

Principle of Independence in Construction Service Contracts

Sugiarto Raharjo Japar

Managing Partner Law Office Japar & Associates, Indonesia

Email: japar@dosen.umaha.ac.id

Abstract

This paper examines the pivotal role of the engineer's independence and impartiality in the administration of construction contracts. Adopting a normative approach, the study analyzes the contractual provisions and legal principles governing the engineer's independence, as well as the application of this concept across different legal systems. The findings suggest that while the notion of the engineer as an independent and unbiased party is well-established in certain jurisdictions, particularly those utilizing FIDIC contracts, it is less familiar in civil law systems, where the contract administrator is often perceived as representing the employer's interests. The paper emphasizes the critical significance of preserving the engineer's independence to ensure fairness, transparency, and effective dispute resolution in the construction industry. Maintaining the engineer's independence is essential for upholding the integrity and fairness of the construction contract administration process, enabling objective decision-making without undue influence from the employer or other project stakeholders.

Keywords: *Construction contracts, Engineer's independence, FIDIC, Cost management, Dispute resolution.*

A. INTRODUCTION

The construction sector is marked by inherent complexities and significant uncertainty, frequently leading to disputes among the contracting parties. In this context, the engineer's role as the independent and impartial administrator of the construction contract is crucial. The engineer is responsible for managing costs, interpreting contractual obligations, and resolving conflicts in a fair and effective manner (Omran, 2019). The engineer's independence and impartiality are essential to enable objective decision-making and the fulfillment of their duties without undue influence from the employer or other stakeholders (Lau, 2017).

This paper examines the principle of the engineer's independence in construction service contracts, its legal foundations, and its practical implications for cost management and dispute resolution in the construction industry (Ndekugri et al., 2007). Preserving the engineer's independence is pivotal to upholding the integrity and fairness of the construction contract administration process.

B. LITERATURE REVIEW

The concept of the engineer's independence in construction contract administration is well-established and widely recognized in jurisdictions influenced by the FIDIC contract forms (Chen, 1997). The FIDIC Conditions of Contract emphasize the significance of the engineer's impartiality, underscoring their role as an independent party responsible for making fair and objective decisions (Robinson, 2013). According to the FIDIC model, the engineer is expected to act as an impartial

and independent third party, carrying out their duties without undue influence from the employer or other project stakeholders (Abdul-Malak et al., 2020). However, the understanding and acceptance of the engineer's independence concept vary across different legal systems.

The engineer's independence is paramount in construction contract administration for several reasons. For instance, in Saudi Arabia, the adoption of FIDIC contracts has emphasized the significance of the engineer's independence and impartiality in the contract administration process (Daradkeh, 2016). The FIDIC framework highlights the need for the engineer to function as an autonomous and unbiased party, responsible for interpreting contractual documents, issuing directives, and resolving disputes between the contracting parties (Bari et al., 2019). The engineer's role in cost management is also pivotal, as they are tasked with drafting the construction contract, providing detailed drawings and designs, and approving the contractor's work and payment applications. The engineer's independent and impartial decision-making in these matters is essential to ensure fairness and transparency in the construction project (Hayati et al., 2019). Moreover, the engineer's independence is vital for effective dispute resolution. When a dispute arises, the engineer is expected to offer a neutral and objective assessment of the situation and issue binding decisions that are not unduly influenced by the employer or other stakeholders, thereby preserving the integrity of the dispute resolution process (Ma, 2009).

While the principle of the engineer's independence is well-established in certain jurisdictions, it faces challenges and limitations. In some legal systems, the contract administrator is often perceived as an agent of the employer, rather than an independent party (Walter & Richards, 1990). This perception can create conflicts of interest and undermine the engineer's ability to act impartially.

C. METHOD

This research paper undertook a comprehensive review of scholarly literature and legal analysis concerning the independence of engineers in the administration of construction contracts. The study primarily relied on two key sources:

1. A Scholarly article that closely analyzed the concept of the engineer's independence within the context of FIDIC contracts, underscoring its legal foundations and practical implications (Zubair et al., 2016);
2. This study further examined the application of FIDIC contracts in the Saudi Arabian construction industry, underscoring the importance of the engineer's independence within this context. Additionally, the review incorporated two supplementary sources to provide broader context and a more comprehensive understanding of engineers' roles in resolving disputes in offshore projects, as well as the technical and legal aspects of FIDIC contracts (Seifert, 2005).

This literature review analyzed the central concepts, legal foundations, and practical ramifications associated with the engineer's independence in the

administration of construction contracts. The insights gleaned from this review were then synthesized to cultivate a comprehensive comprehension of this subject and its relevance for cost management and dispute resolution within the construction industry (Gambatese et al., 2003). This literature review and analysis focused on examining the following key aspects:

1. The legal foundations and contractual basis of the engineer's independence in construction contracts, particularly within the FIDIC framework, are well-established and widely recognized in certain legal jurisdictions (Wen & Zhou, 2012). The FIDIC contract forms have played a pivotal role in establishing and promoting the principle of the engineer's impartiality, emphasizing their role as an independent party responsible for making fair and objective decisions;
2. This study investigated the practical importance of the engineer's independence in the administration of construction projects, highlighting its significance for cost management and dispute resolution. Additionally, it examined the challenges and constraints associated with the concept of the engineer's independence, and how these issues are addressed across varying legal and industry settings (Hoke, 2012). The research findings were then synthesized to cultivate a comprehensive understanding of the principle of the engineer's independence and its implications within the construction industry (Leong et al., 2020).
3. The study examined an article that explored the engineer's role in resolving construction disputes, with a particular focus on the challenges and limitations associated with the engineer's independence in the Arab world context (Jarzembski, 1989). These primary sources were carefully analyzed and synthesized to develop a comprehensive understanding of the engineer's independence in construction contract administration, its legal foundations, and its practical implications for cost management and dispute resolution (Fawzy & El-Adaway, 2012). Additionally, the study considered relevant secondary sources, such as scholarly articles, industry reports, and legal commentaries, to provide a broader context and support the analysis (Gebken & Gibson, 2006). The research adopted a comparative approach, highlighting the similarities and differences in the legal treatment of the engineer's independence across different jurisdictions, particularly FIDIC-influenced systems and those with a more agent-based approach to the contract administrator's role (Eldeen & Al- Khazaleh, 2019).

D. RESULT AND DISCUSSION

This study underscores the fundamental significance of the engineer's autonomy in the management of construction contracts. The FIDIC contract framework has been instrumental in establishing and advancing the principle of the engineer's objectivity, which is widely acknowledged within certain legal jurisdictions. The engineer's independence is crucial for guaranteeing fairness, transparency, and effective dispute resolution in construction projects (Ataei &

Salem, 2016).

The FIDIC framework underscores the engineer's position as an impartial and autonomous third party, entrusted with making fair and unbiased decisions without being unduly swayed by the employer or other stakeholders (Zhang et al., 2013). This principle is particularly salient in the realm of cost management, where the engineer is responsible for drafting the construction contract, providing detailed drawings and designs, and approving the contractor's work and payment requests. The engineer's independent and impartial decision-making in these critical areas is essential for upholding the integrity and transparency of the construction project.

Moreover, the engineer's autonomy is indispensable for the effective resolution of disputes. When a disagreement arises, the engineer is anticipated to furnish a neutral and impartial evaluation of the situation, rendering decisions that are binding upon both the employer and the contractor (Galloway, 2012). This independent and impartial approach to dispute resolution helps uphold the fairness and credibility of the process, ensuring that the interests of all stakeholders are duly represented and safeguarded.

However, the concept of the engineer's independence is not universally understood or accepted. In certain legal frameworks, the contract administrator is frequently perceived as a representative of the employer, rather than an autonomous entity. This perspective can give rise to conflicts of interest and impair the engineer's capacity to act objectively (Oxer, 2002). This challenge is particularly pronounced in certain regions, such as the Arab world, where the concept of the engineer's autonomy has not been fully embraced despite the widespread utilization of FIDIC contracts (Daradkeh, 2016).

Addressing the challenges to the engineer's autonomy in construction contract administration necessitates a holistic and multifaceted strategy. Fundamentally, it is essential to cultivate a deeper comprehension and wider acceptance of the engineer's impartial role among all stakeholders engaged in construction projects (Birkby, 1995). Educational initiatives and targeted training programs can be implemented to emphasize the legal foundations and practical importance of the engineer's autonomous position. Furthermore, efforts should be undertaken to strengthen the contractual and legal frameworks that enshrine the engineer's independence, ensuring the principles of impartiality and neutrality are firmly established and safeguarded (Vesilind, 2003). Accordingly, legal reforms may be necessary to safeguard the engineer's independence. These reforms should clearly define and enshrine the engineer's autonomous role, ensuring their decision-making process remains unbiased and free from undue influence by the employer or other stakeholders (Matsuura, 2019). Robust legal protocols and mechanisms should be established to reinforce the engineer's neutral and objective assessment of situations, particularly in dispute resolution contexts. Strengthening the legal framework that underpins the engineer's independent role can hold stakeholders accountable for respecting the integrity of the contract administration process (Kathuria & Kumaran, 2015).

This study's findings contribute to a more comprehensive understanding of the principle of the engineer's autonomy in the administration of construction contracts and the resolution of disputes (Wu et al., 2011). By integrating and analyzing insights from diverse sources, this study underscores the fundamental significance of the engineer's autonomous position, its legal underpinnings, and the challenges that may arise when this principle is not fully embraced (Cheung & Yiu, 2006).

In addition to legal and educational measures, the construction industry should cultivate a culture that recognizes and values the engineer's impartial role, as it is fundamental to ensuring fairness, transparency, and successful project outcomes (Crist, 2009). The construction industry can establish industry-wide standards, codes of conduct, and collaborative frameworks that underscore the engineer's autonomous position and the significance of preserving objectivity throughout the construction process (Wiele & Messner, 1984).

Complementing legal reforms, enhanced awareness and focused training initiatives can cultivate an industry culture that recognizes the paramount importance of the engineer's independence for ensuring fairness and transparency in construction projects. By educating stakeholders on the legal underpinnings and practical relevance of the engineer's impartial position, these efforts can overcome the perception of the contract administrator as solely representing the employer's interests, which can compromise the engineer's capacity to act objectively (Toole, 2005).

Furthermore, the development of robust dispute resolution mechanisms that explicitly reinforce the engineer's independence is crucial. These mechanisms should establish clear protocols for the engineer's involvement in dispute resolution, safeguarding their neutral and objective assessment of the situation and ensuring their decisions are binding on all parties (Cheung et al., 2019).

Reinforcing these dispute resolution mechanisms is paramount for maintaining the integrity and equity of the broader construction contract administration process, which is a foundational element of successful project implementation (McConnell & Clevenger, 2018).

E. CONCLUSION

The principle of the engineer's autonomy in construction contract administration is a core tenet of the FIDIC model and other widely adopted international standards. This independence is essential for upholding the fairness, transparency, and integrity of the construction process, as the engineer is responsible for critical decisions impacting the project's cost, quality, and progress.

Nonetheless, the notion of the engineer's impartial function is not universally comprehended or embraced, and obstacles may arise in particular legal and cultural contexts. Surmounting these challenges necessitates a multifaceted strategy, encompassing legal reforms, educational initiatives, and the cultivation of an industry culture that recognizes and values the engineer's independent position.

By implementing these collective measures, the construction industry can bolster the legal frameworks, contractual stipulations, and practical mechanisms that safeguard the engineer's impartial position, thereby fostering fair and transparent contract administration and dispute resolution processes.

REFERENCES

- Abdul-Malak, M. A. U., Bou Hamdan, S., & Demachkieh, F. S. (2020). Enhanced roles and traits of the engineer in assessing claims. *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 12(3), 04520019.
- Ataei, H., & Salem, O. M. (2016, June). Teaching professional engineering ethics in civil and construction engineering. In *2016 ASEE Annual Conference & Exposition*.
- Bari, P., Bhatt, V., & Sawant, P. (2019). Techno legal aspect of FIDIC contract. *Proceedings of Sustainable Infrastructure Development & Management (SIDM)*.
- Birkby, G., NEC, & PSC. (1995, August). A New Environment for Consultants. Briefing. [Practical Effect of Ice Professional Services Contract on Consulting Engineers]. In *Proceedings of the Institution of Civil Engineers-Civil Engineering* (Vol. 108, No. 3, pp. 141-142). Thomas Telford-ICE Virtual Library.
- Cheung, S. O., & Yiu, T. W. (2006). Are construction disputes inevitable?. *IEEE transactions on engineering management*, 53(3), 456-470.
- Cheung, S. O., Li, K., & Levina, B. (2019). Paradox of bias and impartiality in facilitating construction dispute resolution. *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 11(3), 04519007.
- Crist Jr, R. A. (2009). The ASCE committee of global principles for professional conduct. *Leadership and Management in Engineering*, 9(3), 144-146.
- Daradkeh, L. (2016). Solution By Negotiation and Determination by Arbitration in Arab World Construction Disputes: Comparative Study Between FIDIC Rules of 1987 and FIDIC Rules of 1999. *Arab Law Quarterly*, 30(4), 395-409.
- Eldeen, S., & Al-Khazaleh, Q. (2019). The Nature of Civil Liability of the Consulting Engineer in International Construction Contracts. *Journal of Law Policy and Globalization*, 92, 187.
- Fawzy, S. A., & El-adaway, I. H. (2012). Contract administration guidelines for managing conflicts, claims, and disputes under World Bank-funded projects. *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 4(4), 101-110.
- Galloway, P. D. (2013). Engineering a successful negotiation. *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 5(1), 6-12.
- Gambatese, J., Behm, M., & Hinze, J. (2003). Engineering mandates stipulated in OSHA regulations. In *Construction Research Congress: Wind of Change: Integration and Innovation* (pp. 1-8).
- Gebken, R. J., & Gibson, G. E. (2006). Quantification of costs for dispute resolution

- procedures in the construction industry. *Journal of professional issues in engineering education and practice*, 132(3), 264-271.
- Hayati, K., Latief, Y., & Jaka, S. A. (2019, April). Risk-based contract management on the design and build construction to minimize disputes in infrastructure projects. In *Iop conference series: Materials science and engineering* (Vol. 506, No. 1, p. 012047). IOP Publishing.
- Hoke, T. (2012). A Question of Ethics: Pitfalls of Parting. *Civil Engineering Magazine Archive*, 82(8), 42-43.
- Jarzembski, W. B. (2002). Some legal aspects of engineering. *IEEE Potentials*, 8(4), 30-31.
- Kathuria, D., & Kumaran, S. (2015, March). On the mitigation of natural disasters through engineering. In *2015 IEEE Integrated STEM Education Conference* (pp. 272-275). IEEE.
- Lau, E. (2017). The Role of Engineer in Cost Management. *MOJ Civil Engineering*, 3(3).
- Leong, L. W., Ho, T. C., Teo, P. C., & Choo, L. S. (2020, November). Factors influencing ethical decision making: A view through engineering consultancy firm in Malaysia. In *2020 International Conference on Decision Aid Sciences and Application (DASA)* (pp. 893-897). IEEE.
- Lina, C. (1997). Role of engineer under FIDIC form contract. *Journal of professional issues in engineering education and practice*, 123(2), 48-50.
- Ma, A. (2009). Engineer's role in resolving disputes in offshore projects. *Proceedings of the Institution of Civil Engineers-Management, Procurement and Law*, 162(4), 191-196.
- Matsuura, J. H. (2019). *Engineering Codes of Ethics: Legal Protection and Empowerment for Engineers*. Cambridge University Press.
- McConnell, W., & Clevenger, C. M. (2018). Frequently disputed sections within the AIA A201-2017 general conditions. *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, 10(4), 03718002..
- Ndekugri, I., Smith, N., & Hughes, W. (2007). The engineer under FIDIC's conditions of contract for construction. *Construction management and economics*, 25(7), 791-799.
- Omran, M. E. (2019). A review about FIDIC contracts in Saudi Arabia. *Indian Journal of Science and Technology*, 12(36), 1-12.
- Oxer, J. P. (2002). Independent contracting in professional practice and management. *IEEE Engineering Management Review*, 30(1), 100-103.
- Robinson, M. D. (2013). *An Employer's and Engineer's Guide to the FIDIC Conditions of Contract*. John Wiley & Sons.
- Seifert, B. M. (2005). International construction dispute adjudication under international federation of consulting engineers conditions of contract and the dispute adjudication board. *Journal of professional issues in engineering education and practice*, 131(2), 149-157.
- Toole, T. M. (2005). Increasing engineers' role in construction safety: Opportunities

- and barriers. *Journal of Professional Issues in Engineering Education and Practice*, 131(3), 199-207.
- Vesilind, P. A. (2003). Engineering and the threat of terrorism. *Journal of Professional Issues in Engineering Education and Practice*, 129(2), 70-74.
- Walter, C., & Richards, E. P. (1990). Engineering and the law-engineering obligations. III. Who is an independent contractor? In *IEEE Engineering in Medicine and Biology Magazine* (Vol. 9, Issue 4, p. 48). IEEE Engineering in Medicine and Biology Society.
- Wen, Z., & Zhou, Q. L. (2012). Some suggestions for China construction project investment control present situation based on FIDIC contract. *Applied Mechanics and Materials*, 209, 1294-1297.
- Wiele, L. E., & Messner, M. E. (1984). Essential Elements of a Successful Engineering and Construction Project. *Journal of Metals*, 36(2), 41-45.
- Yunna, W., Kai, X., & Yam, Z. (2011, May). Notice of Retraction: Research on whole process contract management in deputy construction project. In *2011 International Conference on E-Business and E-Government (ICEE)* (pp. 1-4). IEEE.
- Zhang, Y. H., Tang, L. J., & Wang, N. (2013). Discussion on influence engineering project quality six factors and Its Countermeasures. *Applied Mechanics and Materials*, 357, 1484-1487.
- Zubair, M. U., Gabriel, H. F., Thaheem, M. J., Khurshid, M. B., & Mubeen, A. (2016). FIDIC Conditions of Subcontract as a Model for General Conditions of Subcontract in Pakistan. *Advances in Science Technology and Engineering Systems Journal*, 1(6).