

Claim Submission Strategy for Jakarta Sewerage System Development Project Based on Standard Contract Management Body of Knowledge (CMBOK) Study Case PT.XYZ

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Keywords:	Abstract
Claim Administration; Claim Documentation; Joint Venture Integrated.	The implementation of construction work, particularly utility network installation, is generally required to comply with the provisions established in regulations stipulated by the local government. However, considering the actual conditions at the project site, several contractual clauses tend to be burdensome and cannot be fully complied with by the Contractor, thereby creating the potential for disputes and claims not only between the contracting parties but also among internal parties that had previously formed a Joint Venture. The highly complex and dynamic characteristics of construction work may increase potential risks related to cost and time and hinder the timely completion of the work. Therefore, an effective claim administration and documentation system is required to address these issues. This research aims to assist the Contractor in obtaining approval for claims related to additional costs and extensions of time as a means of mitigating the risk of claim rejection. The findings will subsequently be developed into a Standard Operating Procedure (SOP) for Joint Venture claim administration based on the Contract Management Body of Knowledge (CMBOK). Accordingly, this study employs a case study method to formulate strategic measures for minimizing claim rejection by analyzing the factors that predominantly contribute to claim disapproval, as identified in previous studies. By identifying the dominant risk factors in the implementation of the Joint Venture Integrated Project, the findings are expected to provide key measures for mitigating the risk of claim rejection.

INTRODUCTION

The implementation of the Jakarta Sewerage Development Project (JSDP) Construction of Sewers is included in Indonesia's National Strategic Projects (Proyek Strategis Nasional or PSN), in accordance with Presidential Regulation of the Republic of Indonesia No. 12 of 2025 concerning the Third Amendment to Presidential Regulation No. 3 of 2016 concerning the Acceleration of the Implementation of National Strategic Projects, and Regulation of the Coordinating Minister for Economic Affairs No. 7 of 2023 concerning the Third Amendment to Regulation of the Coordinating Minister for Economic Affairs No. 7 of 2021 concerning Amendments to the List of National Strategic Projects. The JSDP wastewater pipeline network involves an extensive total pipeline length. The Construction of Sewers works consist of the procurement and installation of wastewater pipeline networks covering three administrative cities, namely North Jakarta, West

Jakarta, and Central Jakarta, with an implementation period of 1,460 calendar days. The construction methods employed for the installation of the wastewater pipeline network include steel sheet piles for the construction shaft openings and the pipe-jacking method for connections between pipeline sections (Bakhary et al., 2015).

The construction methods employed in the Jakarta Sewerage Development Project require advanced technology; therefore, contributions from countries with prior experience in implementing such construction methods are necessary (Multazam, 2019). One such country is Japan, which is collaborating with Indonesia on this project. With an emphasis on knowledge transfer and mutually beneficial cooperation, the parties established an International Joint Venture to undertake the wastewater pipeline installation works (Dehkordi & Nobari, 2015). International Joint Ventures are among the most distinctive types of project-based organizational arrangements (Kim et al., 2009; Hung et al., 2002; Chou & Yang, 2013). Companies entering Joint Ventures often focus on the benefits that collaboration may provide without adequately considering the costs involved in establishing and maintaining a Joint Venture (Ahmadisheykhsarmast & Sönmez, 2020; Clough, 2004; Cunningham, 2014; Vaidya, 2017). Even when potential benefits are clearly identified, the associated costs can be substantial and difficult to predict (Mooris & Hergert, 1987). The decision to enter into a Joint Venture therefore requires careful management consideration because historical evidence has shown that Joint Ventures may experience instability and ultimately end in failure (Berquist et al., 1995).

Construction companies establish Joint Ventures for various reasons. Badger and Mulligan (1995) categorize these into general reasons, such as risk reduction, reduced competition, and expansion of the financial base, and specific reasons, such as market access, access to local resources, key account management, local content requirements, technology transfer, know-how transfer and training, and gains from currency fluctuations (Abdul-Rahman et al., 2014; Bashir et al., 2024; Famakin et al., 2012; Girmscheid & Brockmann, 2009). Some of these specific reasons benefit local partners in an International Joint Venture, whereas others benefit foreign partners. Construction projects are expected to be completed according to the specified schedule; however, achieving this objective can be challenging because of project complexity, the involvement of numerous parties, and a dynamic project environment (Almenar-Llongo et al., 2021; Klee & Charles, 2013; Soliman, 2014; Tochaiwat & Chovichien, 2006). Construction projects are inherently exposed to various risks and changes, and the initial design of a construction project may not correspond precisely to the actual conditions and completed works at the project site. Consequently, construction projects are susceptible to disputes concerning claims, including those involving entities participating in Joint Ventures (Bakhary, 2015).

PT.XYZ is an Integrated Joint Venture entity formed by a regionally owned enterprise (Badan Usaha Milik Daerah or BUMD) and foreign companies to undertake the Jakarta Sewerage Development Project (JSDP) Construction of Sewers, which is included in the National Strategic Projects (PSN). During project implementation, PT.XYZ experienced cost overruns arising from several claims, including a claim for provision fees incurred in complying with local government regulations; a claim for the relocation of medium-voltage utilities, water pipelines, and fiber-optic

cables; a claim for the demolition of road sidewalks pursuant to instructions from the relevant authorities; a claim for idle equipment resulting from the suspension of third-party works; and a claim for aerial cable relocation costs associated with the mobilization of heavy equipment. The total value of claims incurred by the Contractor was IDR 6.738 billion in 2023 and IDR 15.643 billion in 2024 for similar cases in both years. Under the Contract, PT.XYZ is entitled to submit claims arising from the implementation of the works; however, the Employer rejected these claims. During the implementation of PT.XYZ's existing claim procedure, several gaps were identified that contributed to claim rejection, particularly because the procedure had not been updated to reflect current project conditions. Therefore, the existing claim procedure needs to be further developed with reference to the Contract Management Body of Knowledge (CMBOK) as a recognized contract management framework. In response to this situation, the Contractor must implement further measures to protect the company's contractual entitlements and financial interests and to ensure that legitimate claims are properly prepared, substantiated, and submitted (Bakhary et al., 2013, 2015; Shakeri et al., 2014; Zhao et al., 2013).

The aim of this paper is to identify gaps between PT.XYZ's existing claim procedure and the principles and practices established in the Contract Management Body of Knowledge (CMBOK), thereby enabling the Contractor to compile and prepare the documents required when submitting claims in Joint Venture construction projects more effectively. The theoretical contribution of this research is to enrich the literature on claim administration in construction projects, particularly within the context of Integrated Joint Ventures, while its practical contribution is to provide a Standard Operating Procedure (SOP) for claim administration that can be used by contractors to minimize claim rejection. The contribution of this research lies in integrating the CMBOK framework into the development of claim administration procedures for Integrated Joint Venture construction projects, an area that has not been extensively explored in previous studies. This research is expected to provide recommendations for contractors regarding the preparation and substantiation of claim documents in accordance with recognized contract management practices, thereby increasing the likelihood of claim approval and supporting the achievement of the company's financial objectives (Dehkordi & Nobari, 2015; Mohamed et al., 2014).

METHOD

The project involved the installation of a main sewerage pipeline using specialized technology and was implemented through an Integrated Joint Venture between Indonesian and Japanese partners. The collaboration emphasized knowledge transfer and mutually beneficial long-term development. The project was scheduled for approximately 48 months and covered approximately 38 km of pipeline installation, including associated manholes.

A survey was conducted to obtain the perspectives of experienced professionals involved in Construction Joint Ventures and to identify gaps between PT.X's existing claim administration procedure and the Contract Management Body of Knowledge (CMBOK) framework. The study aimed to determine areas in which the existing procedure could be improved to facilitate the

preparation, documentation, and submission of claims in Joint Venture construction projects.

The survey was administered through face-to-face interviews and email questionnaires to professionals with relevant expertise. A total of 35 completed questionnaires were collected and analyzed. Respondents evaluated the relevant CMBOK areas using a five-point Likert scale, covering Pre-Award, Acquisition Planning and Strategy, Post-Award, Specialized Knowledge Areas, and Business competencies. Their assessments were used to identify gaps and determine the CMBOK components relevant to the development of an improved claim administration procedure for the International Joint Venture.

RESULTS AND DISCUSSION

Analysis of the data used in this study by conducting a survey of respondents and asking respondents to provide feedback related to the claims procedure of Integrated Joint Venture that affect the Administration Claims Procedure. There are several issues and causes of claim cases in construction projects, especially PT.XYZ, including different contract standards, the complexity of the types of work to be carried out, and changes and/or additions to the scope of work due to the impact of regulations set by related stakeholders. Each party has different interests and intentions, so it is very susceptible to conflict or disputes during project implementation. Therefore, in order to achieve the objectives of the claim, it is necessary to develop a claim administration and documentation system for construction projects, especially for construction projects that form a Joint Venture. The development of this system aims to assist construction implementers in preparing claims so that the claims submitted can be accepted by the Employer. The implementation of an appropriate claim management system will facilitate the claim process and it is hoped that claims can be accepted by Employer and avoided the disputes, because simple conflicts can develop into quite serious disputes. In this study, in an effort to find the cause of claim rejection, an identification was carried out regarding the gap between PT.XYZ's claim procedures based on CMBOK with the output as stated in the following table :

Table 1. Comparison Between PT.XYZ Existing Procedure and CMBOK Procedure

Claim Stages Based On Literature Review	Claim Procedure of JV Integrated PT.XYZ	Claim Procedure Based On CMBOK	The Risk Identification Due to PT.XYZ Claim Procedure and CMBOK Procedure Gap
Pre Award			
Ensuring the Implementation of Joint Venture Construction Contracts applies existing laws and regulations	Unavailable	Available	The risk of the Joint Venture Construction Contract being used does not accommodate existing laws and regulations.
Implementing basic contract principles such as General Concept of contract (reasonable price, market research); Special contract clauses of force majeure, risk of loss, guarantee, contract modification and termination	Unavailable	Available	The risk of not having clear contract clauses regulating contract changes, force majeure, guarantees, and unreasonable contract prices.

Ensuring that contract clauses accommodate the laws governing ethical treatment established in the Standards of Practice	Unavailable	Available	Risks when carrying out work that do not behave ethically
Ensure that the implementation of the contract takes into account socio-economic programs, where this program takes into account the interests of certain groups	Unavailable	Available	Project implementation risks that are of particular importance to certain groups and can therefore affect project performance
Using Contract Types that refer to the price setting or contract method used to create a contract such as Fixed Price Contracts, Cost Reimbursement Contracts, other types of Contracts	Unavailable	Available	The risk of using a contract type other than the Fixed Price Contract or Cost Reimbursement Contracts can lead to disputes later on.
Ensure the bidding process uses the Sealed Bidding, Negotiation, Simplified Acquisition, Contracting Tools methods			The risk that the tender results cannot be accounted for properly because the bidding process does not use negotiation and sealed bidding methods.
Planning the cost requirements for implementing the contract, including payment methods, payment progress and contract funding.	Unavailable	Available	Financing system risks Unclear contracts can hinder work implementation activities.
Ensure clarity regarding the status of copyrighted works such as patents, copyright, and the existence of non-disclosure agreements during the tender process.	Unavailable	Available	Risk of counterfeiting or duplication of copyrighted works in connection with the project
Acquisition Planning & Strategy			
Carry out acquisition planning according to the Employer's capabilities at a fixed time and at a reasonable cost.	Unavailable	Available	The risk of high price costs to the Employer'ss and the risk of delays in project completion
Create a draft of a suitable offer which will be used to become a contract document	Unavailable	Available	The risk of an unclear draft offer could give rise to claims
Delivering responses to invitations to bids submitted by Employer's	Unavailable	Available	There is a risk of communication errors occurring if the offer invitation is not responded.
Prepare a reasonable and fair Cost Analysis and Price Analysis	Unavailable	Available	The risk of price analysis and cost analysis only prioritizing one party can be an obstacle in project implementation

Conduct negotiations in an effort to reach an agreement from both parties	Unavailable	Available	The risk of a dispute arising from work that has not reached an agreement in the negotiation process
Ensure that the winner selection process is based on a summary of all activities in the evaluation process.	Unavailable	Available	The risk of selecting the winner is not based on the tender evaluation results which can have a negative effect on product delivery
Ensure that participants who do not win can file a protest if they feel that there is a violation of the rules during bidding.	Unavailable	Available	The risk of delays in the project handover and start-up process if there are protests against the tender results.
Post Award			
Ensuring the implementation of contract management includes the use of effective communication, conducting periodic status review meetings, monitoring performance and documenting performance	Unavailable	Available	Risk of unreliable contract management so that it is unable to accommodate every project implementation activity
Ensure that the Contractor provides a guarantee for the results of the work that has been carried out	Unavailable	Available	Risk of not achieving work quality
Ensuring proper contract management for subcontracting acts as a trigger for suppliers to deliver results in accordance with the specifications, schedule, and costs of the agreed-upon program.	Unavailable	Available	The risk of subcontracted work results not meeting expectations
Ensure there are rules regarding changes and modifications to contracts if the work done does not reflect what needs to be done	Unavailable	Available	Risk of changes in the scope of the Contract
Ensure the contract includes, among other things, the required date of receipt, method of transportation, and responsibility for costs for transportation.	Unavailable	Available	Risk of dispute if the details of transportation are not explained in detail in the contract
Ensuring clear interpretation of contracts to avoid or resolve disputes	Unavailable	Available	Risk of multiple interpretations of the clauses contained in the Contract
Ensure that clear rules are in place stating that the obligations under the Contract have been fulfilled and that the procurement files are physically and administratively complete.	Unavailable	Available	The risk of contract closure never being achieved if there are no clear rules regarding the fulfillment of tasks

Ensure that the cost obligations for contract termination are accommodated and included in the Contract clause.	Unavailable	Available	Risks to the project status if there is no explanation regarding contract termination in the contract documents
Specialized Knowledge Area Conduct research and development of the Contract before deciding on its use.	Unavailable	Available	The risk of not understanding the advantages and disadvantages of contracts in construction projects
Appoint a professional in the field of contracts who has specialized knowledge and experience skills in engineering and construction contracts.	Unavailable	Available	The risks of not understanding engineering contracts and construction contracts
Applying information technology in implementing construction contract management	Unavailable	Available	The risk of data loss due to not using information technology
Appoint a Contract Manager who understands design for cost, active communication, program management, reliability, work breakdown structure	Unavailable	Available	The risk of a contract manager being incompetent can result in many claims arising from a project.
Appoint a contract professional who understands the legal implications and potential implications of the service contract.	Unavailable	Available	The risk of legal issues arising from the contract
Develop policies and procedures governing the acquisition and sale of goods and services between foreign parties and the government.	Unavailable	Available	The risk of additional costs such as customs or other things that can hinder the acquisition of goods and services from abroad.
Studying the shortcomings of implementing construction projects in central government areas due to very strict regulations.	Unavailable	Available	The risk of difficulty in obtaining the permit if violated central government regulations
Ensure management of all functions, operations and facilities involved in the procurement and delivery of goods to the Employer	Unavailable	Available	The risk of irregular procurement management processes and delivery of goods to customers
Ensuring property protection with public funds due to government-owned property	Unavailable	Available	The risk of project cost savings due to government-owned properties
Study the contingency terms of the contract, the necessary contracts regarding the environment, security, and other	Unavailable	Available	The risk of other things appearing outside the scope of the construction project that could hamper project performance

project-related matters at the beginning of the project.

Business

Ensure you have a contract professional who understands Planning, Organizing, Directing, Controlling	Unavailable	Available	The risk of poor contract management due to lack of management capabilities
Ensure there are leaders who have the ability to motivate people to work together	Unavailable	Available	The risk of poor Human Resources (HR) management so that in practice a person does not give his best ability
Have the ability to segment the target market that best suits the company	Unavailable	Available	The risk of people's purchasing power not being in line with the selling price
Ensure that there is management of activities related to the direction and control of management functions	Unavailable	Available	Operational risks are not managed properly
Ensure Contract Managers understand financial analysis to determine if a company is stable enough to execute a contract.	Unavailable	Available	The risk of the company's financial inability to carry out construction projects
Ensuring the company to collect, organize and record financial information to make management decisions	Unavailable	Available	The risk of not having financial reports from a project's activities
Ensure that economic analysis has been carried out in decision making for scarce resources such as labor, capital, goods, and natural resources.	Unavailable	Available	The risk of uncontrolled budgets due to the lack of mature economic considerations
Ensure Contract Managers use information and technology tools such as: e-contract, e-procurement, and other online tools to manage suppliers, and contracts	Unavailable	Available	The risk of a long procurement process due to the lack of support from information technology

Based on the literature study, it was found that the caused the claims for Joint Venture Integrated that had an effect on the administration claim procedure, so that the risk findings in the this table would be developed in a Standard Operating Procedure of Joint Venture Integrated Claims. These stages consist of the Pre Award, Acquisition Planning & Strategy, Post Award, Specialized Knowledge Area, and Business.

Pre Award

The Pre-Award Stage is fundamental in this stage, namely understanding the applicable laws and regulations and being able to develop appropriate strategies in using the type of Contract, before implementing the contractual relationship between the parties carrying out the engagement and/or obtaining the Contract.. Risk factors that are dominant in this variable include "The risk of

not having clear contract clauses regulating contract changes, force majeure, guarantees, and unreasonable contract prices ", "Risks of an unclear contract financing system can hinder work implementation activities ", " The risk of the Joint Venture Construction Contract being used does not accommodate existing laws and regulations ", and "The risk of using a contract type other than the Fixed Price Contract or Cost Reimbursement Contracts can lead to disputes later on ".

Acquisition Planning & Strategy

In this phase, research is conducted and the acquisition strategy is formulated. Once planning is complete, the next phase involves all the work leading up to the contract award, including preparing the requirements documents, evaluating proposals, negotiating, and finalizing the scope of work. Risk factors that are dominant in this variable include " The risk of high selling costs to Employes and the risk of delays in project completion ", " The Risk of communication errors occurring if the offer invitation is not responded", "The risk of price analysis and cost analysis only prioritizing one party can be an obstacle in project implementation", and " The risk of delays in the project handover and start-up process if there are protests against the tender results."

Post Award

In this phase, the implementation of contract management brings in professionals who have special competencies in mastering the field of Contracts and carry out knowledge development regarding the latest rules and regulations that will impact the implementation of the Contract.. The risk factors that are dominant in this variable include " Risk of not achieving work quality ", " Risk of changes in the scope of the Contract ", " Risk of multiple interpretations of the clauses contained in the Contract ", and "The risk of contract closure never being achieved if there are no clear rules regarding the fulfillment of tasks".

Specialized Knowledge Area

In this stage, reliable contract management is oriented towards the concepts of Planning, Organizing, Actuating and Controlling as well as leadership skills in implementing long-term contract activities. Risk factors that are dominant in this variable include " The risk of difficulty in obtaining work permits if you violate central government regulations ", " The risk of not understanding the advantages and disadvantages of contracts in construction projects ", "The risks of not understanding engineering contracts and construction contracts" and " The risk of a contract manager being incompetent can result in many claims arising from a project."

Business

In this stage, reliable contract management is oriented towards the concepts of Planning, Organizing, Actuating and Controlling as well as leadership capabilities in carrying out long-term contract activities. The risk factors that are dominant in this variable include " The risk of poor contract management due to lack of management capabilities", " The risk of the company's financial inability to carry out construction projects ", and " The risk of a long procurement process due to the lack of support from information technology ".

CONCLUSION

This study aimed to identify gaps between PT.XYZ's existing claim procedure and the Contract Management Body of Knowledge (CMBOK) framework. The findings were used to develop and improve the existing claim procedure to enhance the effectiveness of claim preparation and submission and support the achievement of the company's targeted profit margin in the implementation of this Integrated Joint Venture (JV) project. Based on the research findings, five key CMBOK areas relevant to Joint Venture claim administration were identified: Pre-Award, Acquisition Planning and Strategy, Post-Award, Specialized Knowledge Areas, and Business competencies. These findings were subsequently incorporated into an Integrated Joint Venture Claim Procedure and Claim Documentation framework, which was validated by experts for implementation as an improved claim administration procedure for PT.XYZ's Integrated Joint Venture construction project.

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