

**IMPLEMENTING FIDIC PARTICULAR CONDITIONS IN INDONESIAN
ELECTRICITY INFRASTRUCTURE PROJECTS:
A STRATEGY FOR DISPUTE PREVENTION AND PROJECT EFFICIENCY**

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Abstract

Electricity infrastructure construction projects in Indonesia are strategic and highly complex, often involving multi-sector stakeholders. During implementation, disputes frequently arise due to unclear contractual terms. FIDIC (Fédération Internationale des Ingénieurs-Conseils) offers international contractual provisions that help prevent disputes and improve project efficiency through adaptable Particular Conditions tailored to local contexts. This study examines the application of FIDIC Particular Conditions as a tool for dispute prevention and improved efficiency in electricity infrastructure projects in Indonesia. Using a qualitative case study approach focused on transmission and substation projects by PT PLN (Persero), the findings show that clearly defined responsibilities, integration with local regulations, and structured dispute resolution mechanisms contribute significantly to project success.

Keywords: *FIDIC, Particular Conditions, Electricity Infrastructure, Dispute Prevention, Project Efficiency*

INTRODUCTION

The development of electricity infrastructure in Indonesia plays a pivotal role in supporting economic growth and national equitable development. However, these projects frequently encounter legal disputes and delays due to contractual ambiguities, inconsistencies with local regulations, and the lack of effective dispute resolution mechanisms.

Addressing these challenges, international contract models like FIDIC (Fédération Internationale des Ingénieurs-Conseils) have become widely adopted in strategic infrastructure projects in Indonesia. A significant strength of FIDIC is its flexibility to modify provisions through Particular Conditions tailored to local project needs. Several PLN projects, such as the construction of the 500 kV transmission network and the 150 kV substation, have adopted this modified approach.

This research addresses two questions:

1. How can the implementation of FIDIC Particular Conditions mitigate disputes in electricity infrastructure projects?
2. How does this implementation contribute to project efficiency?

By focusing on Indonesian electricity projects as case studies, this research aims to practically contribute to contract formulation and project risk management.

RESEARCH METHOD

This study employs a qualitative approach using the case study method to analyze the implementation of FIDIC Particular Conditions in electricity infrastructure projects. The research population includes electricity construction projects using FIDIC contracts, specifically PT PLN's transmission and substation projects.

Operational definitions of variables used in this research are::

- **FIDIC Particular Conditions:** Specific contract conditions within the FIDIC contract, adapted to the characteristics of particular projects.
- **Dispute Prevention:** Processes that reduce or avoid disputes among project parties.
- **Project Efficiency:** Improvement of project performance reflected in time, cost, and resource savings.

The analysis was conducted thematically based on narratives and contractual documents related to electricity infrastructure construction..

RESULTS AND DISCUSSION

1. Mitigation of Disputes Through FIDIC Particular Conditions

In Indonesian construction practice, disputes in electricity infrastructure projects typically arise from unclear contract interpretations, uneven risk allocation, and inconsistencies between international clauses and national regulations (Triana, 2021). To minimize these risks, a systematic contractual approach, such as the implementation of Particular Conditions within FIDIC contracts, is necessary. Particular Conditions modify General Conditions to precisely meet project requirements and local regulations (Jaeger & Hok, 2021).

1.1. Legal Certainty Through Clauses Adapted to National Law

FIDIC General Conditions contain generic clauses, sometimes causing significant interpretation differences (Bunni, 2020). Particular Conditions allow involved parties to clarify these clauses, thus making contractual interpretations legally certain. According to Booen (2022), Particular Conditions in electricity infrastructure projects commonly clarify responsibilities such as site access.

For instance, Sub-Clause 2.1 FIDIC Red Book (2017):

“The Employer shall give the Contractor right of access to, and possession of, all parts of the Site within the time stated in the Particular Conditions.”

In Indonesian project practice, this sub-clause is explicitly modified:

“The Employer shall grant full site access no later than 14 calendar days after the agreed commencement date. Delays caused by the Employer entitle the Contractor to an extension of time pursuant to Sub-Clause 8.4 and reimbursement of additional costs incurred” (Putra & Santoso, 2022).

This adjustment clearly defines timeframes and responsibilities, reducing potential disputes.

1.2. Clear and Equitable Risk Allocation

Risks such as unforeseen natural conditions or regulatory changes often lead to disputes if not explicitly regulated (Bunni, 2020). Particular Conditions proportionally allocate these risks based on each party’s capability and fairness.

For example, Sub-Clause 4.12 FIDIC states:

“If the Contractor encounters physical conditions which are Unforeseeable, the Contractor shall give notice to the Engineer as soon as practicable.”

Particular Conditions clarify this further:

"If unforeseen physical conditions are encountered, notification must be provided to the Engineer within 14 days from discovery, supported by technical documentation. Following verification, the Contractor shall be entitled to time extension and/or reasonable additional costs incurred due to such conditions" (Simanjuntak, 2020).

Such provisions ensure transparent risk allocation, thereby providing clear legal grounds for dispute resolution.

1.3. Effective Dispute Resolution Mechanisms

FIDIC provides structured dispute resolution mechanisms including DAAB, mediation, and arbitration, often more effective than litigation (Jaeger & Hök, 2021). In Indonesia, these mechanisms are further adapted in Particular Conditions to align with Indonesian arbitration law as per Law No. 30 of 1999:

“The DAAB must issue its decision in writing within 56 days from dispute submission. The decision is binding and must be implemented immediately. If a party fails to comply within 28 days, the dispute may be referred directly to

arbitration under BANI (Indonesian National Arbitration Board) rules" (Raharjo & Gunawan, 2022).

This ensures efficient dispute resolution compliant with national law..

1.4. Integration with National Procurement Regulations

Particular Conditions significantly align international clauses with Indonesian government procurement regulations, such as Presidential Regulation No. 12 of 2021. For example, Sub-Clause 14.7 FIDIC on payments:

"Payments must be made within a maximum of 30 calendar days following the approval of each Interim Payment Certificate in accordance with Presidential Regulation No. 12 of 2021. Delayed payments shall incur interest at rates stipulated by Bank Indonesia" (Widjaja, 2021).

This reduces administrative disputes related to procurement regulations.

1.5. Efficient Contract Administration Governance

Particular Conditions directly enhance project administrative governance, such as timely approval processes for technical documents and claims administration. For example:

"All design documents submitted by the Contractor must be reviewed and approved by the Engineer within 7 working days. Lack of response within this timeframe constitutes approval, allowing the Contractor to proceed accordingly" (Jaeger & Hök, 2021).

This significantly reduces administrative delays and related disputes.

2. How Does This Implementation Contribute to Project Efficiency?

The implementation of FIDIC Particular Conditions in construction contracts does not only significantly mitigate disputes, but also directly enhances the efficiency of project implementation, particularly in the electricity sector, characterized by high complexity and a strong demand for contractual certainty. Efficiency, in this context, refers to a project's capability to meet planned parameters in terms of time, cost, and quality, while maximizing available resources optimally (Jaeger & Hök, 2021). In the context of electricity infrastructure projects in Indonesia, the implementation of Particular Conditions contributes to project efficiency through several key aspects:

2.1. Certainty of Project Implementation Schedule

FIDIC Particular Conditions enable involved parties to define clearly and explicitly the timeline for project execution and the legal consequences of delays. This is reinforced by scheduling clauses, such as those in Sub-Clause 8.3 of the FIDIC Red Book regarding Programme (FIDIC, 2017):

“The Contractor shall submit a detailed time programme to the Engineer within 28 days after receiving the notice under Sub-Clause 8.1. This programme shall show clearly the intended timing and sequence of all activities.”

Within Particular Conditions, this clause may be adjusted to suit specific requirements of electricity infrastructure projects:

“The Contractor must submit a detailed work programme no later than 14 days after the commencement date, including measurable key milestones. The Engineer must approve the work programme within a maximum of 7 days. If the Engineer does not respond within this period, the programme shall be considered approved” (Putra & Santoso, 2022).

Thus, applying this clause helps ensure timely project implementation and reduces the risk of delays resulting from ambiguous project scheduling.

2.2. Optimization and Transparency of Project Costs

Particular Conditions also play a crucial role in clearly and transparently regulating payment mechanisms, thereby supporting cost management efficiency in projects. According to Booen (2022), cost efficiency arises from explicitly defined clauses that detail mechanisms for claiming additional costs, interim payment conditions, and compensation procedures for unforeseen site conditions.

An example can be found in Sub-Clause 14.3 of the FIDIC Red Book on Application for Interim Payment Certificates:

“The Contractor shall submit a Statement to the Engineer after the end of each month, showing in detail the amounts to which the Contractor considers himself to be entitled.”

In Indonesian electricity infrastructure projects, this clause is further clarified through Particular Conditions:

“Interim payment submissions must be accompanied by clear and detailed supporting documentation, which the Engineer must approve or clarify within a

maximum of 14 days from receipt. Rapid approval facilitates timely payments in compliance with prevailing regulations, ultimately supporting overall project cash flow efficiency” (Widjaja, 2021).

This adjustment creates financial transparency and improves administrative efficiency, thus significantly minimizing disputes related to payments.

2.3. Effective Management of Design Changes

Design changes are inherent risks in complex electricity infrastructure projects. Particular Conditions explicitly govern the procedures for approving design changes. According to Simanjuntak (2020), clear clauses on managing design changes can significantly accelerate on-site decision-making processes and reduce project downtime.

Sub-Clause 13.1 FIDIC regarding the Right to Vary states:

“The Engineer may initiate Variations by instruction to the Contractor at any time before the Taking-Over Certificate.”

Particular Conditions can enhance this clause further:

“Every design change must be submitted in writing, accompanied by technical justification, cost estimation, and additional required time. The Engineer must respond in writing within a maximum of 7 working days after receiving the request. If the Engineer does not respond within this period, the request shall be deemed approved, and the Contractor may proceed based on the proposed changes” (Raharjo & Gunawan, 2022).

With an efficient design change procedure, electricity projects become more adaptable to on-site changes, reducing waiting time and accelerating overall construction progress.

2.4. Administrative Efficiency and Compliance with National Regulations

Compliance with national regulations is mandatory for electricity infrastructure projects. Particular Conditions play a pivotal role in harmonizing international clauses with national regulations such as Presidential Regulation No. 12 of 2021 regarding Government Procurement of Goods and Services.

For example, Sub-Clause 4.1 FIDIC on General Obligations of the Contractor states:

“The Contractor shall execute and complete the Works in accordance with the Contract and with the Engineer's instructions.”

In a national context, this clause is clarified through Particular Conditions:

“The Contractor must complete the works in compliance with all contract provisions, the Engineer’s instructions, and all applicable Indonesian laws and regulations, including the latest government procurement regulations. Any non-compliance with national regulations shall be the Contractor's responsibility” (Widjaja, 2021).

Integrating national regulations ensures smoother administrative processes, reduces the risk of sanctions or administrative disputes, and accelerates overall project implementation..

2.5. Reduction of Litigation and Dispute Risks

Consistent implementation of Particular Conditions significantly reduces project dispute risks, allowing resources typically allocated to litigation or arbitration processes to be entirely redirected towards project productivity. According to Triana (2021), projects accurately implementing Particular Conditions demonstrate considerably lower litigation rates than projects without clearly defined contractual clauses.

This directly enhances project implementation efficiency as managerial resources can be fully dedicated to effective construction activities rather than consumed by lengthy legal proceedings.

CONCLUSION

The clear, structured, and nationally adaptive implementation of Particular Conditions clauses in FIDIC contracts can significantly reduce the risk of disputes in Indonesian electricity infrastructure projects. This approach not only provides legal certainty but also creates a more transparent and efficient construction working environment, supporting dispute resolution in a professional, equitable, and consistent manner aligned with the Indonesian legal system.

Overall, the effective application of FIDIC Particular Conditions in Indonesian electricity infrastructure projects contributes substantially to enhancing project execution efficiency in terms of time, cost, as well as administrative and legal management. Adjustments to critical clauses not only clarify contractual legal aspects but also significantly support smoother construction processes by minimizing dispute potential, optimizing resource utilization, and promoting transparent, professional project implementation fully compliant with national regulations..

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