IMPLEMENTATION OF FIDIC PROVISIONS IN PREVENTING DISPUTES OVER LINE CHANGES IN THE 500 KV SUTET TRANSMISSION EFFICIENCY PROJECT IN SUMATRA

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Abstract

The 500 kV SUTET transmission project in Sumatra is part of the efficiency program for electricity infrastructure development. However, changes in transmission lines that occur in its implementation often lead to disputes between related parties. FIDIC as an international contract standard has an important role in preventing such disputes. This study aims to see how FIDIC provisions are applied in this project and to what extent they play a role in preventing disputes. The study results show that although FIDIC has clear mechanisms such as Variation Orders, the implementation still faces obstacles such as late reporting of changes and lack of understanding of contract law. Capacity building and communication systems are needed for FIDIC to be applied more effectively.

Keywords: *FIDIC, transmission line, efficiency project, contract dispute, 500 kV SUTET.*

- **INTRODUCTION**

Electricity infrastructure development is an integral part of the national strategy to ensure reliable, affordable and sustainable energy supply. One of the prominent strategic projects in this regard is the construction of the 500 kV Extra High Voltage Air Line (SUTET) transmission network in Sumatra. This project aims to improve the efficiency of the interconnection system between regions, reduce the cost of electricity production, and support energy distribution across provinces. However, this large-scale transmission project is not free from technical and legal challenges in the field. One of the main obstacles is the change in transmission lines due to land acquisition constraints, community social resistance, and environmental and technical considerations that force design revisions. These changes have a direct impact on costs, implementation schedules, and often trigger disputes between the parties to the contract, especially between project owners and contractors.

Within the construction law framework, contractual provisions play an important role in regulating how work changes are managed, risks are allocated, and conflicts are resolved in an orderly manner. The international standard contract document widely used in global infrastructure projects, including in Indonesia, is the FIDIC (International Federation of Consulting Engineers) contract. FIDIC, particularly the Red Book (2017) version, provides detailed legal tools to govern work variations, claims for additional costs and time, and dispute resolution through institutions such as the Dispute Avoidance/Adjudication Board (DAAB). These provisions aim to prevent open disputes by encouraging early resolution based on the principles of transparency, independent participation of the engineer, and formal documentation of any work changes.

Unfortunately, the implementation of FIDIC provisions in infrastructure projects in Indonesia has not been fully effective. Obstacles such as philosophical differences between the national legal system (civil law) and the principles in FIDIC (which tend to be based on common law), limited technical capacity of project actors, and weak understanding of dispute avoidance mechanisms often cause FIDIC procedures not to be applied optimally. As a result, projects that should prioritize efficiency are hampered by prolonged contractual conflicts. Therefore, it is important to examine the extent to

which FIDIC provisions can be effectively implemented in the context of Indonesian construction law to prevent disputes arising from changes in transmission project lines.

Based on this description, the focus of this study is how the implementation of FIDIC provisions as an international construction contract document can prevent disputes due to line changes in the SUTET 500 kV transmission efficiency project in Sumatra, especially within the framework of construction contract law applicable in Indonesia.

- **RESEARCH METHODS**

This research uses a qualitative approach with normative legal research methods. The focus of the research is to analyze the application of FIDIC provisions in preventing disputes due to line changes in the SUTET 500 kV transmission efficiency project in Sumatra. This approach was chosen because it aims to explore an in-depth understanding of the implementation of FIDIC contract provisions in the context of Indonesian law.

This type of research is descriptive qualitative research, which prioritizes the analysis of Indonesian laws and regulations and the provisions of FIDIC. This research will see whether there is compatibility between the two legal systems, as well as the challenges that arise in its application to electricity infrastructure projects in Indonesia.

The research data was obtained through two sources: primary data and secondary data. Primary data was obtained through in-depth interviews with parties directly involved in the 500 kV SUTET project, such as developers, contractors, and consultants. These interviews aimed to gain insight into the practice of implementing FIDIC as well as the problems faced in the project. Meanwhile, secondary data was obtained by analyzing FIDIC contract documents, project reports, and relevant legal regulations in Indonesia.

Data analysis was conducted using thematic analysis for the interviews, where the results of the interviews would be categorized under relevant themes, such as track

changes and dispute resolution. As for secondary data, content analysis was conducted to evaluate the suitability of FIDIC provisions with Indonesian legal regulations.

With this approach, the research aims to provide an overview of how FIDIC provisions can be applied more effectively in 500 kV SUTET projects to prevent disputes and improve project efficiency.

- **RESULTS AND DISCUSSION**

1. Application of FIDIC Provisions in 500 kV SUTET Project

The application of FIDIC provisions in the 500 kV SUTET project in Sumatra aims to create a clear and structured framework for managing contractual relationships between developers and contractors. FIDIC also provides detailed guidelines in managing potential disputes arising from changes in transmission lines. In general, FIDIC offers procedures known as Variation Orders and Early Warnings that are intended to deal with changes in the project in a quick and transparent manner.

However, in practice, although this provision is stipulated in the contract, the findings of this study show that the implementation of the Variation Orders procedure in the 500 kV SUTET project is not fully effective. One of the main problems is the late notification of changes to transmission lines that are often reported late. Under FIDIC's provisions, notification of changes should be made as soon as possible to avoid cost overruns and unnecessary delays. However, these delays resulted in project delays as well as cost increases that could have been avoided if the procedures had been applied more strictly. This suggests that the application of FIDIC procedures in this context requires increased understanding and awareness for all parties involved.

In addition, despite the clear mechanisms in FIDIC, changes in transmission lines caused by unforeseen factors, such as changes in social or field conditions, are still often poorly managed in terms of notification and budget adjustments. This suggests that the implementation of FIDIC provisions needs more attention and monitoring to be more efficient in anticipating changes that occur during the project.

2. Transmission Line Changes and Variation Orders Procedure in FIDIC

In a 500 kV SUTET project, changes to transmission lines are a frequent occurrence. FIDIC provides a clear procedure for Variation Orders, which are intended to handle design or transmission line changes that may arise. This procedure aims to ensure that the changes made can be managed within the agreed budget and schedule. However, in practice, the problem often arises from delays in change notification, which can disrupt the flow of information and exacerbate cost and schedule adjustments.

FIDIC's Variation Orders process requires prompt formal communication between the contractor and developer about changes. However, in practice, many changes are not promptly reported or not fully recorded, resulting in discrepancies between site conditions and original plans. This increases the risk of cost overruns and delays in project implementation time. Therefore, it is important to strengthen the implementation of these procedures with more in-depth training and periodic evaluation.

3. Dispute Resolution: Arbitration and Alternative Options

FIDIC offers international arbitration as the primary mechanism for dispute resolution in projects. However, practice shows that many parties prefer alternative dispute resolution channels such as mediation or direct negotiation, as they are faster and less costly. International arbitration does offer a more neutral and fair solution, but high costs and lengthy processes are often an obstacle.

In the 500 kV SUTET project, despite the option of arbitration, many parties preferred to resolve disputes through more flexible and direct means, given that the issues arising were often related to unagreed transmission line changes or other administrative issues. Therefore, in addition to arbitration, alternative dispute resolution such as mediation and negotiation should also be considered as options that are more suitable for project conditions in Indonesia.

4. Communication and Transparency in Projects

One of the key principles in FIDIC is to maintain communication and transparency between all parties involved in the project. However, in the 500 kV SUTET project, many problems were found related to the lack of effective communication, which hindered the notification process of transmission line changes and led to delays in the decision-making process. The implementation of a more transparent and fast communication system is needed so that information regarding changes or problems that occur can be immediately conveyed to all relevant parties.

The implementation of digital platform technology in project communication systems can help speed up the flow of information, reduce miscommunication, and ensure greater transparency in project management. The implementation of this digital system not only benefits the developers and contractors, but also ensures that other stakeholders can obtain the information they need in a timely manner.

5. Conformity of FIDIC Provisions with Indonesian National Law

One of the major challenges in implementing FIDIC in the 500 kV SUTET project is the difference in legal systems between the more flexible FIDIC and the more rigid and procedural Indonesian legal system. In this context, there are many provisions in FIDIC that are difficult to adapt directly to Indonesian regulations, especially those related to land acquisition and other administrative procedures.

Land acquisition processes in electricity transmission projects often involve lengthy legal procedures, which are not fully compatible with FIDIC's more flexible provisions. Therefore, it is important to make adjustments to FIDIC's provisions to be more in line with Indonesia's regulations, while maintaining FIDIC's objective of ensuring smooth project implementation.

6. Recommendations for Improved Implementation of FIDIC in the 500 kV SUTET Project

Based on the results of the discussion, several recommendations can be made to improve the application of FIDIC provisions in the 500 kV SUTET project, among others:

1. Intensive training on FIDIC procedures, particularly on Variation Orders and Early Warning, for all parties involved in the project to accelerate understanding and implementation of these provisions.
2. Improved communication using digital platform technology to ensure greater transparency of information and reduce miscommunication.
3. Adjustment of FIDIC arbitration provisions to the Indonesian legal system, by providing alternative dispute resolution options that are more suitable to the needs and conditions of projects in Indonesia.

• CONCLUSIONS

The application of FIDIC provisions in the SUTET 500 kV transmission efficiency project in Sumatra has an important role in preventing disputes caused by changes in transmission lines. Provisions such as Variation Orders, Early Warning System, as well as dispute resolution mechanisms through arbitration or other alternatives, have basically provided an adequate legal and contractual framework. However, their implementation in the field still faces a number of obstacles, such as late notification of changes, lack of understanding of FIDIC procedures, and not yet optimal adjustment between FIDIC's international provisions and Indonesia's national legal system.

In addition, efficiency projects designed to reduce costs and accelerate work completion can be contradictory if not supported by a responsive and collaborative change management system. Administrative unpreparedness, weak coordination, and low use of digital-based project communication systems are factors that trigger disputes or delays in completion.

Therefore, it is necessary to strengthen the implementation of FIDIC provisions through: (1) increasing the capacity of contractual and legal human resources, (2) integrating project information systems to support transparency, and (3) harmonizing FIDIC provisions with national laws and regulations. Thus, FIDIC provisions are not only a contract reference document, but can truly become a legal instrument that prevents conflicts and supports the efficiency of transmission projects in Indonesia.

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