

# Effectiveness of Online Single Submission Policy for Faster Land Transactions Compliance



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## ABSTRACT

The Job Creation Law, the Online Single Submission–Risk Based Approach, and the Basic Agrarian Law collectively reshape Indonesia's land licensing system while simultaneously creating substantial regulatory and institutional challenges. This study evaluates the effectiveness of the OSS-RBA policy in accelerating land transaction compliance while preserving legal certainty and administrative efficiency. The research adopts a doctrinal legal method by examining statutory instruments, implementing regulations, and administrative procedures governing land licensing and spatial conformity. To strengthen the analysis, the study integrates a comparative legal approach to assess patterns of institutional coordination and digital governance. The analysis concentrates on three central dimensions: regulatory consistency in land rights verification and spatial suitability, institutional coordination among competent authorities, and the integration of spatial and land information systems. The results show that regulatory overlaps and normative inconsistencies continue to generate legal uncertainty in land licensing. Fragmented institutional authority further weakens coordination and delays administrative decision-making. In addition, limited interoperability between spatial and land databases reduces the effectiveness of digital licensing services. This study concludes that the OSS-RBA policy will effectively accelerate land transaction compliance only through regulatory harmonization, strengthened inter-agency coordination, and the establishment of an integrated spatial–land information system to ensure legal certainty, good governance, and sustainable land administration.

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## 1. Introduction

The sustainable development of a nation cannot be separated from the quality of its spatial planning and management. The complexity inherent in the processes of planning, implementation, and policy execution in spatial governance often presents multidimensional challenges that influence the effectiveness of development, both in the context of global dynamics and local progress.<sup>1</sup> However, land governance and spatial utilization in Indonesia over the past several decades have faced considerable complexity due to overlapping

<sup>1</sup> Ima Mayasari, 'Evaluasi Kebijakan Izin Lokasi Dan Pertimbangan Teknis Pertanahan Pasca Penerapan Online Single Submission', *Jurnal Rechts Vinding: Media Pembinaan Hukum Nasional*, 8.3 (2019) <https://doi.org/http://dx.doi.org/10.33331/rechtsvinding.v8i3.348>

regulations, weak inter-institutional coordination, and lengthy, non-integrated bureaucratic process.<sup>2</sup> This condition has had a significant impact on investment activities and land transactions conducted by business entities, which are often confronted with administrative barriers, legal uncertainty, and inconsistencies between business permits and spatial conformity. The fragmentation of the licensing and land administration systems illustrates the suboptimal synergy among legal, technical, and institutional aspects in supporting efficient and sustainable development governance.<sup>3</sup>

In response to these issues, the Government of Indonesia introduced the Online Single Submission (OSS) system as a digital instrument aimed at simplifying and integrating cross-sectoral business licensing processes.<sup>4</sup> This system is regulated under Government Regulation No. 5 of 2021 concerning the Implementation of Risk-Based Business Licensing, which serves as a derivative of Law No. 11 of 2020 on Job Creation. Through the OSS platform, the government seeks to consolidate various sectoral licensing systems into a single, integrated, transparent, and efficient portal, encompassing the integration of business licensing, land administration, and spatial planning.<sup>5</sup> In the context of land and spatial planning, this integration holds strategic significance, as land legality and spatial conformity constitute fundamental prerequisites for ensuring the feasibility and sustainability of investments.<sup>6</sup>

The effective implementation of the OSS system in integrating business licensing with land administration and spatial planning has not yet been fully achieved. Several normative, technical, and institutional obstacles continue to emerge in its execution.<sup>7</sup> Regulatory disharmony across sectors constitutes one of the main issues, as laws and regulations in the fields of agrarian affairs, environment, and spatial planning are not yet fully aligned with the principles and mechanisms of the OSS system. Consequently, overlapping regulations, differing operational standards, and a lack of synchronization between geospatial

<sup>2</sup> Irene Vera Purba and others, 'Implications of Agricultural Land Conversion for Sustainable Food Security: Evidence from Vietnam', *Contrarius*, 1.1 (2025), 1–19 <https://doi.org/10.53955/CONTRARIUS.V1I1.79>

<sup>3</sup> Abdul Kadir Jaelani, 'Land Procurement for Infrastructure Projects under the Job Creation Law', *Contrarius*, 1.1 (2025), 20–27 <https://doi.org/10.53955/CONTRARIUS.V1I1.80>

<sup>4</sup> Maya Puspita Dewi and others, 'Sosialisasi Dan Pendampingan Penggunaan Online Single Submission Pada Pelaku Usaha Kecil Dan Menengah Di Kota Depok', *Jurnal Komunitas: Jurnal Pengabdian Kepada Masyarakat*, 3.1 (2020), 34–39 <https://doi.org/10.31334/JKS.V3I1.967>

<sup>5</sup> M Rahadian Hasibuan, Sudiman Sihotang and Ani Yumarni, 'Efektivitas Sistem Online Single Submission (OSS) Dalam Mengurus Perizinan Bangunan Gedung Sekolah Berbasis Tanah Wakaf', *Karimah Tauhid*, 4.5 (2025), 2879–98 <https://doi.org/10.30997/KARIMAHTAUHID.V4I5.19304>

<sup>6</sup> Bambang Sugeng Rukmono and Sandi Yudha Prayoga, 'Justice A Legal Analysis of Medical Marijuana Regulation', *Contrarius*, 1.1 (2025), 28–40 <https://doi.org/10.53955/CONTRARIUS.V1I1.81>

<sup>7</sup> Ketut Sukewati, Lanang Putra Perbawa and Paul Atagamen Aidonojoie, 'Restorative Justice as a Policy Approach to Traffic Crime Resolution in Indonesia', *Contrarius*, 1.1 (2025), 41–50 <https://doi.org/10.53955/CONTRARIUS.V1I1.82>

information systems and licensing databases continue to occur.<sup>8</sup> An example of this issue can be observed in the implementation of the OSS system in Semarang Regency, where challenges arise due to the absence of a Digital Detailed Spatial Plan (*Rencana Detail Tata Ruang Digital* or RDTR Digital). The RDTR serves as a detailed spatial plan for regency or municipal areas, equipped with zoning regulations. The absence of an RDTR consequently limits the information available to business actors regarding the mapping of business locations intended for operation. Another problem identified concerns the limited support system of the OSS platform, particularly unresolved internal system issues that affect the verification of business licenses, non-OSS licenses, and unregistered sectoral requirements.<sup>9</sup>

The ambiguity of authority among institutions both between the central and regional governments as well as among ministries and agencies often results in licensing processes lacking a clear point of authority.<sup>10</sup> For instance, the issuance of the Business Identification Number (*Nomor Induk Berusaha* or NIB) through the OSS system is often hindered by the lack of integration between spatial data and land legal status managed by the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) and the Ministry of Investment/Investment Coordinating Board (BKPM). This situation results in delays in the issuance of Spatial Utilization Suitability (*Kesesuaian Kegiatan Pemanfaatan Ruang* or KKPR), invalid thematic spatial maps, and the emergence of conflicts of interest between sectors and among regional governments.

Another issue is the weak institutional coordination, which has become a significant hindering factor in the implementation of the OSS system. Although the system is designed to facilitate cross-institutional integration, in practice, inter agency coordination still relies on conventional administrative mechanisms that are not yet supported by standardized data systems. The limited capacity of human resources at the regional level in operating the risk based OSS system further complicates its effectiveness. Consequently, a gap persists between the normative objectives mandated by regulation and the practical reality observed in the field.

<sup>8</sup> Reza Octavia Kusumaningtyas and Ong Argo Victoria, 'The Role of the Anti-Corruption Commission Supervisory Board in Institutionalizing Accountability', *Contrarius*, 1.1 (2025), 51–66 <https://doi.org/10.53955/CONTRARIUS.V1I1.83>

<sup>9</sup> Dinda Putri Namiroh, Dyah Lituhayu and Endang Larasati Setianingsih, 'Implementasi Sistem Online Single Submission Risk Based Approach (Oss Rba) Dalam Pelayanan Perizinan Berusaha Di Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu (Dpmptsp) Kabupaten Semarang', *Journal of Public Policy and Management Review*, 13.4 (2024), 19–52 <https://doi.org/10.14710/JPPMR.V13I4.46566>

<sup>10</sup> Ghina Nisrina and Widya Oktavia, 'Tata Ruang Dan Perizinan Lokasi: Keterkaitan NIB Dalam Konteks OSS Dan Perda No 5 Tahun 2021 Kota Semarang', *Jurnal Ilmiah Wahana Pendidikan*, 10.12 (2024), 250–68 <https://doi.org/10.5281/ZENODO.12522671>

In the context of sustainable development, the challenges faced by Indonesia are not only technical but also systemic and structural in nature. The lack of integration between the OSS system and land administration as well as spatial planning systems underscores the need for more fundamental institutional reforms.<sup>11</sup> The strengthening of the OSS system must be accompanied by cross-sectoral policy harmonization, interoperability of spatial information systems, and regulatory adjustments that are adaptive to the dynamics of investment and spatial development. Without strong institutional coordination and an integrated legal ecosystem, the digitalization of licensing will merely constitute a procedural transformation without substantive impact.

The efficiency and transparency of land administration have become key indicators in assessing a country's investment climate.<sup>12</sup> According to the World Bank's *Doing Business* report and the *Land Governance Assessment Framework* (LGAF) index, countries that have successfully implemented integrated land and spatial administration systems tend to exhibit higher levels of investor confidence and lower rates of land disputes.<sup>13</sup> Thus, the integration of the OSS system in Indonesia should be viewed not merely as a public service mechanism, but as a structural reform instrument within the framework of digital agrarian reform one that is oriented toward legal certainty, administrative efficiency, and spatial sustainability.<sup>14</sup>

To date, Indonesia has not yet established a legal and institutional ecosystem that fully ensures synergy among business licensing management, spatial planning control, and land administration.<sup>15</sup> This lack of integration not only increases transaction costs and legal risks for business actors but also leads to unequal access to spatial data and weak control over land use management.<sup>16</sup> In practice, many regional governments still lack digital spatial planning data

<sup>11</sup> Amin Purnawan and Siti Ummu Adillah, 'Regulation Of The Legality Of Micro, Small And Medium Enterprises Through The Online Single Submission System To Increase Competitiveness', *Jurnal Pembaharuan Hukum*, 7.2 (2020), 159–71 <https://doi.org/10.26532/JPH.V7I2.10990>

<sup>12</sup> Revanza Salsa Bilita, Fazriyan Nurazmi and Indra Prasta, 'Implementasi Sistem Online Single Submission Risked Based Approach (OSS RBA) Di Kantor Dinas Penanaman Modal Pelayanan Terpadu Satu Pintu Kota Tanjungpinang', *CiDEA Journal*, 2.2 (2023), 13–19 <https://doi.org/10.56444/CIDEAJOURNAL.V2I2.1267>

<sup>13</sup> Anak Agung Gede Oka Wisnumurti, 'Efektifitas Pelaksanaan Kebijakan Pendaftaran Izin Usaha UMKM Secara Digital Melalui Online Single Submission (OSS) Di Kota Denpasar', *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, 5.12 (2022), 5441–46 <https://doi.org/10.54371/JIIP.V5I12.1230>

<sup>14</sup> Putu Sekarwangi Saraswati and Olim Narzullayev, 'Integrating Miranda Rights to Promote Human Rights Compliance', *Journal of Sustainable Development and Regulatory Issues*, 3.3 (2025), 459–85 <https://doi.org/10.53955/JSDERI.V3I3.94>

<sup>15</sup> Vera Purba and others.

<sup>16</sup> Gregorius Widiartana, Vincentius Patria Setyawan and Ariesta Wibisono Anditya, 'Exploring Restorative Justice in Domestic Violence Cases', *Journal of Sustainable Development and Regulatory Issues*, 3.3 (2025), 641–66 <https://doi.org/10.53955/JSDERI.V3I3.87>

integrated with the OSS system, resulting in the inability to conduct automated verification of spatial conformity.<sup>17</sup>

Therefore, a comprehensive approach is required to assess the effectiveness of the OSS system in the context of integrating business licensing, land administration, and spatial planning. Such an approach should not only emphasize system digitalization but also encompass institutional strengthening, enhanced data interoperability, and legal harmonization that is consistent both vertically and horizontally.<sup>18</sup> In this regard, a progressive legal approach is essential to develop regulatory frameworks and administrative systems that are not merely normative but also responsive to social, economic, and environmental dynamics.<sup>19</sup>

Several previous studies have examined the Land OSS system, including a study conducted by Dhanny Sebastian, which analyzes the effectiveness of OSS implementation. The study identifies several persisting issues, such as low digital literacy, the lack of system integration across agencies, and services that do not meet the prescribed completion time standards, resulting in user dissatisfaction and resistance. The research proposes technical improvements and stronger institutional support to enhance the system's performance.<sup>20</sup> Another study conducted by Gilang Ilham Pratama highlights various obstacles in the implementation of the OSS system. The findings show that the issuance of licenses through OSS is hindered by insufficient substantive technical content within the OSS application, as well as the limited quantity and quality of human resources involved. The study proposes addressing these challenges through the development of complementary applications, such as *Go Putar*, to support OSS services, along with the optimization of technological advancements.<sup>21</sup>

In addition, there is a previous study conducted by Yudi Ajeng Wiratif, which focuses on the implementation of land technical considerations in the issuance of location permits through the OSS system and examines the ideal legal solutions for ensuring the proper application of these technical land assessments within the OSS framework.<sup>22</sup> However, none of the existing studies provide an in depth

<sup>17</sup> Hasibuan, Sihotang and Yumarni.

<sup>18</sup> Ima Mayasari, 'Evaluasi Kebijakan Izin Lokasi Dan Pertimbangan Teknis Pertanahan Pasca Penerapan Online Single Submission', *Jurnal Rechts Vinding: Media Pembinaan Hukum Nasional*, 8.3 (2019), 403 <https://doi.org/10.33331/RECHTSVINDING.V8I3.348>

<sup>19</sup> Nisrina and Oktavia.

<sup>20</sup> Muhammad Reza El Fajri and Sri Juni Woro Astuti, 'Efektivitas Sistem Perizinan Online Oss Rba (Online Single Submission Risk Based Approach) Terhadap Pengembangan Umkm Di Kabupaten Gresik', *JISP (Jurnal Inovasi Sektor Publik)*, 4.1 (2024), 60-71 <https://doi.org/10.38156/JISP.V4I1.227>

<sup>21</sup> Harsya Harun, 'Penyelenggaraan Urusan Pemerintahan Daerah Studi Penyelenggaraan Urusan Bidang Pendidikan Menengah Di Kota Palopo Provinsi Sulawesi Selatan', *DIALEKTIKA: Jurnal Ekonomi Dan Ilmu Sosial*, 3.1 (2018), 33-54 <https://doi.org/10.36636/DIALEKTIKA.V3I1.81>

<sup>22</sup> Chyndi Berliana Milta and Mayarni Mayarni, 'Pelayanan Perizinan Melalui Sistem Online Single Submission Risk Based Approach (OSS-RBA) Pada Dinas Penanaman Modal Pelayanan Terpadu

discussion of land related OSS licensing in relation to spatial planning or propose policy reform solutions. Therefore, this study seeks to fill this gap in the literature, which has thus far addressed OSS merely as a general licensing instrument without thoroughly linking it to the integration of land administration and spatial planning. Practically, this research is expected to offer a critical reflection on the direction of Indonesia's digital agrarian reform policies and to propose a conceptual framework for strengthening the integration of land and spatial governance based on the principles of legal certainty, administrative efficiency, and sustainable development.

## 2. Research Method

A doctrinal qualitative method underpins the analysis, supported by comparative legal evaluation. The doctrinal approach is used to examine primary legal sources, including Law No. 11/2020 on Job Creation, Government Regulation No. 5/2021 on Risk-Based Licensing, Government Regulation No. 21/2021 on Spatial Planning, and Law No. 5/1960 on Basic Agrarian Principles (UUPA).<sup>23</sup> These materials are analyzed to identify normative structures, legal hierarchies, and potential inconsistencies within the Indonesian regulatory framework governing business licensing, land administration, and spatial planning. Secondary sources such as academic articles, policy papers, institutional reports, and previous empirical studies on OSS implementation, are utilized to contextualize legal developments and assess institutional practice. A comparative method is applied to contrast Indonesia's land registration system with Singapore's Torrens-based model, providing insights into how different legal traditions shape administrative efficiency and legal certainty. The analysis relies on content analysis and legal hermeneutics, focusing on three dimensions: (1) normative coherence between licensing and agrarian regulations; (2) institutional dynamics between BKPM and ATR/BPN; and (3) risks of regulatory disharmony and legal vacuums in OSS procedures. Through this interpretive and comparative framework, the study formulates a set of conceptual and policy recommendations to strengthen the integration of OSS-RBA with land and spatial governance.<sup>24</sup>

## 3. Results and Discussion

### *Legal Coherence Issues in OSS Licensing and Agrarian Governance*

The regulatory reforms introduced through the Job Creation Law (Law No. 11 of 2020), along with its derivative regulations such as Government Regulation (PP) No. 5 of 2021 and PP No. 21 of 2021, mark one of the most ambitious attempts in

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Satu Pintu Dan Tenaga Kerja Kabupaten Kuantan Singingi', *Journal of Research and Development on Public Policy*, 2.3 (2023), 19–25 <https://doi.org/10.58684/JARVIC.V2I3.71>

<sup>23</sup> Rahmat Ramadhani, 'Pendaftaran Tanah Sebagai Langkah Untuk Mendapatkan Kepastian Hukum Terhadap Hak Atas Tanah', *SOSEK: Jurnal Sosial Dan Ekonomi*, 2.1 (2021), 31–40 <https://doi.org/10.55357/SOSEK.V2I1.119>

<sup>24</sup> Matthew Mitchell, 'Analyzing the Law Qualitatively', *Qualitative Research Journal*, 23.1 (2022), 102–13 <https://doi.org/https://doi.org/10.1108/QRJ-04-2022-0061>

Indonesia's recent legal history to streamline the business licensing environment and accelerate investment growth.<sup>25</sup> These reforms are intended not only to simplify administrative procedures but also to create a more attractive climate for domestic and foreign investors.<sup>26</sup> The overarching aim of the Job Creation Law is to reduce legal fragmentation, rationalize licensing procedures, and strengthen economic competitiveness by integrating a variety of sectoral regulations into a unified framework. The legislation also emphasizes the empowerment of micro, small, and medium enterprises, as well as access to land for development projects, reflecting the government's desire to align economic liberalization with inclusive growth. Despite these intentions, the implementation of these new norms raises significant legal, institutional, and substantive challenges, particularly in the interface between centralized licensing mechanisms and the long-established principles of agrarian law under the Basic Agrarian Law of 1960 (UUPA).<sup>27</sup>

Government Regulation No. 5 of 2021 operationalizes the risk-based business licensing system and introduces the Online Single Submission (OSS) platform as the central gateway for all licensing processes.<sup>28</sup> The OSS system represents a paradigm shift from a fragmented and manual licensing regime toward a digital, standardized, and integrated procedure. It classifies business activities according to levels of risk-low, medium, or high-and adjusts documentation requirements accordingly.<sup>29</sup> Through this framework, licensing is intended to become more transparent, predictable, and user-friendly, reducing bureaucratic hurdles that previously discouraged investment and contributed to inefficiency. The regulation thus envisions OSS as an institutional mechanism capable of synchronizing data and linking various ministries and local governments through one national platform. However, the success of OSS in practice depends heavily on inter-

<sup>25</sup> Thanh T Ho and Abdul Fikri Angga Reksa, 'Environmental Policy in Indonesia from the Post-New Order Era to the Present: Positive Adjustments and Limitations', in *Media, Politics and Environment: Analyzing Experiences from Europe and Asia*, ed. by Detlef Briesen and Sarada Prasanna Das (Cham: Springer International Publishing, 2023), pp. 189–212 [https://doi.org/10.1007/978-3-031-31252-6\\_14](https://doi.org/10.1007/978-3-031-31252-6_14)

<sup>26</sup> Bambang Irawan and others, 'Inovasi Pelayanan Permohonan Pengajuan Izin Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu (DPMPTSP) Kota Samarinda', *Matra Pembaruan*, 4.2 (2020), 135–45 <https://doi.org/10.21787/MP.4.2.2020.135-145>

<sup>27</sup> Mohamad Agus Setiawan and others, 'Tata Kelola Digital Layanan Lalu Lintas Jalan Tol Di Indonesia: Studi Aplikasi Travoy Jasa Marga', *Matra Pembaruan*, 8.1 (2024), 1–16 <https://doi.org/10.21787/MP.8.1.2024.1-16>

<sup>28</sup> Yunita Dj.B, Faturachman Alputra Sudirman and La Ode Mustafa R, 'Efektivitas Penerapan Aplikasi Online Single Submission Dalam Pelayanan Izin Usaha Menengah Keatas Di DPMPTSP Kabupaten Morowali', *PAMARENDA : Public Administration and Government Journal*, 4.1 (2024), 15–28 <https://doi.org/10.52423/PAMARENDA.V4I1.2>

<sup>29</sup> Muhammad Iqbal and others, 'Pelaksanaan Online Single Submission (Oss) Dalam Rangka Percepatan Perizinan Berusaha Di Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu (Dpmptsp) Jawa Tengah', *Diponegoro Law Journal*, 8.2 (2019), 1328–42 <https://doi.org/10.14710/DLJ.2019.24582>

agency cooperation and consistent normative alignment across regulatory sectors, which remain unresolved issues in several critical areas.<sup>30</sup>

Government Regulation No. 21 of 2021 complements the licensing framework by regulating spatial planning and the basic requirements for business licensing in relation to land use and spatial conformity.<sup>31</sup> aSpatial planning, as governed in Indonesia, is foundational for ensuring sustainable development and preventing land-use conflicts. PP No. 21/2021 consolidates and reorganizes various spatial planning instruments, such as zoning ordinances, land-use permits, and location permits, within the broader risk-based licensing architecture. In theory, the integration of spatial planning requirements into OSS provides a coherent administrative flow where business actors receive clear information on whether their proposed activities align with regional and national spatial plans. Yet, this integration remains challenging because spatial planning is inherently decentralized, relying on local governments' technical assessments and authority. The assimilation of these decentralized functions into a centrally managed digital system such as OSS leads to complexities related to institutional autonomy, accuracy of spatial data, and disparities in administrative capacity at the regional level.<sup>32</sup>

At the core of Indonesia's land governance stands the Basic Agrarian Law (UUPA) of 1960, which continues to serve as the principal statutory foundation for the regulation of land rights, land use, and land tenure relationships. UUPA is built upon principles of social justice, sustainability, and equitable access to land, recognizing land as a social asset and not merely an economic commodity. It affirms state authority in governing land resources while mandating that their utilization must serve the greatest prosperity of the people. The norms embedded in UUPA shape the institutional landscape of agrarian administration, particularly through the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN).<sup>33</sup> Given that UUPA predates the Job Creation Law by several decades, the coexistence of the two legal regimes raises questions about which legal principles take precedence when conflicts arise between investment facilitation and agrarian justice. The potential friction between the goals of

<sup>30</sup> Jaswinder Singh, Anu Gupta and Preet Kanwal, 'Quality Enhancement in OSS Development Process: A Quantitative Framework Approach', *Software Quality Journal*, 33.1 (2025), 4 <https://doi.org/10.1007/s11219-024-09705-0>

<sup>31</sup> Yanto Rochmayanto and others, 'Devolution of Forest Management to Local Communities and Its Impacts on Livelihoods and Deforestation in Berau, Indonesia', *Helijon*, 9.5 (2023), e16115 <https://doi.org/10.1016/j.heliyon.2023.e16115>

<sup>32</sup> Sultan S. Alqahtani, 'Beyond the Code: Analyzing OSS Developers Security Awareness and Practices', *International Journal of Information Security*, 24.3 (2025), 109 <https://doi.org/10.1007/s10207-025-01023-1>

<sup>33</sup> Reza Andriansyah Putra and Atik Winanti, 'Urgensi Dan Kendala Dalam Penerbitan Dokumen Sertifikat Tanah Elektronik Pasca Peraturan Menteri ATR/BPN Nomor 3 Tahun 2023', *Jurnal Usm Law Review*, 7.2 (2024) <https://doi.org/https://doi.org/10.26623/julr.v7i2.9178>

economic acceleration and agrarian equity must therefore be analyzed carefully to ensure that new policies do not undermine fundamental agrarian rights.

A key point of tension emerges from the relationship between the OSS system, administered largely by the Investment Coordinating Board (BKPM), and the traditional agrarian authority of ATR/BPN. OSS is designed to centralize and simplify licensing procedures, including those related indirectly to land use, such as business identification numbers (NIB), location conformity statements, and environmental feasibility assessments. However, the technical authority to regulate land rights, land registration, and land-use change remains exclusively with ATR/BPN. This creates an administrative dualism wherein OSS may issue preliminary or conditional permissions without the mandatory confirmation of agrarian legality from ATR/BPN. The institutional gap becomes particularly problematic when business actors obtain OSS-generated licenses that imply land-use eligibility, even though the underlying land status has not yet been verified. Consequently, the administrative synergy between BKPM as the licensing facilitator and ATR/BPN as the land authority becomes essential. Without effective coordination, the licensing system may inadvertently distort land governance by producing permits that are difficult to enforce or that conflict with existing land tenure conditions.<sup>34</sup>

From the perspective of legal principles, the current regulatory landscape raises fundamental questions regarding the fulfillment of key legal doctrines. The principle of legal certainty requires that norms be clear, consistent, and predictable so that regulated actors can understand their rights and obligations.<sup>35</sup> While OSS seeks to enhance certainty by standardizing procedures and digitizing requirements, inconsistencies between the Job Creation Law framework and agrarian regulations often undermine this objective. Business actors may obtain a license that appears valid procedurally but lacks substantive legitimacy if it fails to align with land regulations under UUPA. Moreover, the decentralization of spatial planning further complicates certainty, as local governments may interpret or implement spatial conformity assessments differently, creating discrepancies and potential disputes. Thus, the formal promise of legal certainty through OSS is not

<sup>34</sup> Gianny Putrisasmita, 'Kedudukan Program Pendaftaran Tanah Sistematis Lengkap Dalam Kerangka Reforma Agraria Untuk Mewujudkan Kepastian Hukum Pertanahan Di Indonesia', *LITRA: Jurnal Hukum Lingkungan, Tata Ruang, Dan Agraria*, 3.1 (2023), 18-36 <https://doi.org/10.23920/LITRA.V3I1.1466>

<sup>35</sup> Ai Permatasari and others, 'Distortion of Gratuities In Acquittal (Vrijspraak) Verdict in Corruption Case Juridical Analysis of the Central Jakarta District Court Decision Number: 37/Pid.Sus-Tpk/2021/PN.Jkt.Pst', *Greenation International Journal of Law and Social Sciences*, 2.4 SE-Articles (2025), 354-70 <https://doi.org/10.38035/gijlss.v2i4.325>

always reflected in practice, particularly in regions where institutional capacity is limited.<sup>36</sup>

The principle of ease of doing business underpins the regulatory reforms associated with the Job Creation Law.<sup>37</sup> OSS embodies this principle by reducing the number of required permits, consolidating administrative steps, and enabling a faster turnaround through digital processes. These reforms are intended to reduce transaction costs, eliminate redundancies, and minimize face-to-face interactions that have historically been vulnerable to corruption. However, ease of doing business cannot be pursued in isolation from other legal imperatives. When simplification leads to the bypassing of critical sectoral checks, especially those related to agrarian legality, it risks producing new problems, such as land disputes, administrative contradictions, and unlawful conversion of land. These challenges demonstrate that ease of doing business must be balanced with sectoral integrity, particularly in matters involving land ownership, customary land rights, and environmental sustainability.

Another important lens is the principle of good governance, which encompasses transparency, accountability, coordination, and public participation. OSS introduces elements of transparency by making licensing conditions publicly accessible and traceable. Nevertheless, achieving full transparency requires the integration of accurate and up-to-date agrarian data into OSS, which remains a significant obstacle. Accountability also becomes diffused when multiple institutions share overlapping responsibilities without clear delineation of roles. For example, when a licensing error occurs, such as the issuance of a permit on land still under dispute, it becomes difficult to determine whether the responsibility rests with BKPM, ATR/BPN, local governments, or OSS as a system. Effective oversight and inter-institutional communication are therefore critical to ensuring that the principles of good governance are not compromised.<sup>38</sup>

One of the most pressing concerns within this regulatory ecosystem is the emergence of normative disharmony and potential legal vacuums. Normative disharmony arises when legal instruments at different levels, laws, government regulations, ministerial regulations, contain inconsistent provisions or fail to

<sup>36</sup> Inovasi Perizinan Usaha Mikro Kecil di Perkotaan and others, 'Effectiveness of the Online Single Submission Risk-Based Approach (OSS RBA): Innovation in Licensing for Micro and Small Businesses in Urban Areas', *Matra Pembaruan: Jurnal Inovasi Kebijakan*, 8.2 (2024), 103–16 <https://doi.org/10.21787/MP.8.2.2024.103-116>

<sup>37</sup> Didi Rosidi, 'Implementasi Kebijakan Perizinan Berusaha Berbasis Resiko (OSS-RBA) Di Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu (DPMPTSP) Di Kabupaten Subang', *The World of Public Administration Journal*, 2022 <https://doi.org/10.37950/WPAJ.V4I2.1492>

<sup>38</sup> Syaiful Ihsan Hilmi, Maulana Akhyar and Aprila Niravita, 'Analisis Yuridis Penyelesaian Sengketa Pulau Batu Antara Malaysia Dengan Singapura Dalam Perpektif Hukum Internasional', *JURNAL MULTIDISIPLIN ILMU AKADEMIK*, 2.1 (2025), 150–69 <https://doi.org/10.61722/JMIA.V2I1.3166>

complement one another. In the context of OSS and agrarian governance, disharmony is evident in the misalignment between the simplification agenda of the Job Creation Law and the comprehensive agrarian framework of UUPA.<sup>39</sup> While OSS prioritizes speed and convenience, UUPA mandates careful and substantive scrutiny of land rights and land-use transitions. This disparity may produce situations where business actors possess valid administrative permits but lack legally recognized land rights, thereby exposing both the government and investors to legal risks and potential litigation.<sup>40</sup>

The possibility of a legal vacuum arises when certain regulatory areas fall outside the scope of both the new licensing framework and existing agrarian regulations. For instance, when OSS processes business licensing without fully addressing the legality of underlying land tenure, a gap emerges in which the legal status of land-use authorization becomes uncertain. This vacuum can manifest in several ways: ambiguous land-designation statuses, conflicting interpretations of land-use conformity, or incomplete integration of spatial planning data into OSS. Such gaps can result in administrative stagnation, disputes between authorities, or even the issuance of contradictory decisions. Over time, unresolved legal vacuums may undermine the credibility of the licensing system and weaken public trust in the government's regulatory reforms.

In conclusion, the Job Creation Law and its implementing regulations establish a transformative foundation for modernizing Indonesia's licensing regime, offering significant potential for improving regulatory efficiency and attracting investment. The OSS platform stands at the center of this reform, promoting digitalization, standardization, and procedural clarity. Nevertheless, the success of these reforms depends substantially on their alignment with longstanding agrarian principles under UUPA and the effective coordination between BKPM and ATR/BPN. The tensions between simplified licensing and rigorous agrarian governance highlight the need for harmonization of norms, clearer institutional delineation, and the strengthening of technical capacities at both national and regional levels. Without addressing these challenges, the reforms may inadvertently generate legal uncertainty, administrative dualism, and heightened risk of agrarian conflicts.<sup>41</sup> Ultimately, achieving a coherent regulatory environment requires not only technological modernization but also a deliberate

<sup>39</sup> Resya Myla Libran, 'Analisis Kualitas Pengurusan Perizinan Melalui Sistem Online Single Submission Risk Based Approach (OSS-RBA) Pada Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu Kabupaten Maluku Tengah', *Action Research Literate*, 8.4 (2024), 725–41 <https://doi.org/10.46799/ARL.V8I4.304>

<sup>40</sup> Alqahtani.

<sup>41</sup> Dian Rahmawati and Deden Rukmana, 'The Financialization of Housing in Indonesia: Actors and Their Roles in the Transformation of Housing Production', *Cities*, 131 (2022), 103918 <https://doi.org/https://doi.org/10.1016/j.cities.2022.103918>

effort to reconcile economic objectives with agrarian justice, legal certainty, and the principles of good governance.<sup>42</sup>

### *Online Single Submission Policy in Singapore Land Registration*

Land registration constitutes a fundamental instrument within a nation's land administration system, as it serves to provide legal certainty over land ownership, possession, and utilization rights. Through an orderly and integrated land registration system, the state can ensure legal protection for rights holders, minimize potential land disputes, and foster a stable and sustainable investment climate. Nevertheless, land registration policies and systems vary significantly across countries, depending on their respective legal traditions, institutional capacities, and orientations of public policy.<sup>43</sup> In this context, Indonesia and Singapore present an intriguing comparison, as both countries adopt distinct legal approaches that differ conceptually and historically. Indonesia adheres to the civil law system, rooted in the continental European legal tradition, whereas Singapore follows the Anglo-Saxon or common law system, inherited from the English legal framework. This divergence in legal traditions directly influences the regulatory models, implementation mechanisms, and the degree of legal certainty within each country's land registration system.<sup>44</sup>

In Indonesia, land registration policy is founded on Law No. 5 of 1960 concerning Basic Agrarian Principles (UUPA), which emphasizes the social function of land and designates the state as the primary regulator of land utilization for the greatest prosperity of the people. The system is declarative in nature, wherein a land certificate serves as strong evidence of ownership but does not constitute the sole determinant of legal validity. In practice, Indonesia's land registration process continues to face various challenges, including overlapping land rights, limited spatial data, and bureaucratic inefficiencies, all of which contribute to weak legal certainty and the slow progress of agrarian reform.<sup>45</sup>

Conversely, Singapore adopts the Torrens System, a model of land registration characteristic of Anglo-Saxon jurisdictions. This system upholds the principle of title by registration, wherein ownership rights over land are deemed valid and final upon registration. Land titles issued by the Singapore Land Authority (SLA) possess absolute legal authority, thereby providing a high degree of certainty and protection for rights holders. This approach reflects the features of the common

<sup>42</sup> Rebecca Meckelburg and Agung Wardana, 'The Political Economy of Land Acquisition for Development in the Public Interest: The Case of Indonesia', *Land Use Policy*, 137 (2024), 107017 <https://doi.org/https://doi.org/10.1016/j.landusepol.2023.107017>

<sup>43</sup> Indra Yudha Koswara and others, *Kepastian Hukum Tanah: Pendaftaran, Investasi, Dan Pertumbuhan Ekonomi Di Era MEA*, ed. by Lisnawati, Cetakan Pe (Amerta Media, 2024).

<sup>44</sup> Klaus Deininger, *Land Policies for Growth and Poverty Reduction* (Washington, DC: Oxford University Press, 2003).

<sup>45</sup> Boedi Harsono, *Hukum Agraria Indonesia: Sejarah Pembentukan Undang-Undang Pokok Agraria, Isi Dan Pelaksanaannya*, Revised ed (Jakarta: Universitas Trisakti, 2013).

law system, which emphasizes efficiency, legal certainty, and case law based adjudication, supported by integrated information technology within a fully digital land administration framework.<sup>46</sup>

The comparison between the land registration systems of Indonesia and Singapore rooted in two distinct legal traditions, civil law and Anglo-Saxon common law is highly relevant for understanding how legal constructs influence the effectiveness of land governance. This divergence is not limited to procedural aspects but also extends to the underlying legal philosophy: Indonesia emphasizes the role of the state in ensuring social justice in land ownership, whereas Singapore prioritizes individual property rights and administrative efficiency in land transactions.

In terms of digitalization, Indonesia, as the world's largest archipelagic state, faces complex challenges in managing land data that span vast and diverse territories. To address these challenges, the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) has promoted the digitalization of the land administration system through various innovative programs. One such initiative is "*Sentuh Tanahku*" (Touch My Land), which provides online public access to monitor the land certification process transparently.<sup>47</sup> In addition, the implementation of the Electronic Mortgage System (*Hak Tanggungan Elektronik-HT-el*) has accelerated the registration process of security rights over land and reduced administrative errors that were commonly encountered in the manual system.<sup>48</sup> These efforts reflect the government's commitment to advancing efficiency, legal certainty, and digital-based public service delivery.<sup>49</sup> Digitalization has also been implemented through the Land Value Zone (Zona Nilai Tanah-ZNT) system, which provides open access to land value data, thereby enhancing transparency and the accuracy of information in the land market.<sup>50</sup> However, limitations in digital infrastructure, particularly in remote areas, remain a major constraint in the equitable implementation of this system. Therefore, a hybrid approach combining digital and manual processes is still necessary until an inclusive and sustainable digital land registration system is fully established in Indonesia.

<sup>46</sup> Khakim Ghazali and Yudho Giri Sucahyo, 'Comparative Study Of E-Government Enterprise Architecture By Primary Attributes Of 3 Asian Countries', *Jurnal Sistem Informasi*, 8.2 (2012), 126–32 <https://doi.org/10.21609/JSI.V8I2.334>

<sup>47</sup> Putrisasmita.

<sup>48</sup> Peggye Lenda Olivia Rembeth, Bobby Jhon Vian Polii and Leonardus Ricky Rengkung, 'Evaluasi Pelaksanaan Pendaftaran Tanah Sistematis Lengkap Di Kecamatan Tumpaan Kabupaten Minahasa Selatan', *AGRI-SOSIOEKONOMI*, 16.3 (2020), 441–50 <https://doi.org/10.35791/AGRISOEK.16.3.2020.31137>

<sup>49</sup> Winny Sanjaya, 'Dampak Kebijakan Satu Peta/One Map Policy Di Bidang Pertanahan Terhadap Sertifikat Sebagai Bukti Kepemilikan Hak Atas Tanah Di Indonesia', *LITRA: Jurnal Hukum Lingkungan Tata Ruang Dan Agraria*, 2.2 (2023) <https://doi.org/https://doi.org/10.23920/litra.v2i2.1291>

<sup>50</sup> Putra and Winanti.

In contrast, Singapore has achieved a more advanced level of digitalization in its land registration system through the Singapore Land Authority (SLA). The government has implemented the National Land Information System (NLIS), which provides the public with comprehensive access to land data, including ownership, location, and land value information. Furthermore, the development of OneMap, a national interactive mapping platform, enables the integration of spatial data from multiple government sources.

Technological innovation is also evident in the implementation of blockchain to ensure the security, transparency, and integrity of land ownership data, which serves as a crucial foundation for building public trust in the land administration system.<sup>51</sup> On the other hand, stringent digital security policies ensure protection against potential cyber threats, allowing all land data to be accessed quickly and securely. Land digitalization in Singapore aligns with the national "Smart Nation" vision, where technology serves as a core pillar in delivering efficient, transparent, and reliable public services. This model demonstrates that the implementation of an integrated digital system not only enhances administrative efficiency but also strengthens legal certainty and attracts investor confidence in the property sector.<sup>52</sup>

Land registration in Indonesia is affirmed in Article 19(1) of Law No. 5 of 1960 on Basic Agrarian Principles (UUPA), which states to ensure legal certainty, the Government shall conduct land registration throughout the territory of the Republic of Indonesia in accordance with the provisions regulated in Government Regulations. Regarding the land registration system, Article 32(2) of Government Regulation No. 24 of 1997 on Land Registration stipulates that Indonesia's system is based on the principle of negative publication with positive elements, whereby a land certificate serves as strong evidence of rights for bona fide parties recorded as rights holders in the land register. Thus, although the system does not guarantee absolute accuracy of registration data, certificates issued by the state retain significant evidentiary power as provided under the UUPA, thereby granting legal protection to legitimate land rights holders.<sup>53</sup>

The land registration process in Indonesia is carried out by the National Land Agency (BPN), which serves as the authorized institution responsible for land administration.<sup>54</sup> However, its implementation often faces various obstacles, particularly related to procedural complexity and prolonged processing times. Normatively, the land registration process involves several administrative stages

<sup>51</sup> Khakim Ghozali and Yudho Giri Sucahyo, 'Comparative Study of E-Government Enterprise Architecture By Primary Attributes of 3 Asian Countries', *Jurnal Sistem Informasi*, 8.2 (2013) <https://doi.org/https://doi.org/10.21609/jsi.v8i2.334>

<sup>52</sup> Anis Mashdurohatun and others, 'Legal Attitudes Toward Cohabitation: A Review Of Liberal And Islamic States', *PETITA: JURNAL KAJIAN ILMU HUKUM DAN SYARIAH*, 10.1 (2025) <https://doi.org/10.22373/petita.v10i1.376>

<sup>53</sup> Harsono.

<sup>54</sup> Ramadhani.

that must be fulfilled by the applicant. The initial stage begins with the submission of a land registration application accompanied by supporting documents in accordance with applicable legal requirements. Subsequently, the BPN conducts data verification and validation, which includes examining the authenticity of documents, the clarity of the rights' subject and object, and the conformity with recorded physical and juridical data.<sup>55</sup>

The final stage of this process is the issuance of a land certificate, which serves as legal evidence of ownership rights and provides assurance of legal certainty to the rights holder. Nonetheless, in practice, the effectiveness of land registration is often hindered by layered bureaucracy, insufficient coordination among work units, and limitations in administrative infrastructure and information technology.<sup>56</sup> This situation results in delays in the land registration process and reduces the efficiency of public service delivery in the land sector. Delays in the issuance of land certificates frequently occur, creating legal uncertainty for landowners. This uncertainty can impede investment in the land sector, as many investors require strong legal guarantees before committing their capital.<sup>57</sup> Although land certificates are designed to provide legal protection, the negative publication system implemented in Indonesia presents its own challenges. Under this system, land disputes frequently arise due to unclear ownership rights, which are further exacerbated by the convoluted registration process.<sup>58</sup>

In light of these various issues, the need for reforming Indonesia's land registration system has become increasingly urgent.<sup>59</sup> This reform aims to establish a land administration process that is more efficient, transparent, and accountable, thereby providing optimal legal certainty for land rights holders.<sup>60</sup> These improvement efforts are expected not only to simplify procedures and accelerate public service delivery but also to strengthen the integrity of the land administration system through the utilization of information technology and the enhancement of institutional capacity.

<sup>55</sup> Mohammad Firdaus Syahputra, Bintara Tamtama Putra and Alvin Dwi Arianto, 'Perbedaan Kebijakan Pendaftaran Tanah Di Indonesia, Malaysia Dan Singapura: Efektivitas Dan Tantangannya.', *Jurnal Multidisiplin Ilmu Akademik*, 2.1 (2025), 348–61 <https://doi.org/10.61722/JMIA.V2I1.3334>

<sup>56</sup> 'Implementasi Kebijakan Satu Peta Mengatasi Permasalahan Tumpang Tindih Lahan'.

<sup>57</sup> Tiara Dwi Rahayu, Yani Pujiwati and Betty Rubiati, 'Kepastian Hukum Kepemilikan Hak Atas Tanah Setelah Mengalami Likuefaksi Tanah', *LITRA: Jurnal Hukum Lingkungan Tata Ruang Dan Agraria*, 2.2 (2023) <https://doi.org/https://doi.org/10.23920/litra.v2i2.1315>

<sup>58</sup> Syarifaatul Hidayah and others, 'Tantangan Dan Peluang Sertifikat Elektronik Dalam Reformasi Pendaftaran Tanah Di Era Digital.', *Jurnal Ilmiah Nusantara*, 1.6 (2024), 186–99 <https://doi.org/10.61722/JINU.V1I6.2793>

<sup>59</sup> Mayasari, 'Evaluasi Kebijakan Izin Lokasi Dan Pertimbangan Teknis Pertanahan Pasca Penerapan Online Single Submission'.

<sup>60</sup> Danti Sugiarto, 'Mempercepat Pendaftaran Tanah Di Indonesia Dengan Hukum Pertahanan', *Court Review: Jurnal Penelitian Hukum*, 3.03 (2023), 17–21 <https://doi.org/10.69957/CR.V3I03.703>

More broadly, the modernization of the land registration system will have a positive impact on national economic stability, as legal certainty over land ownership constitutes a fundamental prerequisite for investment, infrastructure development, and the sustainable management of agrarian resources.<sup>61</sup> Thus, the success of this reform is expected to create an inclusive and equitable land ecosystem, in which the public derives tangible benefits from an orderly, transparent, and service oriented land administration system that prioritizes sustainable public service delivery. Unlike in Indonesia, Singapore's land registration system is administered by the Singapore Land Authority (SLA) through an integrated electronic registration mechanism supported by advanced information technology infrastructure.<sup>62</sup> This system is designed to ensure a fast, efficient, and transparent process, thereby minimizing administrative obstacles and strengthening public confidence in the land administration system. The implementation of digital land registration allows applicants to submit, monitor, and complete the registration process online, including tracking the status of their applications in real time. This approach not only enhances the efficiency of public service delivery but also reinforces the principles of accountability and transparency in land administration.<sup>63</sup>

The legal basis for land registration in Singapore is governed by the Land Titles Act, which adopts the Torrens System, a land registration model characteristic of the Anglo-Saxon legal tradition (common law system).<sup>64</sup> Unlike the system in Indonesia, which adheres to the principle of negative publication, the Torrens System emphasizes the principle of title by registration, whereby land ownership becomes valid and final upon registration. Consequently, land certificates issued by the SLA possess absolute legal authority (indefeasible title), except in cases involving proven fraud or serious administrative errors.<sup>65</sup>

The requirements for land registration in Singapore are relatively straightforward, encompassing valid proof of ownership, legitimate identification of the applicant, evidence of property tax payment, and a declaration that the land being registered is not subject to any legal dispute.<sup>66</sup> This process emphasizes the importance of clear legal ownership status and the conformity of land use with applicable spatial planning regulations. With an automated system, land

<sup>61</sup> Iqbal and others.

<sup>62</sup> Hilmi, Akhyar and Niravita.

<sup>63</sup> Bianca Prithresia, 'Kajian Perbandingan Asas Nasionalitas Hukum Agraria Dalam Konteks Internasional', *UNES Law Review*, 6.2 (2023), 7305-13 <https://doi.org/10.31933/UNESREV.V6I2.1259>

<sup>64</sup> Russell King, *Land Reform: A World Survey* (New York: Routledge, 2018).

<sup>65</sup> Dody Susanto and Diana Haiti, 'Kepastian Hukum Sertipikat Tanah Elektronik Terhadap Pinjaman Yang Tidak Didaptarkan Hak Tanggungan', *Al-Zayn : Jurnal Ilmu Sosial & Hukum*, 3.4 (2025), 4117-27 <https://doi.org/10.61104/ALZ.V3I4.1898>

<sup>66</sup> Akhmad Kautsar Fattah and Handar Subhandi Bakhtiar, 'Cross-Border Property Ownership Dalam Perspektif Hukum Internasional: Suatu Studi Perbandingan Negara', *Jurnal Humaniora Dan Sosial Sains*, 2.2 (2025), 270-74. <https://humaniorasains.id/jhss/article/view/119>

registration in Singapore can be completed within days, significantly faster than in Indonesia or Malaysia, where the process is still hindered by lengthy and complex bureaucratic procedures.<sup>67</sup>

The efficiency of this system provides a high degree of legal certainty for rights holders, with land certificates serving as strong and largely unassailable proof of ownership. In addition, the high level of transparency in land data allows public access to ownership information, facilitating verification by interested parties such as buyers, financial institutions, or creditors.<sup>68</sup> This accessibility and openness significantly reduce the potential for land disputes, accelerate property transactions, and strengthen confidence in the national land law system. Thus, Singapore's land registration system reflects the core characteristics of the Anglo-Saxon legal tradition, which prioritizes legal certainty, administrative efficiency, and protection of individual rights. The integration of legal, technological, and institutional management aspects positions Singapore as a successful example of modernized land administration that is effective, responsive, and adaptive to global economic dynamics.

Furthermore, the existence of a structured, transparent, and reliable land registration system in Singapore has been a key factor in promoting investment growth, particularly in the property sector. The high level of legal certainty regarding land ownership provides security for both domestic and foreign investors in conducting transactions and managing property assets. The clear legal status of land, guaranteed by the Land Titles Act, and the procedural efficiency implemented by the Singapore Land Authority (SLA) create a stable and globally competitive investment climate.<sup>69</sup> The ease of access to accurate, real-time land information through electronic systems further strengthens investor confidence. Transparency of ownership data and openness of administrative processes enable prospective buyers, creditors, and financial institutions to conduct rapid verification, thereby reducing legal dispute risks and lowering transaction costs. These factors position Singapore as a model of land governance based on legal certainty and administrative efficiency, contributing significantly to national economic growth.<sup>70</sup>

Singapore's approach to land registration can serve as a reference for other countries, including Indonesia, in efforts to enhance the effectiveness, efficiency, and transparency of their land administration systems. The adoption of best practices from the Singaporean model has the potential to foster a legal land governance ecosystem conducive to investment, while simultaneously increasing

<sup>67</sup> Eugene K.H. Tan, *Land Law in Singapore and Malaysia* (Singapore: Academy Publishing, 2018).

<sup>68</sup> Kevin Tan, *Singapore Land Law* (Singapore: Wolters Kluwer, 2017).

<sup>69</sup> Kautsar Fattah and Subhandi Bakhtiar.

<sup>70</sup> Ghozali and Sucahyo, 'Comparative Study of E-Government Enterprise Architecture By Primary Attributes of 3 Asian Countries'.

public trust in land institutions. In the long term, reforms toward a more efficient and integrated land registration system will support inclusive and sustainable economic growth and contribute to the overall improvement of societal welfare.<sup>71</sup>

**Table 1. Comparison of Land Registration Systems Between Indonesia and Singapore**

Aspect	Indonesia	Singapore
<b>Certificate Type</b>	Physical and electronic certificates running in parallel	Fully electronic since 2004 via INLIS
<b>Managing Institution</b>	BPN/ATR	Singapore Land Authority (SLA)
<b>Registration Process</b>	PPAT inputs manually/digitally to BPN	Law firm inputs directly into SLA system
<b>Type of Security</b>	Hak Tanggungan (Land Collateral Right)	Mortgage
<b>Security Imposition Process</b>	Through SKMHT then APHT and must be registered	Mortgage recorded directly in the INLIS system
<b>Executory Power</b>	Must go through APHT registered at BPN	Can be executed automatically
<b>Principle of Publicity</b>	Still manual/partially electronic; not real-time	Applies in real-time and publicly accessible
<b>Registration System</b>	Negative with positive tendency	Positive
<b>Certificate Status</b>	Becomes collateral only after APHT is registered	Property right recorded directly

Source: Processed by the Author

Based on Table 1, this study demonstrates fundamental structural differences between the land registration systems of Indonesia and Singapore in terms of certificate typology, institutional governance, registration procedures, publicity principles, registration models, and the executory power of security rights, reflecting divergent levels of regulatory maturity and digital governance integration. Indonesia continues to apply a dual-track certificate regime in which physical and electronic certificates operate concurrently, indicating that its land administration digitalization remains transitional, whereas Singapore has implemented a fully electronic registration system through the Integrated Land Information Service (INLIS) since 2004, ensuring higher administrative efficiency and stronger protection against document falsification. Institutionally, land registration in Indonesia is administered by the National Land Agency/Ministry of Agrarian Affairs and Spatial Planning (BPN/ATR), which encounters bureaucratic complexity and regional capacity disparities, while Singapore assigns this function to the Singapore Land Authority (SLA) as an integrated digital regulatory

<sup>71</sup> Muhammad Syarif, Budi Hartono and Isnaini Isnaini, 'Implementasi Sistem Online Single Submission Risk Basic Approach (OSS RBA) Dalam Meningkatkan Kualitas Pelayanan Pada Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu Kabupaten Aceh Tamiang', *Journal of Education, Humaniora and Social Sciences (JEHSS)*, 5.4 (2023), 3102-11 <https://doi.org/10.34007/JEHSS.V5I4.1768>

authority. Procedurally, Indonesia relies on Land Deed Officials (PPAT) to input registration data into the BPN system, creating vulnerabilities in the form of delays, human error, and maladministration risks; by contrast, Singapore enables law firms to submit data directly into the SLA platform, ensuring real-time integration and transparency. In the context of security rights, Indonesia applies a multi-stage *Hak Tanggungan* mechanism requiring SKMHT and APHT registration, whereas Singapore permits direct electronic mortgage registration with automatic executory effect. Moreover, Indonesia applies a negative registration system with positive tendencies, while Singapore adopts a positive system guaranteeing data validity, resulting in substantially higher legal certainty in Singapore.

### ***The Effectiveness of OSS toward Integrated and Progressive Land Governance Reform***

Land governance reform in Indonesia has become increasingly prominent since the enactment of the Job Creation Law, which aims to simplify permitting procedures while strengthening the integration between land policy and spatial planning.<sup>72</sup> One of the most significant changes is the simplification of the process for approving conformity of spatial utilization activities (KKPR). Under the job creation law, if local governments have not yet prepared or approved detailed spatial plans (RDTR), business actors can directly submit KKPR applications to the central government through an electronic licensing system. This mechanism addresses bureaucratic stagnation in the regions while ensuring that investment can continue within the framework of spatial planning laws.<sup>73</sup> The central government then processed and approved the KKPR based on the applicable spatial planning documents in hierarchical order, starting with the National Spatial Planning Plan, the Island/Archipelago Spatial Planning Plan, the National Strategic Area Spatial Planning Plan, and ending with the Provincial and District/City Spatial Planning Plans.<sup>74</sup> This hierarchical model is designed to ensure consistency in spatial utilization across regions and government agencies, thus preventing the disharmony in spatial planning that has often been a source of disputes and overlapping land use.<sup>75</sup>

<sup>72</sup> John F McCarthy and others, 'Land Reform Rationalities and Their Governance Effects in Indonesia: Provoking Land Politics or Addressing Adverse Formalisation?', *Geoforum*, 132 (2022), 92–102 <https://doi.org/10.1016/j.geoforum.2022.04.008>

<sup>73</sup> B. F. Sihombing and Farhan Hamid, 'Land Law Evolution and Investment Dynamics: Historical Perspective and Contemporary Development Nexus', *Lex Publica*, 10.1 (2023), 66–83 <https://doi.org/10.58829/lp.10.1.2023.66-83>

<sup>74</sup> Joko T. Suroso, Dani Durahman and Indra Budi, 'The Simplification of Licensing Procedure in Job Creation Law: The Effectiveness to Attract Foreign Investor', *Cogent Social Sciences*, 10.1 (2024) <https://doi.org/10.1080/23311886.2024.2414509>

<sup>75</sup> Qu Yanbo and others, 'Territorial Spatial Planning for Regional High-Quality Development – An Analytical Framework for the Identification, Mediation and Transmission of Potential Land

Bureaucratic simplification is also evident in the mechanism for preparing provincial, district, and city-level spatial plans.<sup>76</sup> Suppose the local government does not establish the RTR within the specified timeframe after obtaining substantive approval from the central government. In that case, the central government is authorized to take over the establishment of the RTR. This policy marks a strengthening of the central government's role in ensuring alignment of national spatial planning, while also accelerating the establishment of regional RTRs, which have long been a barrier to investment permits.<sup>77</sup> Furthermore, to support the Job Creation Law more effectively, the government launched the Online Single Submission (OSS) system based on a Risk-Based Approach (RBA).<sup>78</sup> OSS-RBA not only simplifies the business registration and licensing process but also integrates KKPR, environmental approvals, and other technical permits into a single platform. Using a risk-based approach allows the government to manage permits more efficiently, as the level of supervision is adjusted to the risk of business activities to safety, health, the environment, and spatial utilization.<sup>79</sup>

Legal reform in land governance plays a strategic role in achieving justice, efficiency, and legal certainty.<sup>80</sup> The complexity of land management in Indonesia, ranging from overlapping land rights and land conflicts to unclear legal status, necessitates an adaptive and integrative policy framework.<sup>81</sup> Through the OSS-RBA policy aimed at simplifying procedures, digitizing services, and integrating spatial planning and business licensing, this reform is expected to reduce bureaucratic inefficiencies and minimize conflicts arising from unsynchronized land data. However, implementing the OSS-RBA application faces challenges, as previously discussed. Therefore, to overcome the difficulties and obstacles

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Utilization Conflicts in the Yellow River Delta', *Land Use Policy*, 125 (2023), 106462  
<https://doi.org/10.1016/j.landusepol.2022.106462>

<sup>76</sup> Yongjiao Zhang, Xiaowu Man and Yongnian Zhang, 'From "Division" to "Integration": Evolution and Reform of China's Spatial Planning System', *Buildings*, 13.6 (2023), 1555  
<https://doi.org/10.3390/buildings13061555>

<sup>77</sup> Huanyu Yang and others, 'Innovation in Comprehensive Transportation Network Planning in the Context of National Spatial Development: Institutional Constraints and Policy Responses', *Land*, 14.5 (2025), 1046 <https://doi.org/10.3390/land14051046>

<sup>78</sup> Sang Ayu Putu Rahayu and Rindia Fanny Kusumaningtyas, 'Implications of Existence Online Single Submission Risk-Based Approach for Foreign Investors', in *AIP Conference Proceedings* (AIP Publishing, 2022), p. 030006 <https://doi.org/10.1063/5.0104101>

<sup>79</sup> Seyed MHS Rezvani and others, 'A Systematic Literature Review on Urban Resilience Enabled with Asset and Disaster Risk Management Approaches and GIS-Based Decision Support Tools', *Applied Sciences*, 13.4 (2023), 2223 <https://doi.org/10.3390/app13042223>

<sup>80</sup> Donna Okthalia Setiabudhi and others, 'The Role of Land Management Paradigm Towards Certainty and Justice', *BESTUUR*, 11.1 (August) (2023), 43  
<https://doi.org/10.20961/bestuur.v11i1.71710>

<sup>81</sup> Alfath Satria Negara Syaban and Seth Appiah-Opoku, 'Unveiling the Complexities of Land Use Transition in Indonesia's New Capital City IKN Nusantara: A Multidimensional Conflict Analysis', *Land*, 13.5 (2024), 606 <https://doi.org/10.3390/land13050606>

encountered in policy implementation, a strategy is needed to lead to integrated land and spatial governance.<sup>82</sup>

First, strengthening the data integration system. A comprehensive overhaul of the OSS system is needed, from input to output in the permit management process, so that the entire service flow can be completed effectively through the OSS platform.<sup>83</sup> To achieve this, the integration of the OSS system must be expanded immediately to all relevant ministries and agencies, including the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency, the Ministry of Investment/Investment Coordinating Board, and their respective levels at both the central and regional levels. This integration is essential because land services are a crucial component of business licensing, especially for corporations, which require legal certainty regarding land status, compliance with spatial utilization, and the legality of other land documents. The effort to integrate the BPN service system with OSS-RBA is a strategic step that not only aims to accelerate the process of corporate land transactions but also to improve the accountability and transparency of land services.<sup>84</sup>

Through this integration, various land services can be performed digitally in one place, including land rights registration, land division or consolidation, and certificate validity verification.<sup>85</sup> If all these stages can be processed directly through OSS, the long and layered bureaucratic chain that has existed until now can be significantly shortened. Besides shortening the service completion time, the full integration of OSS and BPN also creates a more standardized licensing ecosystem. Each procedure will operate based on synchronized data, uniform guidelines, and a digital verification mechanism with minimal manual intervention. This not only increases efficiency but also strengthens legal certainty for business actors, as the entire approval and verification process is transparently recorded in the electronic system. Thus, this integration is a key prerequisite for driving the modernization of land governance, minimizing potential disputes, and creating a more conducive and integrated investment climate.<sup>86</sup>

<sup>82</sup> Dwi Putranto Riau and others, 'Communication and Coordination Innovations in Improving the Performance of Permits for Suitability for Spatial Use Activities', *International Journal of Sustainable Development and Planning*, 19.7 (2024), 2719–27 <https://doi.org/10.18280/ijspd.190728>

<sup>83</sup> Singh, Gupta and Kanwal.

<sup>84</sup> Rajamemang and others, 'Effectiveness of Licensing Services for Issuing Business Identification Numbers Through the Oss-Rba System at the Investment and One-Stop Integrated Service Office of Sinjai Regency', *THE American Journal of Humanities and Social Sciences Research (THE AJHSSR)*, 6.2 (2023), 63–71 <https://doi.org/https://doi.org/10.56805/ajhssr>

<sup>85</sup> Trias Aditya, I Ketut Gede Ary Sucaya and Fajar Nugroho Adi, 'LADM-Compliant Field Data Collector for Cadastral Surveyors', *Land Use Policy*, 104 (2021), 105356 <https://doi.org/10.1016/j.landusepol.2021.105356>

<sup>86</sup> Mustikasari, Kurniawan and Eduardus Bayo Sili, 'Implementation of the Online Single Submission (OSS) System for Licensing Foreign Investment Limited Liability Companies (PT PMA)

Second, the harmonization and codification of OSS regulations. One of the root problems in implementing OSS is the overlap of regulations across business licensing, spatial planning, land use, environmental licensing, and sectoral licensing. Each sector has its own legal basis, authority, and standard operating procedures, leading to policy fragmentation.<sup>87</sup> To address this problem, the drafting of the Omnibus Regulation on OSS Implementation is an urgent strategic step. This master regulation serves as a legal umbrella, unifying all licensing norms into a uniform, operational regulatory framework. The unification of norms allows the government to simplify the licensing process, eliminate conflicting provisions, and ensure legal certainty for business actors. This omnibus must regulate standards for permit definition and classification; the integration of spatial planning, land, and environment; mechanisms for data interoperability between ministries; the obligation to validate thematic maps and land legal status before issuing NIB and KKPR; and sanction mechanisms for institutions that do not provide data or hinder integration. Thus, omnibus regulation can be a structural solution to eliminate the sectoral regulatory complexity that has been hindering the effectiveness of OSS.<sup>88</sup>

Additionally, regarding regulation, Government Regulation No. 5 of 2021 needs to be revised to integrate spatial data and land status.<sup>89</sup> Revisions to Government Regulation No. 5 of 2021 should explicitly state several provisions related to the integration of spatial data and land use. *First*, the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) must be required to provide land legal status data in an integrated format that the OSS-RBA system can read in real-time.<sup>90</sup> *Second*, the Ministry of Environment and Forestry (KLHK) and other sectoral ministries must be required to provide validated, standardized thematic maps to eliminate information overlap across sectors.<sup>91</sup> *Third*, regulations are

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in the Central Lombok Regency Area', *International Journal of Integrated Science and Technology*, 3.1 (2025), 1203–18 <https://doi.org/10.59890/ijist.v3i1.214>

<sup>87</sup> Desni Maharani Saragih, T. Sabrina and Agus Purwoko, 'The Influence Of Easy Business Licensing Through The Implementation Of Online Single Submission (OSS) Applications On Increasing Investment In North Sumatra Province (Mid Large Scale Industrial Sector)', *International Journal of Science, Technology & Management*, 5.1 (2024), 25–32 <https://doi.org/10.46729/ijstm.v5i1.1049>

<sup>88</sup> Vincent Nadin and others, 'Integrated, Adaptive and Participatory Spatial Planning: Trends across Europe', *Regional Studies*, 55.5 (2021), 791–803 <https://doi.org/10.1080/00343404.2020.1817363>

<sup>89</sup> Nasim Mohamadiazar, Ali Ebrahimian and Atorod Azizinamini, 'Equitable Prioritization of Bridge Rehabilitation Projects Using a Spatial Multi-Criteria Decision Support Framework', *Transportation Research Record: Journal of the Transportation Research Board*, 2678.12 (2024), 2059–76 <https://doi.org/10.1177/03611981241254110>

<sup>90</sup> Muhammad Mahreza Maulana and others, 'The Smart Governance Framework and Enterprise System's Capability for Improving Bio-Business Licensing Services', *Informatics*, 10.2 (2023), 53 <https://doi.org/10.3390/informatics10020053>

<sup>91</sup> Eleine Juliana Malek and Abd Rahman Abdul Rahim, 'A Thematic Review of Forest Certification Publications from 2017 to 2021: Analysis of Pattern and Trends for Future Studies', *Trees, Forests and People*, 10 (2022), 100331 <https://doi.org/10.1016/j.tfp.2022.100331>

needed to ensure the technical flow of electronic-based KKPR verification, including an automatic mechanism to check spatial planning compliance.<sup>92</sup>

Third, strengthening governance and institutional coordination. The effectiveness of risk-based business licensing depends heavily on the strength of institutional coordination among ministries, agencies, and local governments.<sup>93</sup> Fragmentation of authority, differences in operational standards, and the lack of integrated oversight mechanisms have become structural obstacles to the permit issuance process, including KKPR and NIB. To address this issue, a comprehensive reform of institutional governance is needed. The first step is the formation of the National Coordination Council for Risk-Based Licensing, a cross-sectoral body with the authority to make quick decisions to resolve regulatory conflicts, harmonize data, and synchronize thematic maps across agencies. This council should be directly under the President's coordination, with sufficient authority to address sectoral differences and ensure that all ministries and local governments comply with OSS-RBA standards. The existence of this council will expedite the clarification of issues, ensure parallel data updates, and eliminate the practice of sectoral egoism that has hindered the implementation of integrated licensing policies.<sup>94</sup>

The second step is to standardize the OSS SOP across central and regional governments to prevent differences in interpretation and implementation practices. Currently, many local governments still use manual procedures or refer to outdated derivative rules, leading to a lack of synchronization between processes at the central and regional levels. An integrated SOP binding will ensure that every agency follows the same procedures for data verification, technical recommendations, and permit issuance.<sup>95</sup> Additionally, the SOP must include minimum service standards, completion deadlines, and sanctions for delays or violations of procedures. Thirdly, strengthening governance needs to be accompanied by digital post-licensing supervision based on cutting-edge technology, such as geographic information systems (GIS), monitoring sensors, satellite imagery, and real-time reporting. Integrating technology-based supervision into the OSS will enable the government to automatically monitor business actors' compliance with approved spatial plans, environmental permits, and land use. This oversight model will also prevent permit abuse, minimize

<sup>92</sup> Siti Sundari and Rusdianto Sesung, 'Validity Publishing the Conformity of Space Use Activities (Kkpr) That Are Not in Accordance With the Spatial Plan', *Journal of Law, Politic and Humanities*, 5.4 (2025), 2358–68 <https://doi.org/10.38035/jlph.v5i4.1380>

<sup>93</sup> Nunik Nurhayati and others, 'Legal Certainty of The Positive Fictive Policy In Business Licensing Through The Online Single Submission Risk-Based Approach System In Indonesia', *Jurnal Ius Constituendum*, 10.2 (2025), 224–41 <https://doi.org/10.26623/jic.v10i2.12009>

<sup>94</sup> Rick Vogel and others, 'Cross-sector Partnerships: Mapping the Field and Advancing an Institutional Approach', *International Journal of Management Reviews*, 24.3 (2022), 394–414 <https://doi.org/10.1111/ijmr.12283>

<sup>95</sup> Alqahtani.

ecological damage practices, and ensure that the process aligns with the principles of spatial sustainability.<sup>96</sup>

Ultimately, implementing these three policy models not only enhances the effectiveness of OSS-RBA as an electronic licensing instrument but also accelerates the transformation of land governance in Indonesia towards a more transparent, efficient, and sustainable system. With the integration of regulations, spatial data synchronization, and robust institutional coordination, the permitting process is no longer seen as a mere administrative procedure. Still, it has evolved into a strategic instrument for investment management, spatial planning, and the integrated distribution of land use. Through a digitalized and data-driven system, the government can ensure that every spatial use decision aligns with spatial plans, environmental policies, and sustainable development goals. Business actors gain legal certainty and ease of doing business, while the state gains more effective control over land-use dynamics. Thus, OSS-RBA not only accelerates licensing services but also strengthens the foundation of national land governance, making it adaptive, accountable, and responsive to future development challenges.<sup>97</sup>

#### 4. Conclusion

Based on the analysis presented, it can be concluded that, *first*, the integration of the Job Creation Law, OSS-RBA, and Indonesia's agrarian framework reveals persistent regulatory disharmony and institutional fragmentation that undermine legal certainty in land-based business licensing. Ensuring coherent implementation requires harmonized norms, clearer division of authority between BKPM and ATR/BPN, and the alignment of digital licensing mechanisms with foundational agrarian principles under the UUPA. *Second*, a comparison between Indonesia and Singapore shows that differences in legal traditions, institutional capacity, and the level of digitalization significantly affect the effectiveness of the land registration system in ensuring legal certainty and protecting land rights. *Third*, improving the efficacy of OSS-RBA requires an integrated approach that includes data synchronization, regulatory harmonization, and strengthened institutional coordination to achieve transparent, aligned land governance. Through these strategic reforms, OSS-RBA can evolve into a digital instrument that not only accelerates business licensing but also strengthens sustainable land governance and spatial planning that is accountable and responsive to future development challenges.

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<sup>96</sup> Santi Hapsari Dewi Adikancana and Mas Achmad Santosa, 'The Licensing Transformation in Small and Medium Industries Affecting Environment Following the Establishment of the Law on Job Creation: A Case Study of the Washing Industry in Bandung Regency', *Padjadjaran Jurnal Ilmu Hukum*, 11.3 (2024), 339–64 <https://doi.org/10.22304/pjih.v11n3.a2>

<sup>97</sup> Maharani Saragih, Sabrina and Purwoko.

## References

Adikancana, Santi Hapsari Dewi and Mas Achmad Santosa, 'The Licensing Transformation in Small and Medium Industries Affecting Environment Following the Establishment of the Law on Job Creation: A Case Study of the Washing Industry in Bandung Regency', *Padjadjaran Jurnal Ilmu Hukum*, 11 (2024), 339–64 <https://doi.org/10.22304/pjih.v1i1n3.a2>

Aditya, Trias, I Ketut Gede Ary Sucaya and Fajar Nugroho Adi, 'LADM-Compliant Field Data Collector for Cadastral Surveyors', *Land Use Policy*, 104 (2021), 105356 <https://doi.org/10.1016/j.landusepol.2021.105356>

Alqahtani, Sultan S, 'Beyond the Code: Analyzing OSS Developers Security Awareness and Practices', *International Journal of Information Security*, 24 (2025), 109 <https://doi.org/10.1007/s10207-025-01023-1>

Deininger, Klaus, *Land Policies for Growth and Poverty Reduction* (Washington, DC: Oxford University Press, 2003)

Dewi, Maya Puspita, Tuswoyo Tuswoyo, Abdul Gofur and Dony Hendarto, 'Sosialisasi Dan Pendampingan Penggunaan Online Single Submission Pada Pelaku Usaha Kecil Dan Menengah Di Kota Depok', *Jurnal Komunitas: Jurnal Pengabdian Kepada Masyarakat*, 3 (2020), 34–39 <https://doi.org/10.31334/JKS.V3I1.967>

Dj.B, Yunita, Faturachman Alputra Sudirman and La Ode Mustafa R, 'Efektivitas Penerapan Aplikasi Online Single Submission Dalam Pelayanan Izin Usaha Menengah Keatas Di DPMPTSP Kabupaten Morowali', *PAMARENDA: Public Administration and Government Journal*, 4 (2024), 15–28 <https://doi.org/10.52423/PAMARENDA.V4I1.2>

El Fajri, Muhammad Reza and Sri Juni Woro Astuti, 'Efektivitas Sistem Perizinan Online Oss Rba (Online Single Submission Risk Based Approach) Terhadap Pengembangan Umkm Di Kabupaten Gresik', *JISP (Jurnal Inovasi Sektor Publik)*, 4 (2024), 60–71 <https://doi.org/10.38156/JISP.V4I1.227>

Ghozali, Khakim and Yudho Giri Sucahyo, 'Comparative Study of E-Government Enterprise Architecture By Primary Attributes of 3 Asian Countries', *Jurnal Sistem Informasi*, 8 (2013) <https://doi.org/https://doi.org/10.21609/jsi.v8i2.334>

—, 'Comparative Study Of E-Government Enterprise Architecture By Primary Attributes Of 3 Asian Countries', *Jurnal Sistem Informasi*, 8 (2012), 126–32 <https://doi.org/10.21609/JSI.V8I2.334>

Harsono, Boedi, *Hukum Agraria Indonesia: Sejarah Pembentukan Undang-Undang Pokok Agraria, Isi Dan Pelaksanaannya*, Revised ed (Jakarta: Universitas Trisakti, 2013)

Harun, Harsya, 'Penyelenggaraan Urusan Pemerintahan Daerah Studi Penyelenggaraan Urusan Bidang Pendidikan Menengah Di Kota Palopo Provinsi Sulawesi Selatan', *DIALEKTIKA: Jurnal Ekonomi Dan Ilmu Sosial*, 3 (2018), 33–54 <https://doi.org/10.36636/DIALEKTIKA.V3I1.81>

Hasibuan, M Rahadian, Sudiman Sihotang and Ani Yumarni, 'Efektivitas Sistem Online Single Submission (OSS) Dalam Mengurus Perizinan Bangunan Gedung Sekolah

Berbasis Tanah Wakaf', Karimah Tauhid, 4 (2025), 2879–98  
<https://doi.org/10.30997/KARIMAHTAUHID.V4I5.19304>

Hidayah, Syarifaatul, Universitas Negeri Semarang, Evi Hariyani, Universitas Negeri, Semarang M Adymas and Hikal Fikri, 'Tantangan Dan Peluang Sertifikat Elektronik Dalam Reformasi Pendaftaran Tanah Di Era Digital.', *Jurnal Ilmiah Nusantara*, 1 (2024), 186–99 <https://doi.org/10.61722/JINU.V1I6.2793>

Hilmi, Syaiful Ihsan, Maulana Akhyar and Aprila Niravita, 'Analisis Yuridis Penyelesaian Sengketa Pulau Batu Antara Malaysia Dengan Singapura Dalam Perpektif Hukum Internasional', *JURNAL MULTIDISIPLIN ILMU AKADEMIK*, 2 (2025), 150–69  
<https://doi.org/10.61722/JMIA.V2I1.3166>

Ho, Thanh T and Abdul Fikri Angga Reksa, 'Environmental Policy in Indonesia from the Post-New Order Era to the Present: Positive Adjustments and Limitations', in *Media, Politics and Environment: Analyzing Experiences from Europe and Asia*, ed. by Detlef Briesen and Sarada Prasanna Das (Cham: Springer International Publishing, 2023), pp. 189–212 [https://doi.org/10.1007/978-3-031-31252-6\\_14](https://doi.org/10.1007/978-3-031-31252-6_14)

Indra Yudha Koswara and others, *Kepastian Hukum Tanah: Pendaftaran, Investasi, Dan Pertumbuhan Ekonomi Di Era MEA*, ed. by Lisnawati, Cetakan Pe (Amerta Media, 2024)

Iqbal, Muhammad, Fitra Assegaf, Henny Juliani and Nabitus Sa'adah, 'Pelaksanaan Online Single Submission (Oss) Dalam Rangka Percepatan Perizinan Berusaha Di Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu (Dpmptsp) Jawa Tengah', *Diponegoro Law Journal*, 8 (2019), 1328–42  
<https://doi.org/10.14710/DLJ.2019.24582>

Irawan, Bambang, Muhammad Nizar, Paisal Akbar and Andi Hafidz Khanz, 'Inovasi Pelayanan Permohonan Pengajuan Izin Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu (DPMPTSP) Kota Samarinda', *Matra Pembaruan*, 4 (2020), 135–45  
<https://doi.org/10.21787/MP.4.2.2020.135-145>

Jaelani, Abdul Kadir, 'Land Procurement for Infrastructure Projects under the Job Creation Law', *Contrarius*, 1 (2025), 20–27  
<https://doi.org/10.53955/CONTRARIUS.V1I1.80>

Kautsar Fattah, Akhmad and Handar Subandi Bakhtiar, 'Cross-Border Property Ownership Dalam Perspektif Hukum Internasional: Suatu Studi Perbandingan Negara', *Jurnal Humaniora Dan Sosial Sains*, 2 (2025), 270–74  
<https://humaniorasains.id/jhss/article/view/119>

King, Russell, *Land Reform: A World Survey* (New York: Routledge, 2018)

Kusumaningtyas, Reza Octavia and Ong Argo Victoria, 'The Role of the Anti-Corruption Commission Supervisory Board in Institutionalizing Accountability', *Contrarius*, 1 (2025), 51–66 <https://doi.org/10.53955/CONTRARIUS.V1I1.83>

Maharani Saragih, Desni, T Sabrina and Agus Purwoko, 'The Influence Of Easy Business Licensing Through The Implementation Of Online Single Submission (OSS) Applications On Increasing Investment In North Sumatra Province (Mid Large Scale Industrial Sector)', *International Journal of Science, Technology & Management*, 5 (2024),

25–32 <https://doi.org/10.46729/ijstm.v5i1.1049>

Malek, Eleine Juliana and Abd Rahman Abdul Rahim, 'A Thematic Review of Forest Certification Publications from 2017 to 2021: Analysis of Pattern and Trends for Future Studies', *Trees, Forests and People*, 10 (2022), 100331 <https://doi.org/10.1016/j.tfp.2022.100331>

Mashdurohatun, Anis, Deni Setiyawan, I Ketut Kasna Dedi, Andi Tri Saputro and Idham Kholid, 'Legal Attitudes Toward Cohabitation: A Review Of Liberal And Islamic States', *PETITA: JURNAL KAJIAN ILMU HUKUM DAN SYARIAH*, 10 (2025) <https://doi.org/10.22373/petita.v10i1.376>

Maulana, Muhammad Mahreza, Arif Imam Suroso, Yani Nurhadryani and Kudang Boro Seminar, 'The Smart Governance Framework and Enterprise System's Capability for Improving Bio-Business Licensing Services', *Informatics*, 10 (2023), 53 <https://doi.org/10.3390/informatics10020053>

Mayasari, Ima, 'Evaluasi Kebijakan Izin Lokasi Dan Pertimbangan Teknis Pertanahan Pasca Penerapan Online Single Submission', *Jurnal Rechts Vinding: Media Pembinaan Hukum Nasional*, 8 (2019) <https://doi.org/http://dx.doi.org/10.33331/rechtsvinding.v8i3.348>

—, 'Evaluasi Kebijakan Izin Lokasi Dan Pertimbangan Teknis Pertanahan Pasca Penerapan Online Single Submission', *Jurnal Rechts Vinding: Media Pembinaan Hukum Nasional*, 8 (2019), 403 <https://doi.org/10.33331/RECHTSVINDING.V8I3.348>

McCarthy, John F, Ahmad Dhiaulhaq, Suraya Afiff and Kathryn Robinson, 'Land Reform Rationalities and Their Governance Effects in Indonesia: Provoking Land Politics or Addressing Adverse Formalisation?', *Geoforum*, 132 (2022), 92–102 <https://doi.org/10.1016/j.geoforum.2022.04.008>

Meckelburg, Rebecca and Agung Wardana, 'The Political Economy of Land Acquisition for Development in the Public Interest: The Case of Indonesia', *Land Use Policy*, 137 (2024), 107017 <https://doi.org/https://doi.org/10.1016/j.landusepol.2023.107017>

Milta, Chyndi Berliana and Mayarni Mayarni, 'Pelayanan Perizinan Melalui Sistem Online Single Submission Risk Based Approach (OSS-RBA) Pada Dinas Penanaman Modal Pelayanan Terpadu Satu Pintu Dan Tenaga Kerja Kabupaten Kuantan Singingi', *Journal of Research and Development on Public Policy*, 2 (2023), 19–25 <https://doi.org/10.58684/JARVIC.V2I3.71>

Mitchell, Matthew, 'Analyzing the Law Qualitatively', *Qualitative Research Journal*, 23 (2022), 102–13 <https://doi.org/https://doi.org/10.1108/QRJ-04-2022-0061>

Mohamadiazar, Nasim, Ali Ebrahimian and Atorod Azizinamini, 'Equitable Prioritization of Bridge Rehabilitation Projects Using a Spatial Multi-Criteria Decision Support Framework', *Transportation Research Record: Journal of the Transportation Research Board*, 2678 (2024), 2059–76 <https://doi.org/10.1177/03611981241254110>

Mustikasari, Kurniawan and Eduardus Bayo Sili, 'Implementation of the Online Single Submission (OSS) System for Licensing Foreign Investment Limited Liability Companies (PT PMA) in the Central Lombok Regency Area', *International Journal of*

*Integrated Science and Technology*, 3 (2025), 1203–18 <https://doi.org/10.59890/ijist.v3i1.214>

Myla Libran, Resya, 'Analisis Kualitas Pengurusan Perizinan Melalui Sistem Online Single Submission Risk Based Approach (OSS-RBA) Pada Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu Kabupaten Maluku Tengah', *Action Research Literate*, 8 (2024), 725–41 <https://doi.org/10.46799/ARL.V8I4.304>

Nadin, Vincent, Dominic Stead, Marcin Dąbrowski and Ana Maria Fernandez-Maldonado, 'Integrated, Adaptive and Participatory Spatial Planning: Trends across Europe', *Regional Studies*, 55 (2021), 791–803 <https://doi.org/10.1080/00343404.2020.1817363>

Namiroh, Dinda Putri, Dyah Lituhayu and Endang Larasati Setianingsih, 'Implementasi Sistem Online Single Submission Risk Based Approach (Oss Rba) Dalam Pelayanan Perizinan Berusaha Di Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu (Dpmptsp) Kabupaten Semarang', *Journal of Public Policy and Management Review*, 13 (2024), 19–52 <https://doi.org/10.14710/JPPMR.V13I4.46566>

Nisrina, Ghina and Widya Oktavia, 'Tata Ruang Dan Perizinan Lokasi: Keterkaitan NIB Dalam Konteks OSS Dan Perda No 5 Tahun 2021 Kota Semarang', *Jurnal Ilmiah Wahana Pendidikan*, 10 (2024), 250–68 <https://doi.org/10.5281/ZENODO.12522671>

Nurhayati, Nunik, Giftian Fajri Rustyono, Achmad Miftah Farid and Rohmad Suryadi, 'Legal Certainty of The Positive Fictive Policy In Business Licensing Through The Online Single Submission Risk-Based Approach System In Indonesia', *Jurnal Ius Constituendum*, 10 (2025), 224–41 <https://doi.org/10.26623/jic.v10i2.12009>

Peggye Lenda Olivia Rembeth, Bobby Jhon Vian Polii and Leonardus Ricky Rengkung, 'Evaluasi Pelaksanaan Pendaftaran Tanah Sistematis Lengkap Di Kecamatan Tumpaan Kabupaten Minahasa Selatan', *AGRI-SOSIOEKONOMI*, 16 (2020), 441–50 <https://doi.org/10.35791/AGRSEK.16.3.2020.31137>

Perizinan Usaha Mikro Kecil di Perkotaan, Inovasi, Ropiko Duri, Bachtari Alam Hidayat and Rika Destiny Sinaga, 'Effectiveness of the Online Single Submission Risk-Based Approach (OSS RBA): Innovation in Licensing for Micro and Small Businesses in Urban Areas', *Matra Pembaruan: Jurnal Inovasi Kebijakan*, 8 (2024), 103–16 <https://doi.org/10.21787/MP.8.2.2024.103-116>

Permatasari, Ai, Sirrinawati Sirrinawati, Suarman Gulo, Aep Sulaeman and Imas Rosidawati Wiradirja, 'Distortion of Gratuities In Acquittal (Vrijspraak) Verdict in Corruption Case Juridical Analysis of the Central Jakarta District Court Decision Number: 37/Pid.Sus-Tpk/2021/PN.Jkt.Pst', *Greenation International Journal of Law and Social Sciences*, 2 (2025), 354–70 <https://doi.org/10.38035/gijlss.v2i4.325>

Prithresia, Bianca, 'Kajian Perbandingan Asas Nasionalitas Hukum Agraria Dalam Konteks Internasional', *UNES Law Review*, 6 (2023), 7305–13 <https://doi.org/10.31933/UNESREV.V6I2.1259>

Purnawan, Amin and Siti Ummu Adillah, 'Regulation Of The Legality Of Micro, Small And Medium Enterprises Through The Online Single Submission System To Increase Competitiveness', *Jurnal Pembaharuan Hukum*, 7 (2020), 159–71

<https://doi.org/10.26532/JPH.V7I2.10990>

Putra, Reza Andriansyah and Atik Winanti, 'Urgensi Dan Kendala Dalam Penerbitan Dokumen Sertifikat Tanah Elektronik Pasca Peraturan Menteri ATR/BPN Nomor 3 Tahun 2023', *Jurnal Usm Law Review*, 7 (2024) <https://doi.org/https://doi.org/10.26623/julr.v7i2.9178>

Putrisasmita, Gianny, 'Kedudukan Program Pendaftaran Tanah Sistematis Lengkap Dalam Kerangka Reforma Agraria Untuk Mewujudkan Kepastian Hukum Pertanahan Di Indonesia', *LITRA: Jurnal Hukum Lingkungan, Tata Ruang, Dan Agraria*, 3 (2023), 18–36 <https://doi.org/10.23920/LITRA.V3I1.1466>

Rahayu, Sang Ayu Putu and Rindia Fanny Kusumaningtyas, 'Implications of Existence Online Single Submission Risk-Based Approach for Foreign Investors', in *AIP Conference Proceedings* (AIP Publishing, 2022), p. 030006 <https://doi.org/10.1063/5.0104101>

Rahayu, Tiara Dwi, Yani Pujiwati and Betty Rubiati, 'Kepastian Hukum Kepemilikan Hak Atas Tanah Setelah Mengalami Likuefaksi Tanah', *LITRA: Jurnal Hukum Lingkungan Tata Ruang Dan Agraria*, 2 (2023) <https://doi.org/https://doi.org/10.23920/litra.v2i2.1315>

Rahmawati, Dian and Deden Rukmana, 'The Financialization of Housing in Indonesia: Actors and Their Roles in the Transformation of Housing Production', *Cities*, 131 (2022), 103918 <https://doi.org/https://doi.org/10.1016/j.cities.2022.103918>

Rajamemang, Andi M Rusdi Maidin, Moehamat Nurdin, Wahyudi Putera, Andi Tenri Ulmi, Abd Rasyid, and others, 'Effectiveness of Licensing Services for Issuing Business Identification Numbers Through the Oss-Rba System at the Investment and One-Stop Integrated Service Office of Sinjai Regency', *THE American Journal of Humanities and Social Sciences Research (THE AJHSSR)*, 6 (2023), 63–71 <https://doi.org/https://doi.org/10.56805/ajhssr>

Ramadhani, Rahmat, 'Pendaftaran Tanah Sebagai Langkah Untuk Mendapatkan Kepastian Hukum Terhadap Hak Atas Tanah', *SOSEK: Jurnal Sosial Dan Ekonomi*, 2 (2021), 31–40 <https://doi.org/10.55357/SOSEK.V2I1.119>

Revanza Salsa Bilita, Fazriyan Nurazmi and Indra Prasta, 'Implementasi Sistem Online Single Submission Risked Based Approach (OSS RBA) Di Kantor Dinas Penanaman Modal Pelayanan Terpadu Satu Pintu Kota Tanjungpinang', *CIDEA Journal*, 2 (2023), 13–19 <https://doi.org/10.56444/CIDEAJOURNAL.V2I2.1267>

Rezvani, Seyed MHS, Maria João Falcão, Dragan Komljenovic and Nuno Marques de Almeida, 'A Systematic Literature Review on Urban Resilience Enabled with Asset and Disaster Risk Management Approaches and GIS-Based Decision Support Tools', *Applied Sciences*, 13 (2023), 2223 <https://doi.org/10.3390/app13042223>

Riau, Dwi Putranto, Yonarisman Muhammad Akbar, Tora Akadira, Muhtarom and Bambang Agus Diana, 'Communication and Coordination Innovations in Improving the Performance of Permits for Suitability for Spatial Use Activities', *International Journal of Sustainable Development and Planning*, 19 (2024), 2719–27 <https://doi.org/10.18280/ijsdp.190728>

Rochmayanto, Yanto, Dodik Ridho Nurrochmat, Bramasto Nugroho, Dudung Darusman, Arif Satria, Thorkil Casse, and others, 'Devolution of Forest Management to Local Communities and Its Impacts on Livelihoods and Deforestation in Berau, Indonesia', *Heliyon*, 9 (2023), e16115 <https://doi.org/10.1016/j.heliyon.2023.e16115>

Rosidi, Didi, 'Implementasi Kebijakan Perizinan Berusaha Berbasis Resiko (OSS-RBA) Di Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu (DPMPTSP) Di Kabupaten Subang', *The World of Public Administration Journal*, 2022 <https://doi.org/10.37950/WPAJ.V4I2.1492>

Rukmono, Bambang Sugeng and Sandi Yudha Prayoga, 'Justice A Legal Analysis of Medical Marijuana Regulation', *Contrarius*, 1 (2025), 28–40 <https://doi.org/10.53955/CONTRARIUS.V1I1.81>

Sanjaya, Winny, 'Dampak Kebijakan Satu Peta/One Map Policy Di Bidang Pertanahan Terhadap Sertifikat Sebagai Bukti Kepemilikan Hak Atas Tanah Di Indonesia', *LITRA: Jurnal Hukum Lingkungan Tata Ruang Dan Agraria*, 2 (2023) <https://doi.org/https://doi.org/10.23920/litra.v2i2.1291>

Saraswati, Putu Sekarwangi and Olim Narzullayev, 'Integrating Miranda Rights to Promote Human Rights Compliance', *Journal of Sustainable Development and Regulatory Issues*, 3 (2025), 459–85 <https://doi.org/10.53955/JSDERI.V3I3.94>

Setiabudhi, Donna Okthalia, Ahsan Yunus, Irwansyah Irwansyah and Andi Rifky, 'The Role of Land Management Paradigm Towards Certainty and Justice', *BESTUUR*, 11 (2023), 43 <https://doi.org/10.20961/bestuur.v11i1.71710>

Setiawan, Mohamad Agus, Hartoyo Hartoyo, Kudang Boro Seminar, Bagus Sartono and Rachma Fitriati, 'Tata Kelola Digital Layanan Lalu Lintas Jalan Tol Di Indonesia: Studi Aplikasi Travoy Jasa Marga', *Matra Pembaruan*, 8 (2024), 1–16 <https://doi.org/10.21787/MP.8.1.2024.1-16>

Sihombing, BF and Farhan Hamid, 'Land Law Evolution and Investment Dynamics: Historical Perspective and Contemporary Development Nexus', *Lex Publica*, 10 (2023), 66–83 <https://doi.org/10.58829/lp.10.1.2023.66-83>

Singh, Jaswinder, Anu Gupta and Preet Kanwal, 'Quality Enhancement in OSS Development Process: A Quantitative Framework Approach', *Software Quality Journal*, 33 (2025), 4 <https://doi.org/10.1007/s11219-024-09705-0>

Siti Sundari and Rusdianto Sesung, 'Validity Publishing the Conformity of Space Use Activities (Kkpr) That Are Not in Accordance With the Spatial Plan', *Journal of Law, Politic and Humanities*, 5 (2025), 2358–68 <https://doi.org/10.38035/jlph.v5i4.1380>

Sugiarto, Danti, 'Mempercepat Pendaftaran Tanah Di Indonesia Dengan Hukum Pertahanan', *Court Review: Jurnal Penelitian Hukum*, 3 (2023), 17–21 <https://doi.org/10.69957/CR.V3I03.703>

Sukewati, Ketut, Lanang Putra Perbawa and Paul Atagamen Aidonojie, 'Restorative Justice as a Policy Approach to Traffic Crime Resolution in Indonesia', *Contrarius*, 1 (2025), 41–50 <https://doi.org/10.53955/CONTRARIUS.V1I1.82>

Suroso, Joko T, Dani Durahman and Indra Budi, 'The Simplification of Licensing Procedure in Job Creation Law: The Effectiveness to Attract Foreign Investor', *Cogent Social Sciences*, 10 (2024) <https://doi.org/10.1080/23311886.2024.2414509>

Susanto, Dody and Diana Haiti, 'Kepastian Hukum Sertipikat Tanah Elektronik Terhadap Pinjaman Yang Tidak Didaftarkan Hak Tanggungan', *Al-Zayn: Jurnal Ilmu Sosial & Hukum*, 3 (2025), 4117–27 <https://doi.org/10.61104/ALZ.V3I4.1898>

Syaban, Alfath Satria Negara and Seth Appiah-Opoku, 'Unveiling the Complexities of Land Use Transition in Indonesia's New Capital City IKN Nusantara: A Multidimensional Conflict Analysis', *Land*, 13 (2024), 606 <https://doi.org/10.3390/land13050606>

Syahputra, Mohammad Firdaus, Bintara Tamtama Putra and Alvin Dwi Arianto, 'Perbedaan Kebijakan Pendaftaran Tanah Di Indonesia, Malaysia Dan Singapura: Efektivitas Dan Tantangannya.', *Jurnal Multidisiplin Ilmu Akademik*, 2 (2025), 348–61 <https://doi.org/10.61722/JMIA.V2I1.3334>

Syarif, Muhammad, Budi Hartono and Isnaini Isnaini, 'Implementasi Sistem Online Single Submission Risk Basic Approach (OSS RBA) Dalam Meningkatkan Kualitas Pelayanan Pada Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu Kabupaten Aceh Tamiang', *Journal of Education, Humaniora and Social Sciences (JEHSS)*, 5 (2023), 3102–11 <https://doi.org/10.34007/JEHSS.V5I4.1768>

Tan, Eugene K.H., *Land Law in Singapore and Malaysia* (Singapore: Academy Publishing, 2018)

Tan, Kevin, *Singapore Land Law* (Singapore: Wolters Kluwer, 2017)

Vera Purba, Irene, Gusti Ayu Ketut, Rachmi Handayani, Lego Karjoko and Anurat Anantanatorn, 'Implications of Agricultural Land Conversion for Sustainable Food Security: Evidence from Vietnam', *Contrarius*, 1 (2025), 1–19 <https://doi.org/10.53955/CONTRARIUS.V1I1.79>

Vogel, Rick, Markus Göbel, Marit Grewe-Salfeld, Barbara Herbert, Yuka Matsuo and Christiana Weber, 'Cross-sector Partnerships: Mapping the Field and Advancing an Institutional Approach', *International Journal of Management Reviews*, 24 (2022), 394–414 <https://doi.org/10.1111/ijmr.12283>

Widiartana, Gregorius, Vincentius Patria Setyawan and Ariesta Wibisono Anditya, 'Exploring Restorative Justice in Domestic Violence Cases', *Journal of Sustainable Development and Regulatory Issues*, 3 (2025), 641–66 <https://doi.org/10.53955/JSDERI.V3I3.87>

Wisnumurti, Anak Agung Gede Oka, 'Efektifitas Pelaksanaan Kebijakan Pendaftaran Izin Usaha UMKM Secara Digital Melalui Online Single Submission (OSS) Di Kota Denpasar', *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, 5 (2022), 5441–46 <https://doi.org/10.54371/JIIP.V5I12.1230>

Yanbo, Qu, Wang Shilei, Tian Yaya, Jiang Guanghui, Zhou Tao and Meng Liang, 'Territorial Spatial Planning for Regional High-Quality Development – An Analytical Framework for the Identification, Mediation and Transmission of Potential Land

Utilization Conflicts in the Yellow River Delta', *Land Use Policy*, 125 (2023), 106462  
<https://doi.org/10.1016/j.landusepol.2022.106462>

Yang, Huanyu, Wei Huang, Dong Yang and Ying Jiang, 'Innovation in Comprehensive Transportation Network Planning in the Context of National Spatial Development: Institutional Constraints and Policy Responses', *Land*, 14 (2025), 1046  
<https://doi.org/10.3390/land14051046>

Zhang, Yongjiao, Xiaowu Man and Yongnian Zhang, 'From "Division" to "Integration": Evolution and Reform of China's Spatial Planning System', *Buildings*, 13 (2023), 1555  
<https://doi.org/10.3390/buildings13061555>