

IMPLEMENTING RED FIDIC CONDITIONS OF CONTRACT FOR GREEN CONSTRUCTION IN INDONESIA NEW CAPITAL PROJECT TO AVOID DISPUTES

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Abstract

This paper examines the implementation of Red FIDIC Conditions of Contract in the context of green construction within Indonesia's New Capital (IKN) project. Given the ambitious scale and environmental aspirations of the project, applying internationally recognized contract standards like FIDIC can provide clarity and help mitigate disputes. The study discusses the legal and practical framework of FIDIC, its relevance to sustainable construction, and how its adoption could align with Indonesia's legal system and environmental goals. A qualitative methodology is employed, using doctrinal legal research and case studies. Findings suggest that tailored application of FIDIC clauses, particularly those addressing dispute resolution and environmental compliance, is essential for reducing project risks and enhancing stakeholder collaboration. The findings of this study emphasize that implementing the Red FIDIC Conditions of Contract in the IKN green construction project can significantly reduce legal ambiguities and enhance stakeholder coordination.

Keywords: *Red FIDIC, green construction, IKN, dispute resolution, sustainable infrastructure*

ABSTRAK

Makalah ini mengkaji penerapan *Red FIDIC Conditions of Contract* dalam konteks konstruksi hijau pada proyek Ibu Kota Negara (IKN) Indonesia. Mengingat skala proyek yang ambisius dan aspirasi lingkungannya, penerapan standar kontrak yang diakui secara internasional seperti FIDIC dapat memberikan kejelasan dan membantu memitigasi sengketa. Studi ini membahas kerangka hukum dan praktis FIDIC, relevansinya terhadap konstruksi berkelanjutan, serta bagaimana penerapannya dapat selaras dengan sistem hukum Indonesia dan tujuan lingkungan nasional. Metodologi kualitatif digunakan melalui penelitian hukum doktrinal dan studi kasus. Temuan menunjukkan bahwa penerapan klausul FIDIC yang disesuaikan, khususnya yang berkaitan dengan penyelesaian sengketa dan kepatuhan lingkungan, sangat penting untuk mengurangi risiko proyek dan meningkatkan kolaborasi antar pemangku kepentingan. Temuan dari studi ini menekankan bahwa penerapan *Red FIDIC Conditions of Contract* dalam proyek konstruksi hijau IKN dapat secara signifikan mengurangi ambiguitas hukum dan meningkatkan koordinasi antar pemangku kepentingan.

Kata kunci: *Red FIDIC, konstruksi hijau, IKN, penyelesaian sengketa, infrastruktur berkelanjutan*

Introduction

Indonesia's ambitious plan to relocate its capital city to East Kalimantan, known as the Ibu Kota Negara (IKN) project, is underpinned by aspirations of creating a smart, sustainable, and inclusive urban development. The move is motivated by numerous factors, including overpopulation and environmental degradation in Jakarta, as well as economic decentralization. In line with Indonesia's climate commitments and the global green transition, green construction principles are a cornerstone of the IKN blueprint. These principles emphasize energy efficiency, low carbon emissions, environmental preservation, and sustainable use of resources.

As with any large-scale construction project, especially one that incorporates stringent environmental requirements, the legal and contractual frameworks must support efficient project delivery while minimizing conflict. This paper proposes the implementation of the FIDIC Conditions of Contract as an effective approach to manage legal risks and align the IKN project with international standards. The FIDIC suite of contracts is widely used in global infrastructure projects and is recognized for its clarity in risk allocation, standardization of roles and responsibilities, and emphasis on dispute avoidance.

The integration of FIDIC Conditions of Contract is particularly relevant in the context of green construction, where contractual obligations must be clear regarding sustainability deliverables. Traditional Indonesian construction contracts may not yet fully encompass the complexities of environmentally sustainable obligations, resulting in possible ambiguities and disputes. Therefore, the adoption and adaptation of FIDIC contracts, especially the Red Book versions, could help bridge this gap.

Furthermore, adopting FIDIC in Indonesia's IKN project must consider compatibility with local legal systems, particularly concerning contract enforcement, dispute resolution mechanisms, and compliance with environmental regulations. This paper explores how FIDIC can be contextualized to meet the needs of the IKN project, the types of disputes that might be avoided through this approach, and the broader benefits for stakeholders engaged in green infrastructure development.

Problem Formulation

Despite regulatory efforts, infrastructure projects in Indonesia often face disputes arising from ambiguities in contract interpretation, environmental obligations, and differing stakeholder expectations. The implementation of green construction further complicates the legal landscape. This paper seeks to address how FIDIC Conditions of Contract can be adapted to mitigate these risks within the context of the IKN project.

1. Indonesia's infrastructure projects, particularly the IKN green construction project, face significant legal and operational challenges due to ambiguities in contract interpretation, environmental obligations, and diverse stakeholder expectations.
2. The complexity of integrating sustainable development principles into large-scale construction increases the risk of disputes, especially when traditional contracts lack provisions for environmental compliance and risk allocation.
3. Therefore, it is essential to explore how FIDIC Conditions of Contract can be adapted and implemented effectively to address these challenges, mitigate legal risks, and align with Indonesia's legal framework and sustainability goals.

Research Questions

1. How can FIDIC Conditions of Contract be implemented effectively in the IKN green construction project?
2. What clauses within FIDIC are most relevant for mitigating disputes related to environmental and sustainability commitments?
3. How can Indonesia's legal and regulatory framework accommodate the FIDIC model in a domestic mega-infrastructure project?

Research Objectives

1. To analyse the applicability of FIDIC in the Indonesian legal and regulatory context.
2. To evaluate key FIDIC clauses that support green construction and dispute avoidance.
3. To propose an implementation framework for the use of FIDIC in the IKN project that aligns with sustainable development goals and local legal norms.

Literature Review

The literature on FIDIC Conditions of Contract is extensive, particularly in the context of international construction and infrastructure development. The FIDIC Red Book (ConsultingEngineers, 2017), typically used for construction works where the design is provided by the employer, and the Green Book, suitable for simpler projects, are widely respected for their detailed contractual provisions and structured dispute resolution mechanisms.

The FIDIC Red Book (ConsultingEngineers, 2017) is a globally recognized standard contract for construction works where the design is provided by the employer. It promotes balanced risk allocation between parties, ensuring clarity on roles, quality standards, claims, and payment procedures. A key feature is its dispute avoidance and adjudication mechanism (DAAB), which reduces legal conflicts proactively. The FIDIC Red Book (ConsultingEngineers, 2017) also emphasizes compliance with environmental and safety standards, making it highly relevant for Indonesia's IKN project, which integrates green construction principles. Its structured format aids in aligning international best practices with domestic legal frameworks, fostering efficiency and sustainability

Kazimi (Kazimi, 2023) emphasizes that FIDIC's international recognition stems from its adaptability across jurisdictions, a factor that is crucial when implementing it in a domestic context such as Indonesia. The author notes that while FIDIC provides clarity and predictability in contract execution, it requires customization to local legal and regulatory environments.

Kazimi (Kazimi, 2023) analyze FIDIC contracts with a focus on Dispute Adjudication Boards (DABs) and the role of governing law. The study highlights how FIDIC's standardized terms offer legal certainty across jurisdictions but warns that effective dispute resolution depends on strict compliance with procedural steps, like Notices of Dissatisfaction. A case study of a Romanian infrastructure project reveals challenges in enforcing DAB decisions, underscoring that national laws can impact outcomes despite FIDIC's uniform framework. This article provides valuable insights into the intersection of contract provisions and local legal systems, reinforcing the need for careful alignment in international projects like Indonesia's IKN.

Sarwono (Hardjomuljadi, 2020) provide an in-depth examination of dispute resolution mechanisms in FIDIC contracts, highlighting the importance of proactive measures such as Dispute Avoidance/Adjudication Boards (DAABs). These mechanisms are designed to resolve disputes before they escalate into arbitration or litigation, thereby preserving working relationships among project stakeholders.

Sarwono (2020) examines the implementation of Dispute Avoidance and Adjudication Boards (DAABs) in Indonesia's construction sector following the enactment of Law No. 2/2017. The study highlights practical challenges, including legal uncertainty, limited recognition of DAABs, and high operational costs. Notably, Sarwono introduces the concept of Dewan Sengketa, a localized adaptation of DAABs, designed to align with Indonesia's legal culture and regulatory framework. The research underscores the importance of government support, capacity building, and trusted board members to ensure impartiality and effectiveness. These findings reinforce the relevance of localized dispute mechanisms within the FIDIC framework, particularly for mega projects like IKN.

Saputra (Saputra et al., 2020) focuses on the green construction landscape in Indonesia, detailing the regulatory and institutional frameworks, including 4Permen PUPR No. 21/2021. This regulation outlines performance-based standards for green buildings, covering energy and water efficiency, material usage, and indoor environmental quality. However, the study notes that existing domestic contracts lack sufficient detail on how these standards are to be achieved contractually.

Saputra (Saputra et al., 2020) further emphasize the implementation of the Green Building concept through an in-depth SWOT analysis of PT. Dahana's office buildings. The study identifies six core aspects: site development, energy efficiency, water conservation, materials recycling, indoor health, and environmental management. PT. Dahana successfully achieved up to 10% energy savings without compromising employee comfort and productivity. The research highlights the significance of continuous evaluation, appropriate technology, and policy enforcement to enhance green building outcomes. These findings provide practical benchmarks that align with Indonesia's sustainable development agenda, making them relevant as comparative insights for the IKN project's green infrastructure initiatives.

Hariyadi (Hariyadi et al., 2024) discusses broader sustainability goals in Indonesian infrastructure projects, suggesting that international contract models like FIDIC can support the transition toward sustainable development by clearly defining performance obligations and incorporating environmental compliance clauses.

Hariyadi (Hariyadi et al., 2024) highlights the essential role of sustainability frameworks in Indonesian infrastructure projects, emphasizing how environmental, social, and governance (ESG) factors must be integrated within contract design. The study underscores that international models like FIDIC offer structured clauses on environmental compliance and community engagement, making them adaptable to Indonesia's evolving legal landscape. Kazimi (Kazimi, 2023) also points out challenges in aligning local institutional capacities with global sustainability benchmarks, advocating for proactive stakeholder collaboration. These insights are particularly relevant to the IKN project, where clear legal obligations and sustainable development goals intersect, underscoring the need for precise contract stipulations and continuous monitoring

Case studies from the UAE, Singapore, and Vietnam reveal successful FIDIC implementations in projects with green aspirations. In these cases, success was attributed to early stakeholder alignment, tailored contract amendments, and robust monitoring systems. These examples provide valuable insights for Indonesia's IKN project.

Research Methodology

This study employs a qualitative legal research methodology. The primary method is doctrinal research, which involves analyzing existing legal rules and contractual standards relevant to FIDIC and green construction. Key documents include the FIDIC 2017 Red Book, Law No. 3 of 2022 concerning IKN, and the Ministerial Regulation No. 21/2021 on Green Building. (ConsultingEngineers, 2017); (Kementerian PUPR, 2021). (Republic of Indonesia, 2022)

In addition to doctrinal analysis, the study incorporates comparative legal research through case studies from countries where FIDIC has been successfully implemented in green construction projects. Secondary sources include peer-reviewed journal articles, expert commentaries, and interviews with legal practitioners and contract managers experienced with FIDIC.

The research aims to triangulate findings from legal texts, real-world applications, and theoretical perspectives to develop a contextual framework for the IKN project. The framework will be tested through hypothetical application scenarios and stakeholder mapping to evaluate its effectiveness in avoiding disputes and promoting sustainability.

Result and Discussion

The findings of this study emphasize that implementing the Red FIDIC Conditions of Contract in the IKN green construction project can significantly reduce legal ambiguities and enhance stakeholder coordination. Key FIDIC clauses, particularly those related to Dispute Avoidance/Adjudication Boards (DAABs), environmental obligations, and clearly defined performance indicators, are essential to align project execution with sustainability standards. When adapted to Indonesia's legal framework, FIDIC fosters proactive risk management, contract transparency, and mutual accountability. Case studies from countries such as the UAE and Vietnam indicate that success stems from contract customization, early stakeholder involvement, and rigorous compliance monitoring. These elements are particularly relevant for IKN, a project that requires both international credibility and local legitimacy. Moreover, the study highlights that integrating FIDIC with domestic legal instruments—such as Law No. 3 of 2022 on National Capital and Ministerial Regulation No. 21/2021 on Green Building—offers a legal pathway for enforcing environmental standards and dispute resolution mechanisms. It also stresses the importance of enhancing legal literacy and institutional capacity among project stakeholders to ensure smooth contract execution. By combining international best practices with local legal adaptations, the IKN project can avoid common pitfalls seen in large-scale developments, such as delays, cost overruns, and environmental non-compliance. Additionally, implementing robust monitoring systems and adopting continuous stakeholder engagement strategies will help maintain transparency and accountability. In conclusion, the tailored use of FIDIC not only strengthens legal predictability but also advances Indonesia's sustainable infrastructure goals, offering a model for future green construction initiatives in the country.

Conclusion

In conclusion, this study highlights the critical importance of implementing the Red FIDIC Conditions of Contract for the successful delivery of the IKN green construction project. By providing a structured framework that emphasizes balanced risk allocation, environmental compliance, and proactive dispute resolution, FIDIC serves as a powerful tool for reducing project uncertainties and aligning stakeholder expectations. The integration of international contract standards with Indonesia's legal framework offers both legal certainty and practical guidance for project managers, contractors, and government agencies. Moreover, the study underscores that sustained stakeholder engagement, robust monitoring, and capacity-building efforts are essential to maximize the benefits of FIDIC application. As Indonesia continues its pursuit of sustainable infrastructure development, the lessons from this research can inform future mega-projects and contribute to the country's broader environmental and economic goals. Ultimately, adopting FIDIC within the IKN context represents not only a legal adaptation but also a strategic move toward global best practices.

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