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Legal Implications of Extension of Time in Power Plant Construction Projects: A Comparative Study of FIDIC and Indonesian Law

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ABSTRACT

Disputes related to EoT in electricity EPC projects frequently escalate due to normative conflicts. This conflict arises between the time-bar clause in the FIDIC international contract standards, characterized by strict liability, and the principle of equity in Indonesian civil law. This research aims to analyze the validity of the time-bar clause in light of the principle of good faith, qualify the characteristics of excusable delay in concurrent delay situations, and reconstruct effective dispute-resolution mechanisms. The research method employed is a normative juridical approach, with comparative and empirical case study methods, applied to power plant projects. The results indicate that the application of claim rights forfeiture sanctions due to administrative notification delays possesses conditionally binding force. Such provisions can be set aside if the Service User is proven to have violated the prevention principle. Furthermore, in concurrent delay situations, national law mandates the proportional application of the apportionment principle. This research also finds that the Standing Dispute Board, as provided for in PUPR Ministerial Regulation Number 11 of 2021, is a more effective preventive instrument than arbitration for maintaining project cash flow liquidity. It is concluded that legal harmonization through teleological contract interpretation and the strengthening of Dispute Board executive regulations is imperative. The implications of these findings demand that stakeholders revise the Particular Conditions of contract to accommodate equitable administrative flexibility, ensuring legal certainty and the sustainability of national strategic infrastructure.

Keywords: Concurrent Delay; Dispute Board; Extension of Time; FIDIC Silver Book; Time-Bar Clause.

INTRODUCTION

The development of electricity infrastructure is a strategic sector that holds a positive correlation with national economic growth. However, its implementation is frequently confronted with high contractual complexity. Within the Engineering, Procurement, and Construction (EPC) project contract scheme, cost overruns and delays in work completion are two dominant factors affecting project success (Haryono et al., 2023). The characteristics of electricity projects, which are high-tech and capital-intensive, demand legal certainty regarding the regulation of the parties' rights and obligations, particularly regarding risk allocation. Nevertheless, the field reality indicates that construction contracts often become instruments that trigger disputes due to the imbalance of bargaining power between the Service User and the Service Provider, especially in procurement processes within the environment of State-Owned Enterprises (SOEs) (Lessy et al., 2025). This disparity creates legal vulnerability when deviations in work execution necessitate contractual adjustments.

One of the most crucial forms of deviation in construction contract management is a delay in execution time, which may result in an application for an Extension of Time (EoT). Legally, EoT is not merely an administrative schedule change but a contractual mechanism that protects the Service Provider from liquidated damages if the delay is excusable (Akhtar, 2020). However, disputes often arise not over the substance of the delay but over the claim submission procedure. In international contract practices adopted in Indonesia, such as the FIDIC Conditions of Contract, there is a time-bar clause that extinguishes the contractor's right to claim if they fail to submit

notification within a certain time limit, typically 28 days (Winata & Hardjomuljadi, 2021). The application of this strict liability clause often triggers normative conflicts when confronted with national legal principles that prioritize substantial justice.

Legal normative tension arises when the time-bar clause in these international standard contracts is tested for validity based on Indonesian Civil Law. Article 1338 section (3) of the Civil Code asserts that every agreement must be performed in good faith. Modern legal doctrine and jurisprudence in Indonesia tend to interpret that administrative negligence in notification procedures should not eliminate the contractor's substantive rights to payment or additional time. This applies as long as the work has, in fact, provided benefits to the Service User (Wiraantaka et al., 2025). This conflict between textual legal certainty in the contract (*pacta sunt servanda*) and the demands of justice (*ex aequo et bono*) is the core issue of protracted construction disputes. Interpretations regarding default (*wanprestasi*) and claim rights often differ between the standard contract perspective and the positive law perspective (Sukadana, 2025).

The complexity of disputes increases in multi-year electricity projects. In this type of project, concurrent delays caused by both parties simultaneously often occur (Sumantri et al., 2025). In this situation, determining the party responsible for bearing the delay risk is highly complex and requires clear legal proof. Furthermore, change order instructions, which are often given verbally in the field without proper administration, often create a legal uncertainty that weakens the contractor's position when submitting claims for impact cost or EoT (Setiyawan et al., 2025). Consequently, many EoT claims that are technically valid are rejected under contract. This rejection then leads to legal disputes that hinder the operationalization of electricity infrastructure.

Currently available dispute resolution mechanisms, such as litigation and arbitration, are considered ineffective in addressing the construction industry's need for rapid resolution to maintain project cash flow. Arbitration, although preferred to court proceedings, often consumes significant time and incurs high costs. Moreover, arbitration has an adversarial nature that can damage the parties' long-term business relationship (Indahwati et al., 2025). Therefore, there is a global shift towards preventive, real-time dispute resolution mechanisms, such as the Dispute Board (Wisatrioda et al., 2025). The Indonesian Government has responded to this trend through PUPR Ministerial Regulation Number 11 of 2021. However, its implementation in electricity construction contracts still requires an in-depth study regarding its effectiveness and executive power.

Based on a review of prior literature, the majority of research still focuses on the technical analysis of delay causes or on procedural review of arbitration (Putra & Hardjomuljadi, 2020). There has been little research specifically examining the validity of the FIDIC time-bar clause *vis-à-vis* Indonesian Civil Law, using the latest case study

approach to power plant projects, and integrating it with the Standing Dispute Board (SDB) mechanism as a preventive solution. This research exists to fill this theoretical gap by juxtaposing the latest empirical data from 2024-2025 with classical civil law doctrine. This aims to provide relevant legal prescriptions for stakeholders in the electricity sector. The novelty of this research lies in the harmonization between international contract standards, national sectoral regulations, and the principle of equity in the settlement of EoT claims.

Based on the background of these problems, this research aims to: (1) analyze the validity of the application of the time-bar clause in international standard contracts (FIDIC) viewed from the Principle of Equity and Good Faith in Indonesian Civil Law; (2) qualify the characteristics of excusable delay in EPC Turnkey projects and their legal implications for the contractor's compensation rights; and (3) reconstruct the EoT dispute resolution mechanism through the optimization of the Dispute Board as an alternative to litigation to ensure project cash flow certainty. The benefits of this research are expected to provide legal certainty for construction service business actors in formulating valid claim management strategies, as well as providing policy recommendations for regulators and SOEs in designing construction contracts that are fair and minimize disputes.

METHOD

This study constitutes normative legal research (juridical-normative research) focused on examining norms and rules within positive law, as well as international contract law principles applicable to the construction service industry. This type of research was selected because the urgency of the issues raised is closely related to the vagueness of norms and the conflict between international standard contract clauses and statutory regulations in Indonesia, particularly regarding the validity of time-bar clauses in EoT claims. This research does not intend to test hypotheses through field statistical data, but rather to construct new legal argumentation (legal reasoning) through literature review to address legal issues concerning contractual fairness and legal certainty in power plant projects.

To comprehensively dissect the complexity of these problems, this research applies three main approaches simultaneously: the statute approach, the comparative approach, and the case study approach (Qamar & Rezah, 2020). The statute approach is used to examine the consistency of national regulations regarding construction services, while the comparative approach is utilized to compare the concept of strict liability in the 2017 FIDIC Silver Book Conditions of Contract with the principle of good faith in the Indonesian civil law system. Furthermore, the case study approach is integrated by referring to empirical analysis from current literature regarding disputes in power plant projects, such as concurrent delay cases and the implementation of the Dispute Board at the Asahan 3 Hydroelectric Power Plant (HEPP) Project, to provide a contextual overview of legal norm application in actual practice.

The basis of analysis for this research is sourced from primary legal materials that possess binding force, which serve as the main parameters of legality. These primary legal materials include the Civil Code as the general law (*lex generalis*) of agreements, Law Number 2 of 2017¹, along with its derivative regulations, namely Government Regulation Number 22 of 2020², and PUPR Ministerial Regulation Number 11 of 2021. The inventory of these primary legal materials serves as a foundation for testing whether clauses in construction contracts meet the requirements for the validity of an agreement and do not contravene public order.

In addition to primary legal materials, this research is supported by secondary legal materials that function to provide explanations, critiques, and analytical reinforcement of the primary materials. The secondary legal materials used include the Conditions of Contract for EPC/Turnkey Projects or the FIDIC Silver Book 2017 Edition as the object of contractual study, as well as legal literature in the form of national and international reputable journal articles published within the most recent timeframe (2018-2025). The use of up-to-date references, including works by [Qadri et al. \(2025\)](#), [Sumantri et al. \(2025\)](#), and [Wisatrioda et al. \(2025\)](#), is intended to ensure the aspects of novelty and data relevance (state of the art), particularly regarding the dynamics of dispute resolution through alternative mechanisms outside of court which have not been widely reviewed in classical legal literature.

The technique for collecting legal materials involved library research using a card system and digital documentation. The inventoried legal materials were then selected, classified, and systematized based on their relevance to the three main research objectives ([Sampara & Husen, 2016](#)). The validity verification process for sources was conducted by checking the hierarchy of statutory regulations to ensure that no regulations had been repealed or annulled. Additionally, verification was conducted to ensure the authenticity of the cited FIDIC clauses, thereby ensuring a highly accurate interpretation.

The analysis of legal materials was performed in a prescriptive-analytical manner using deductive logic, in which positive legal norms serve as the major premise and contractual legal facts as the minor premise to draw a legal conclusion ([Irwansyah, 2020](#)). The analysis techniques applied include grammatical interpretation to understand the meaning of the time-bar clause, systematic interpretation to connect articles in the Civil Code with Law Number 2 of 2017, and legal harmonization techniques to identify common ground between FIDIC provisions and national law. The results of this analysis are then presented in the form of prescriptions or concrete legal recommendations to address the validity of time-bar clauses, the qualification of excusable delay, and the reconstruction of dispute resolution mechanisms through the optimization of the Dispute Board that binds the parties.

¹Law Number 2 of 2017, as amended by Article 52 of Government Regulation in Lieu of Law Number 2 of 2022.

²Government Regulation Number 22 of 2020, as amended by Government Regulation Number 14 of 2021.

RESULTS AND DISCUSSION

A. Legal Validity of the Application of Time-Bar Clauses in International Construction Contracts Viewed from National Principles of Equity

The application of the 2017 FIDIC Silver Book international contract standard in power plant projects in Indonesia often creates fundamental normative conflicts regarding EoT claim procedures. Sub-Clause 20.1 of FIDIC 2017 stipulates an imperative provision that the Contractor must give notice of a claim to the Service User or the Engineer within a period of no longer than 28 days after the Contractor became aware, or should have become aware, of the event underlying the claim. This clause explicitly establishes a legal consequence: strict liability. The Contractor's failure to comply with this time limit results in the automatic forfeiture of the claim right (time-barred), and the Service User is discharged from all related liability obligations. Textually, this provision is designed to guarantee legal certainty and project administration discipline. However, in practice in Indonesia, the rigid application of this clause is frequently considered contrary to the principles of substantial justice, particularly when the delay is factually caused by the Service User's own actions (Winata & Hardjomuljadi, 2021).

The validity of applying the sanction of rights forfeiture due to administrative notification delay needs to be tested against fundamental principles in Indonesian civil law, namely the principle of freedom of contract (*pacta sunt servanda*), which is limited by the principle of good faith and equity. Article 1338 section (1) of the Civil Code indeed states that all agreements made legally apply as law for those who make them. However, this provision does not stand alone and must be read systematically with Article 1338 section (3) of the Civil Code, which mandates that the performance of agreements must be based on good faith. Furthermore, Article 1339 of the Civil Code asserts that agreements bind not only to what is expressly stated therein but also to everything that, according to the nature of the agreement, is required by equity, custom, or law. Wiraantaka et al. (2025) argue that, in the context of construction service agreements in Indonesia, judges possess the authority (judicial discretion) to set aside time-bar clauses if their rigid application is found to contradict the principles of distributive justice and the proportionality of performance.

The tension between contractual textual certainty and substantial justice becomes increasingly complex when analyzed using the prevention principle doctrine in construction contract law. Merkin and Saintier (2023) explain that a party may not take advantage of their own wrong or breach (*nullus commodum capere potest de injuria sua propria*). In the context of EoT disputes, if the project delay is clearly caused by the Service User's failure to hand over the site or approve designs on time (Service User's Default), then the Service User is not entitled to

use the time-bar clause as a basis for refusing to grant an extension of time to the Contractor solely due to notification delay reasons. The application of a time-bar in such situations would result in manifest injustice, where the Contractor is imposed with liquidated damages for errors actually committed by the Service User.

Furthermore, the validity of claim forfeiture under administrative procedures is closely related to the qualification of default under national law. [Sukadana \(2025\)](#) states that a default in civil law requires a failure to fulfill the principal performance. In EoT claim disputes, confusion often arises between substantive failure (physical work delay) and administrative failure (delay in issuing a notification letter). Administrative failure should not necessarily eliminate the Contractor's substantive right to compensation, provided the Contractor can prove that the delay event occurred and was not due to their negligence. This is in line with the provisions of Article 1244 and Article 1245 of the Civil Code, which exempt the debtor from reimbursement of costs, damages, and interest if the delay is caused by *force majeure* or unforeseen events, which, in the context of construction projects, may constitute excusable delay.

In the field, the dynamics of project execution can also influence the enforceability of the time-bar clause through the doctrine of Waiver by Conduct. If the Service User is aware of a delay event and continues to instruct the Contractor to accelerate or to discuss the impact of the delay in project meetings without raising the notification deadline issue, such action may be deemed a tacit acceptance. Based on Article 1865 of the Civil Code regarding the burden of proof, the Contractor can submit correspondence evidence or meeting minutes as a basis that the Service User has waived their right to use FIDIC clause 20.1 as grounds for claim rejection. [Ustien and Marhum \(2022\)](#) assert that formal requirements in an agreement can be set aside if the parties' behavior indicates a new agreement deviating from written procedures for the sake of project smoothness.

The aspect of legal protection for Contractors is also highlighted in national sectoral regulations. Article 2 of Law Number 2 of 2017 states that the provision of construction services must be based on the principles of fairness and equality. This is reinforced by Article 47 section (1) point j of the Law, which requires that construction work contracts must contain provisions regarding equal rights and obligations. [Safitri and Taupiqqurrahman \(2024\)](#) and [Najmifaza et al. \(2025\)](#) highlight in their research that government or SOE construction contracts often contain lopsided standard clauses. This condition may be null and void under the law if it violates the objective requirements of an agreement (a lawful cause) or public order. Therefore, a time-bar clause that closes the space for negotiation or proof of material facts can be considered contrary to the spirit of equality in Law Number 2 of 2017.

This validity issue is also evident in comparisons of contract models used in Indonesia. Comparative research indicates that contracts based on the State Budget (APBN) or domestic SOE standards tend not to include rights-forfeiture sanction regulations as strict as those in FIDIC (Arief & Hardjomuljadi, 2020; Putra & Hardjomuljadi, 2020). In domestic contracts, the main focus is on verifying the truth of the claim, not on notification speed. This philosophical difference is often unrealized by stakeholders when adopting FIDIC verbatim into national projects without adequate particular conditions. Consequently, disputes arise when Commitment-Making Officers (CMO) or project managers apply rigid international standards within a flexible national legal culture, triggering unilateral contract termination disputes that harm both parties.

As a matter of law, the validity of the time-bar clause in electricity construction contracts in Indonesia is conditional. The clause is binding as law (Article 1338 section (1) of the Civil Code) as long as it is not misused to cover up the Service User's errors (prevention principle) and as long as it is applied with due regard to the principle of equity (Article 1339 of the Civil Code). Courts or arbitrators in Indonesia have a strong legal foundation to perform legal discovery (*rechtsvinding*) to soften the rigidity of the clause, especially if the Contractor can prove that the Service User did not suffer actual prejudice due to the notification delay.

Thus, harmonizing FIDIC legal certainty with Civil Code justice requires a teleological interpretation of contracts, namely, viewing the ultimate goal of the construction project as the fulfillment of public benefit. The Service User is obliged to comply with the obligations stipulated in Article 86 of Government Regulation Number 22 of 2020 to support the smooth execution of the work. This obligation includes the duty to process substantively valid claims even if there are minor administrative defects. Rejection of claims solely based on a time bar, without examining the substance of the delay, is contrary to good faith and may create counterproductive disputes that impede the completion of the national electricity infrastructure.

B. Qualification of Excusable Delay and Legal Implications of Concurrent Delay in Electricity Engineering, Procurement, and Construction (EPC) Projects

The complexity of electricity projects applying the EPC contract model demands clear boundaries regarding delay risk allocation. In practice, delays in Power Plant projects are often not single events, but rather an accumulation of various factors that intersect. These factors range from delays in land acquisition and design changes to material supply constraints (Akhtar, 2020; Haryono et al., 2023). Based on Sub-Clause 8.5 of the FIDIC Silver Book 2017, delays are qualified into excusable delays and non-excusable delays. This juridical qualification becomes fundamental as it determines the Contractor's right to time and cost

compensation. However, disputes frequently arise when the Service User refuses to acknowledge certain events as excusable delays warranting cost compensation (compensable delay), arguing that such events constitute business risks that must be borne by the Contractor under a *lump sum* contract.

Legally, the Service User's failure to hand over the site on time, or delays in providing design approval, must be treated as a default or a breach of contract. This refers to the legal construction of Article 1234 of the Civil Code, which states that every obligation is to give something, to do something, or not to do something. If the Service User neglects to fulfill their primary obligation to provide Right of Access to the Site as stipulated in the contract, this constitutes a default under Article 1243 of the Civil Code, which mandates reimbursement of costs, damages, and interest. Therefore, in the context of Excusable Compensable Delay, the Contractor is legally entitled not only to an extension of time to avoid penalties. The Contractor is also entitled to claim impact costs due to the extension of the security validity period and project overhead costs covering operational expenses and labor wages during the waiting period (Nugroho & Kirana, 2024; Qadri et al., 2025).

Legal issues become far more complicated when a concurrent delay occurs, namely when two or more delay events occur in the same period or overlap. In this situation, one event is caused by the Service User's risk (e.g., design changes) and the other event is caused by the Contractor's fault (e.g., poor subcontractor performance). Sumantri et al. (2025) note that Government Regulation Number 22 of 2020 does not provide an explicit definition or settlement guidelines for concurrent delay in multi-year contracts. This legal vacuum is often exploited by the Service User to reject the Contractor's entire EoT claim under the pretext that the Contractor also contributed to the delay (contributory negligence). This rigid approach may violate the principle of fairness under Article 2 of Law Number 2 of 2017.

To fill this legal vacuum, an analysis of relevant international construction law doctrines must be adopted proportionately. In international practice, two main approaches are recognized: the Dominant Cause Approach and the apportionment approach. Given the character of Indonesian civil law, which prioritizes equity, the apportionment approach is considered more relevant than an approach that totally extinguishes the rights of one party. This means that if a concurrent delay occurs, the Contractor should remain entitled to an Extension of Time (EoT) to exempt them from liquidated damages, because the Service User may not demand penalties for delays partially caused by the Service User (prevention principle doctrine). However, the Contractor is not entitled to additional cost claims (prolongation cost) for the overlapping period (Bidua, 2018; Sumantri et al., 2025).

In addition to the concurrent delay issue, the validity of EoT claims in electricity projects is also often constrained by the problem of proving oral instructions in the field. In the fast-paced dynamics of projects, change order instructions are often issued verbally or via instant messaging by the Service User's representative, without being immediately followed by a formal Variation Order administration pursuant to FIDIC Sub-Clause 13.3. [Setiyawan et al. \(2025\)](#), in their case study on Substation construction, found that the absence of written orders is often cited by auditors or Service User management to annul cost and time claims submitted by the Contractor at the end of the project. At the same time, the additional work has been executed and provided benefits to the electricity system.

Facing such a situation, Article 1865 of the Civil Code regarding the burden of proof becomes a crucial legal instrument. This article states that anyone who claims a right must prove its existence. In the context of oral instructions, the Contractor is obliged to compile supporting evidence possessing evidentiary value. Such evidence may take the form of Site Instructions, daily reports signed by supervisors, documentation photos, and electronic correspondence, to construct that a materially valid change of scope order has occurred despite being formally defective ([Kustiah et al., 2022](#)). [Lo et al. \(2025\)](#) reinforce this argument by stating that, in government contracts, the factual actions of the Commitment-Making Officer in accepting the results of additional work can constitute ratification of the oral instruction, thereby giving rise to a legal obligation to pay for the performance delivered.

The aspect of fairness in price and time adjustment is also mandated in Article 47 section (1) point i of Law Number 2 of 2017. This article requires construction work contracts to include provisions for price adjustment in the event of changes to the work scope or *force majeure*. [Lessy et al. \(2025\)](#) assert that contracts failing to accommodate reasonable adjustment mechanisms in the face of price volatility and external delay risks tend to create an unhealthy business climate and unfair competition. Therefore, contract interpretation must be directed to ensure that Variation and EoT clauses function as a balancing mechanism, not as a tool to shift the entire project risk to the Contractor.

As a conclusion to this section, the qualification of excusable delay in Electricity EPC projects cannot be separated from proving the causality between the causing event and the delay impact on the critical path. In the event of a concurrent delay, Indonesian national law must apply the principle of proportionality, which separates the right to time and the right to cost. The Contractor is entitled to additional time to avoid unfair penalties, but the burden of the cost risk arising from combined inefficiencies must be shared (shared risk). Legal certainty in this regard can only be achieved if the parties are disciplined in documenting every change instruction ([Setiyawan et al., 2025](#)) and if the regulator immediately issues

more detailed technical guidelines regarding the handling of concurrent delay in national construction contracts.

C. Reconstruction of Dispute Resolution Mechanisms through Optimization of Dispute Boards as a Preventive Instrument in National Regulation

The construction dispute resolution paradigm in Indonesia has thus far been dominated by litigation mechanisms in court or arbitration. Fundamentally, these mechanisms are adversarial (confrontational) and curative (resolving problems after a dispute occurs). Although Article 2 of Law Number 30 of 1999 emphasizes peaceful resolution and efficiency, empirical evidence shows that arbitration is often time-consuming and costly. This is counterproductive to the sustainability of the construction project's cash flow. [Indahwati et al. \(2025\)](#) in their research assert that, in cost claim disputes arising from EoT, arbitration frequently fails to provide the *speedy remedy* required by the Contractor to maintain operational liquidity. Consequently, projects may be stalled during the proceedings. This inefficiency violates the basic principles of project management, which require certainty in technical and contractual decisions in real time.

The weaknesses of these conventional mechanisms underscore the urgency of reconstructing the dispute resolution system towards a more preventive approach. Within the national legal framework, Article 88 of Law Number 2 of 2017 has created space for consensus-based deliberations mediated by a Dispute Board before resorting to arbitration or litigation. This is technically reinforced by PUPR Ministerial Regulation Number 11 of 2021. This regulation adopts the Dispute Board concept from the FIDIC international standard, which aims to prevent technical differences of opinion from developing into legal disputes (*dispute avoidance*) and to provide binding contractual determinations. [Suyoga and Ufunan \(2020\)](#) and [Lastikayasa and Kurniawan \(2025\)](#) note that the philosophical shift from “resolving disputes” to “preventing disputes” represents an absolute legal evolution required for highly complex strategic infrastructure projects, such as electricity.

At the international contractual level, the FIDIC Silver Book 2017, through Clause 21, has redefined the term Dispute Adjudication Board as Dispute Avoidance/Adjudication Board. This nomenclature change has significant juridical implications, namely, providing the Dispute Board with a primary mandate to actively intervene in potential problems before they become formal disputes. [Ismanto and Hardjomuljadi \(2018\)](#) analyze that a permanent Dispute Avoidance/Adjudication Board (DAAB), or Standing Dispute Board (SDB), is far more effective than a temporary (ad-hoc) DAAB. This is because SDB members are involved from the beginning of the project, conduct routine site visits, and understand the technical context of issues in depth. This mechanism minimizes the information asymmetry that often occurs in arbitration, where arbitrators examine only

historical documents without ever seeing the factual conditions at the time the event occurred.

The effectiveness of SDB implementation in Indonesia has been empirically proven in the Asahan 3 HEPP construction project. [Wisatrioda et al. \(2025\)](#) in their case study revealed that the presence of the SDB in the project successfully resolved cost and time claim disputes without proceeding to arbitration. Technical decisions issued by the Dispute Board were accepted by both parties because they were based on accurate technical understanding and objective contract legal considerations. The success of this precedent refutes skepticism that the Dispute Board mechanism cannot be applied in the Indonesian legal system, while simultaneously confirming that this mechanism aligns with the principle of efficiency in government procurement law.

Furthermore, global trends show that other developing countries are also beginning to mandate adjudication or Dispute Board mechanisms as a condition of validity for public construction contracts. [Singh et al. \(2025\)](#) explain that Nepal has integrated adjudication mechanisms into its procurement legal framework to reduce court backlogs. Similarly, in New Zealand, [Silva et al. \(2025\)](#) highlight the use of an interactive pre-contract dispute-avoidance toolkit as a complementary tool to mitigate dispute risks from the pre-contract phase. This comparison suggests that Indonesia needs to strengthen the Dispute Board's bargaining position, not merely as a voluntary option, but as a mandatory mechanism for large-scale projects funded by the state budget or SOEs.

However, the legal challenge to the optimization of Dispute Boards in Indonesia concerns the executive power of their decisions. Unlike arbitration awards, which are *final and binding* and executable through registration at the District Court as stipulated in Article 60 of Law Number 30 of 1999, Dispute Board decisions are fundamentally *contractually binding*. This means that if one party refuses to implement the Dispute Board's decision, the other party must first file for breach of contract in arbitration to obtain an enforceable award ([Qadri et al., 2025](#)). Therefore, regulatory reinforcement at the Law or Government Regulation level is needed to grant Dispute Board decisions special executive status, with coercive power equivalent to that of adjudication decisions under Law Number 2 of 2017.

The absence of an SDB mechanism often leads to *unnecessary disputes*, triggered by sectoral egos or by Commitment-Making Officers' fear of audits. [Woodhead et al. \(2023\)](#) emphasize the importance of collaborative contract models in which dispute resolution is viewed as a joint effort to save the project, rather than an arena for legal conflict. In this context, FIDIC Clause 21 serves as a safety valve that gradually releases pressure on conflicts. The failure of parties to appoint Dispute Board members within the time limit determined in the contract is

often the beginning of claim management chaos, leading to project cost escalation (Egbumokei et al., 2024).

Thus, the reconstruction of the EoT dispute-resolution mechanism in electricity projects must make the Dispute Board the primary remedy. SOE construction contracts, particularly those with PT PLN (Persero), must explicitly adopt the SDB clause and allocate a special budget for member honoraria as part of the project cost. Disregarding this mechanism for cost savings at the beginning of the project is an inefficient move that can lead to greater losses in the long run (*penny-wise, pound-foolish*). This is evidenced by arbitration dispute costs and losses due to power plant operational delays far exceeding Dispute Board operational costs (Ismanto & Hardjomuljadi, 2018; Wisatrioda et al., 2025).

In conclusion, the harmonization of the provisions of the FIDIC Silver Book 2017 with national regulations, as set out in PUPR Ministerial Regulation Number 11 of 2021, offers an effective solution to construction claim gridlock. The Dispute Board mechanism meets the principles of being fast, simple, and low cost, which are the ideals of civil procedural law, while simultaneously providing the technical certainty needed by the industry. Therefore, the validity of dispute resolution clauses in future electricity construction agreements must be measured by the extent to which the contract empowers the preventive function of the Dispute Board, not solely on arbitration clauses, which are the *ultimum remedium*.

CONCLUSIONS AND SUGGESTIONS

Based on a comprehensive normative, juridical, and comparative analysis, this research concludes that harmonization between the FIDIC Silver Book 2017 international contract standards and the Indonesian civil law system in electricity projects cannot be achieved solely through textual analysis. This process requires a teleological interpretation approach based on the principle of equity. The validity of the time-bar clause in FIDIC Sub-Clause 20.1, applying an automatic forfeiture of claim rights (*strict liability*), is declared to have conditional binding force in Indonesian jurisdiction. The clause is null and void under the law, or may be set aside by the panel of judges or arbitrators, if it is proven that the Service User has waived their rights through *Waiver by Conduct*. Therefore, the Contractor's administrative failure to submit a claim notification within 28 days does not necessarily extinguish their substantive rights to EoT, provided that the principles of good faith and distributive justice are fulfilled.

Furthermore, the qualification of delays in electricity EPC projects must be strictly separated into delays worthy of cost compensation and those only worthy of time compensation. In a situation of concurrent delay or delay caused by simultaneous faults on the critical path of both parties, the national construction law must adopt

a proportional apportionment principle. The Contractor is entitled to an Extension of Time (EoT) to exempt them from liquidated damages, but is not entitled to claim overhead costs for the overlapping period. Legal certainty in proving this claim relies heavily on the validity of oral instructions in the field. Juridically, oral instructions retain evidentiary value as stipulated in Article 1865 of the Civil Code if supported by accountable project documentation, even if not immediately embodied in a formal Variation Order.

Reconstructing the construction dispute resolution mechanism in Indonesia requires shifting the paradigm from a curative-adversarial to a preventive-collaborative approach. The Arbitration mechanism, which has been the primary choice thus far, has proven limitations in maintaining project cash flow liquidity due to its lengthy process. Therefore, the optimization of the Dispute Board, particularly the permanent one (Standing DAAB), constitutes the most effective and efficient legal instrument to mitigate dispute risks in national strategic projects. The implementation of the Dispute Board, as mandated by PUPR Ministerial Regulation Number 11 of 2021 and FIDIC Clause 21, is capable of providing contractually binding interim determinations. Thus, construction work can proceed without being impeded by unresolved technical differences of opinion.

As an implication of these legal conclusions, this research recommends concrete steps for stakeholders. *First*, for contract drafters in the SOE electricity sector, it is recommended to modify the Particular Conditions by inserting clauses explicitly regulating the Delay Analysis Method and concurrent delay handling protocols to minimize interpretation uncertainty. *Second*, for the Government as the regulator, it is urgent for the Ministry of PUPR to immediately issue technical guidelines granting immediate executive power to Dispute Board decisions without the need for a complicated re-registration process at arbitration institutions, to ensure legal certainty. *Finally*, for practitioners and construction service business actors, it is mandatory to increase contract administration discipline and digital project archive management as the primary evidentiary basis in defending contractual rights before dispute resolution forums.

REFERENCES

- Akhtar, M. (2020). Dealing with EPC Project Management Problems and Challenges A Case Study on Petrochemical, Oil and Gas EPC Projects in Middle-East. In *Proceedings of the Abu Dhabi International Petroleum Exhibition and Conference* (pp. 1-13). Society of Petroleum Engineers. <https://doi.org/10.2118/203431-ms>
- Arief, E., & Hardjomuljadi, S. (2020). Analisis Perbandingan Model Kontrak APBN dan APBD Terhadap Model Kontrak FIDIC. *Konstruksia*, 11(2), 89-101. <https://doi.org/10.24853/jk.11.2.8-101>

- Bidua, A. K. (2018). Use of FIDIC 2017 as Standard Form of Contract for EPC Projects in Oil and Gas Industry. In *Proceedings of the Abu Dhabi International Petroleum Exhibition and Conference* (pp. 1-9). Society of Petroleum Engineers. <https://doi.org/10.2118/193243-ms>
- Colonial Regulations, *Staatsblad* Number 23 of 1847 on the *Burgerlijk Wetboek voor Indonesie*/the Civil Code. <https://jdih.mahkamahagung.go.id/legal-product/kita-undang-undang-hukum-perdata/detail>
- Egbumokei, P. I., Dienagha, I. N., Digitemie, W. N., Onukwulu, E. C., & Oladipo, O. T. (2024). Cost-Effective Contract Negotiation Strategies for International Oil & Gas Projects. *International Journal of Multidisciplinary Research and Growth Evaluation*, 5(4), 1284-1297. <https://doi.org/10.54660/ijmrge.2024.5.4.1284-1297>
- FIDIC. (2022). *Amendments to the FIDIC Conditions of Contract for EPC/Turnkey Projects, 2017* (Second Edition). International Federation of Consulting Engineers. <https://fidic.org/books/epcturnkey-contract-2nd-ed-2017-silver-book-reprinted-2022-amendments>
- Government Regulation in Lieu of Law of the Republic of Indonesia Number 2 of 2022 on Job Creation (State Gazette of the Republic of Indonesia of 2022 Number 238, Supplement to the State Gazette of the Republic of Indonesia Number 6841). <https://peraturan.go.id/id/perppu-no-2-tahun-2022>
- Government Regulation of the Republic of Indonesia Number 22 of 2020 on the Implementing Regulation of Law Number 2 of 2017 on Construction Service (State Gazette of the Republic of Indonesia of 2020 Number 107, Supplement to the State Gazette of the Republic of Indonesia Number 6494). <https://peraturan.go.id/id/pp-no-22-tahun-2020>
- Government Regulation of the Republic of Indonesia Number 14 of 2021 on Amendment to Government Regulation Number 22 of 2020 on the Implementing Regulation of Law Number 2 of 2017 on Construction Service (State Gazette of the Republic of Indonesia of 2021 Number 24, Supplement to the State Gazette of the Republic of Indonesia Number 6626). <https://peraturan.go.id/id/pp-no-14-tahun-2021>
- Haryono, S., Silviana, S., & Huboyo, H. S. (2023). Evaluasi Pelaksanaan dalam Kajian Biaya Lebih pada Pekerjaan PLTU dengan Jenis Kontrak EPC: Studi Kasus Pekerjaan PLTU oleh PT. X. *Jurnal Profesi Insinyur Indonesia*, 1(6), 216-224. <https://doi.org/10.14710/jpii.2023.18833>
- Indahwati, A. N., Sami'an, S., & Hardjomuljadi, S. (2025). Arbitration in Resolving Construction Cost Claim Disputes Due to Time Extensions: A Study of Contract Law in Indonesia. *SIGn Jurnal Hukum*, 6(2), 263-281. <https://doi.org/10.37276/sjh.v6i2.388>
- Irwansyah. (2020). *Penelitian Hukum: Pilihan Metode & Praktik Penulisan Artikel*. Mirra Buana Media.

- Ismanto, H., & Hardjomuljadi, S. (2018). Analisis Pengaruh Dewan Sengketa & Arbitrase terhadap Penyelesaian Sengketa Konstruksi berdasarkan FIDIC Condition of Contract 2017. *Jurnal Konstruksia*, 10(1), 73-85. <https://doi.org/10.24853/jk.10.1.73-86>
- Kustiah, H., Hardjomuljadi, S., & Amin, M. (2022). Faktor Pengaruh Variation Order pada Konstruksi Jalan dan Jembatan untuk Mengurangi Klaim Konstruksi. *Jurnal Konstruksia*, 13(2), 81-91. <https://doi.org/10.24853/jk.13.2.81-92>
- Lastikayasa, I. W., & Kurniawan, I. G. A. (2025). Legal Philosophy in Construction Contract Dispute Resolution: Between Arbitration and Litigation. *Pena Justisia: Media Komunikasi dan Kajian Hukum*, 24(1), 6202-6219. <https://doi.org/10.31941/pj.v24i2.7122>
- Law of the Republic of Indonesia Number 30 of 1999 on Arbitration and Alternative Dispute Resolution (State Gazette of the Republic of Indonesia of 1999 Number 138, Supplement to the State Gazette of the Republic of Indonesia Number 3872). <https://www.dpr.go.id/dokumen/jdih/undang-undang/detail/431>
- Law of the Republic of Indonesia Number 2 of 2017 on Construction Service (State Gazette of the Republic of Indonesia of 2017 Number 11, Supplement to the State Gazette of the Republic of Indonesia Number 6018). <https://www.dpr.go.id/dokumen/jdih/undang-undang/detail/1687>
- Law of the Republic of Indonesia Number 6 of 2023 on Enactment of Government Regulation in Lieu of Law Number 2 of 2022 on Job Creation Into Law (State Gazette of the Republic of Indonesia of 2023 Number 41, Supplement to the State Gazette of the Republic of Indonesia Number 6856). <https://www.dpr.go.id/dokumen/jdih/undang-undang/detail/1825>
- Lessy, A. S., Sami'an, S., & Hardjomuljadi, S. (2025). Realizing a Fair Competition in the Construction Procurement Process at the State Electricity Company: A Normative Review. *SIGn Jurnal Hukum*, 6(2), 418-432. <https://doi.org/10.37276/sjh.v6i2.403>
- Lo, A., Lee, E. P., Chen, N. E., Baretta, N., Nugraha, D. P., & Tanaya, V. (2025). Legal Implications of Government Default in the Ranggulalo Market Construction Contract: An Analysis of Decision Number 28/Pdt.G/2021/PN Dgl. *SIGn Jurnal Hukum*, 7(1), 70-91. <https://doi.org/10.37276/sjh.v7i1.416>
- Merkin, R., & Saintier, S. (2023). *Poole's Textbook on Contract Law* (Sixteenth Edition). Oxford University Press. <https://doi.org/10.1093/he/9780192885098.001.0001>
- Najmifaza, S. N., Barokah, N. D., & Dafira, L. (2025). Perlindungan Hukum Terhadap Penyedia Jasa dalam Kontrak Konstruksi Pemerintah: Studi Kasus Pemutusan Sepihak. *Al-Zayn: Jurnal Ilmu Sosial & Hukum*, 3(2), 1051-1059. <https://doi.org/10.61104/alz.v3i2.1280>
- Nugroho, A., & Kirana, K. C. (2024). Skema Pengupahan Karyawan Pada Perusahaan Konstruksi Berdasarkan Risiko Keselamatan Kerja. *Jurnal Teknologi dan Manajemen Industri Terapan*, 3(1), 67-77. <https://doi.org/10.55826/tmit.v3i1.295>

- Putra, S. B., & Hardjomuljadi, S. (2020). Analisis Pemilihan Model Kontrak Konstruksi Pekerjaan Pembangunan Pembangkit Listrik (FIDIC Rainbow Contract 2017). *Konstruksia*, 11(2), 33-45. <https://doi.org/10.24853/jk.11.2.33-45>
- Qadri, Q., Sami'an, S., & Saputro, A. (2025). Requirements for Overhead Cost Claims and Construction Dispute Resolution Mechanisms in Indonesia: A Normative Study. *SIGn Jurnal Hukum*, 6(2), 433-451. <https://doi.org/10.37276/sjh.v6i2.404>
- Qamar, N., & Rezah, F. S. (2020). *Metode Penelitian Hukum: Doktrinal dan Non-Doktrinal*. CV. Social Politic Genius (SIGn). <https://books.google.co.id/books?id=TAQHEAAAQBAJ>
- Regulation of Minister of Public Works and Housing of the Republic of Indonesia Number 11 of 2021 on Procedures and Technical Guidelines for Construction Dispute Boards (Bulletin Gazette of the Republic of Indonesia of 2021 Number 307). <https://peraturan.go.id/id/permen-pupr-no-11-tahun-2021>
- Safitri, E., & Taupiqqurrahman, T. (2024). Analisis Tuntutan Ganti Rugi Akibat Wanprestasi dalam Kontrak Pengadaan Sarana Penunjang NICU dan Bedah Saraf. *Jurnal Usm Law Review*, 7(1), 144-162. <https://doi.org/10.26623/julr.v7i1.8120>
- Sampara, S., & Husen, L. O. (2016). *Metode Penelitian Hukum*. Kretakupa Print.
- Setiyawan, I. A., Pasaribu, D. M., & Hikmahtiar, R. (2025). The Legal Force of Change Order Instruction for the Work in Construction Contracts: A Case Study of Substation Development in Central Sumatra. *SIGn Jurnal Hukum*, 6(2), 452-467. <https://doi.org/10.37276/sjh.v6i2.409>
- Silva, P. M., Domingo, N., & Ali, N. A. N. A. (2025). An Interactive Pre-Contract Dispute Avoidance Toolkit for New Zealand Construction Industry. *Construction Innovation*, 25(7), 268-291. <https://doi.org/10.1108/ci-10-2024-0309>
- Singh, R. K., Shrestha, S. B., Bantawa, P., & Thakur, S. (2025). The Architecture of Adjudication: An Analysis of Dispute Resolution and Arbitration within Nepal's Contractual and Procurement Framework. *International Journal of Advanced Research in Engineering and Technology*, 16(5), 1-12. https://doi.org/10.34218/ijaret_16_05_001
- Sukadana, D. A. P. (2025). Implikasi Yuridis Wanprestasi dalam Hukum Perdata antara Teori dan Praktik. *Jurnal Rechtsens*, 14(1), 139-154. <https://doi.org/10.56013/rechtsens.v14i1.4292>
- Sumantri, M. F. A., Sami'an, S., & Hardjomuljadi, S. (2025). Concurrent Delay and Price Adjustment in Multi-Year Contracts: An Indonesian Construction Law Perspective. *SIGn Jurnal Hukum*, 6(2), 343-367. <https://doi.org/10.37276/sjh.v6i2.399>
- Suyoga, I. M. W., & Usfunan, Y. (2020). Penyelesaian Sengketa Kontrak Kerja Konstruksi Melalui Ajudikasi dan Perbandingan dengan Arbitrase. *Acta Comitatus: Jurnal Hukum Kenotariatan*, 5(2), 240-251. <https://doi.org/10.24843/ac.2020.v05.i02.p03>

- Ustien, D. O., & Marhum, U. (2022). Perspektif Hukum Terhadap Suatu Perjanjian. *Jurnal Lakidende Law Review*, 1(2), 85-92. <https://doi.org/10.47353/delarev.v1i2.11>
- Winata, E. G., & Hardjomuljadi, S. (2021). Analisis Klausula Kontrak yang Terkait dengan Klaim pada FIDIC Condition of Contract 1999. *Jurnal Muara Sains, Teknologi, Kedokteran, dan Ilmu Kesehatan*, 5(2), 501-512. <https://doi.org/10.24912/jmstkik.v5i2.12195>
- Wiraantaka, J. A., Sami'an, S., & Hardjomuljadi, S. (2025). Implementation of Legal Principles in Construction Service Agreements: A Normative Study. *SIGN Jurnal Hukum*, 6(2), 386-400. <https://doi.org/10.37276/sjh.v6i2.401>
- Wisatrioda, B., Sebastian, R. R., Sami'an, S., & Hardjomuljadi, S. (2025). Resolving Hydropower Plant Construction Disputes through a Standing Dispute Board: A Case Study of Asahan 3 HEPP. *SIGN Jurnal Hukum*, 6(2), 296-312. <https://doi.org/10.37276/sjh.v6i2.392>
- Woodhead, B., Davis, T., & Walker, R. (2023). Collaborative Construction Contracts. *Alberta Law Review*, 61(2), 307-351. <https://doi.org/10.29173/alr2767>