Analysis of Important Factors in Choosing or Using Process Alternative Dispute Resolution of Construction Project From Contractor’s Perspective (Case Study in XYZ Company, Ltd’s)

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Abstract. When a construction contract have been signed and going through execution, there would be a chance for disputes or disagreement due to the differences in construction interpretation as well as due to other physical and non-physical at the time of planning and construction of the project. According to Oberlender, Garold D, the disputes that generally happens in a project are being caused by several reasons such as the uncertainty of scope of work and being too focused on cost/project budgeting, timeline or schedule and quality. According to Law No 30 of 1999 about Arbitration and Alternative Dispute Resolution (ADR), a dispute can be solved using these methods: Litigation, Arbitration, Consultation, Negotiation, Mediation, Conciliation, and Expert Judgement [1]. The aim of this research is to give XYZ Company, Ltd or other construction company on how to deal with a construction project from private sectors and for future researchers about how to use the ADR effectively. The research methods are qualitative methods such as literature study from books, research paper as well as scientific studies in correlation with the XYZ Company, Ltd’s dispute case by describing and Analysis those data collected from the references mentioned above. Measurement tool use three expert judgement or expert opinion respectively in their field. The research analysis will be taken from XYZ Company, Ltd’s project data in the last 5 years which consists of three construction project.

1. Introduction

When a construction contract have been signed and going through execution, there would be a chance for disputes or disagreement due to the differences in construction interpretation as well as due to other physical and non-physical at the time of planning and construction of the project. Although these dispute are inevitable, they need to be ignored. Those matters should be anticipated during the start of the construction project which is accomodated by all parties. On the other hand, disputes might become worse and would reduce the performance of the construction project as a whole. Disputes are usually caused by the differences of interpretation or knowing to the contract’s administration. Suntana S Djatnika in his hand out workshop explained that the roots of the problem in the execution of a construction work is the uncertainty factor within each and every construction work itself [2]. According to Oberlender, Garold D, the disputes that generally happens in a project are being caused by several reasons such as the uncertainty of scope of work and being too focused on cost/project budgeting, timeline or schedule and quality [3]. According to Law No 30 of 1999 about Arbitration and ADR, a
dispute can be solved using these methods: Litigation, Arbitration, Consultation, Negotiation, Mediation, Conciliation, and Expert Judgement. All of these ADR should not be used altogether in settling one dispute, however the effectiveness of these methods are being valued from several different factors. This research will be focused on the contractor’s perspective to find the importance of the usage of ADR. This research is a case study to XYZ Company, Ltd.

2. Literature

2.1. Risk Management
Several definition of risks are the risks of chance of loss, risks is the possibility of loss and risks is uncertainty. Other expert said, risk is variation of possibility things that happened in situation. So risk is the variation of possible occurrence which may happen naturally or possibility any events that occurs outside of our expectation. Risk management is an approach taken to risk by understanding, identifying, and evaluating the risk of a project. Risk management is all activities related to planning, assessment, handling and monitoring of risk [4] [5] [6].

2.2. Construction Disputes
Construction dispute are disputes that occurs in correlation with the execution of a construction service company parties with other related parties within a construction contract. The construction dispute referred to herein are the disputes in civil law which according to the Law No. 30 of 1999 about Arbitration and ADR. Article 5 mentioned that a dispute can be solved by an Arbitration or an Alternative Dispute Solution (ADR). Disputes are considered to have occurred when the parties in a contract have an experienced dispute in understanding problem or documents related to the contract. Construction disputes also may occur when one of the party have done an action of default.

2.3. Factors Causing Construction Disputes
According Mitropoulus and Howwel that basically there are three roots of problem that causes disputes during the execution of a construction project which are:
   a. The uncertainty factor within each construction project
   b. Problems related to construction contract
   c. Opportunistic behaviour of the related parties within a construction project
Research paper of K. Hayati dan Y. Latief concludes that the risk factors that causes disputes or claims are the delay in land handover, work added / less to the scope of work made by the owner, there is a scope of work that must be carried out by the contractor, but not stated in the tender, project scope is not clearly defined. There are other several causes such as there is a request for acceleration from the owner without compensation, unclear contract clauses, changes in the scope of work and specifications of the owner at the time the construction is in progress, errors in the design agreement that have been agreed upon, the construction team is not/does not meet the qualifications to handle the project, the order of work is changed based on orders from the owner, weather factors, improper schedule preparation, negligence of workers, delayed payments, and data errors given by the owner. [7] [8]

2.4. Various of Alternative Dispute Resolution in Construction
According to Law No. 2 of 2017 about Construction Services, stages of settling a dispute consists of: mediation, conciliation and Arbitration. The parties related to the dispute may create a Dispute Board. Law No. 30 of 1999 about Arbitration and ADR, the dispute resolution can be done by an expert judgement, mediators so the Resolution of the dispute can be described as: Litigation, Arbitration, Consultation, Negotiation, Mediation, Conciliation and Expert Judgement. Regulation of Government of Republic of Indonesia No. 29 of 2000 about (the Organization of Construction Services Chapter 6 Dispute Resolution Article 49 Verse (1) mentions of methods to settle disputes within the execution of
construction services outside of the court of law (non-litigation) can be settled by third party which is a mediator (appointed by related parties or by Arbitration Institution or ADR Institution), conciliation or Arbitration via the Arbitration Institution or Arbitration Ad Hoc. The following are the Alternative Disputes Resolution scheme according to Law No 30 of 1999. [9]

![Diagram](image)

**Figure 1.** Alternative Dispute Resolution Scheme

### 2.5. Important Factors Related to Using or Choosing of Alternative Dispute Resolution

The important factors related to using or choosing of ADR which shall become the variables in this research will be explained in Table 1 below.

**Table 1** Important Factors Related to Choosing / Using of Alternative Dispute Resolution and References.

| No | Variables                        | References                                                                 |
|----|----------------------------------|---------------------------------------------------------------------------|
| 1  | Cost Incurred                    | Hardjomuljadi, Sarwono., (2016)., *ADR Konstruksi*, 3rd edition. Indonesia: Logos Publishing [10] |
| 2  | Time Spent                       | Hardjomuljadi, Sarwono., (2016)., *ADR Konstruksi*, 3rd edition. Indonesia: Logos Publishing |
| 3  | Presevation of relationship all parties | Kurniawan, Freddy., (2015)., “Construction Dispute Resolution in Indonesia”, Narotama University [11] |
|    |                                  | Hardjomuljadi, Sarwono., (2016)., *ADR Konstruksi*, 3rd edition. Indonesia: Logos Publishing |
| 4  | Certainty of Law                 | Hardjomuljadi, Sarwono., (2016)., *ADR Konstruksi*, 3rd edition. Indonesia: Logos Publishing |
|    |                                  | Susanto, Hadi., (2018)., “Analisis Pengaruh Dewan Sengketa & Arbitrase Terhadap Penyelesaian Sengketa Konstruksi Berdasakan FIDIC Condition of Contract 2017”, Jakarta: Mercu Buana University [12] |
| 5  | Confidentiality                  | Kurniawan, Freddy., (2015)., “Construction Dispute Resolution in Indonesia”, Narotama University |
| 6  | Neutrality                       | Kurniawan, Freddy., (2015)., “Construction Dispute Resolution in Indonesia”, Narotama University |
| 7  | Enforceability                   | Kurniawan, Freddy., (2015)., “Construction Dispute Resolution in Indonesia”, Narotama University |

### 2.6. Contractor Role

According to Law No. 2 of 2017 about Construction Services Chapter 1 General Clause mentioned the service provider under the mentioned regulation is a construction service provider. Chapter 54 Law No. 2/2017 mentioned service provider and sub-provider of construction services are obliged to submit the
result of their work with the exact cost, quality and time in accordance with the construction work contract. Service provider and sub-provider of construction services whom unable to submit the result of their work with the exact cost, quality and time according to the condition mentioned in verse (1) shall have to compensate as per the agreement of the construction work contract. Therefore, the obligation of the contractor in the matter of construction is to execute their job according to the instruction from the engineer that corresponds with exact cost, quality and time. That obligation includes the remedy of any defects of work until the finished work satisfies the quality agreed.

2.7. Research Process

The research focused on using qualitative methods with a study on literature such as books, scientific journals, and expert opinion on their fields with a purpose to solve the research problem. Three expert opinions will be used as a Measurement tool to analyze and research the problem. All three of the expert are professionals in their field with positions as a legal manager or contract administrator in their respective construction company with experience and educational background expertise in construction dispute cases.

3. Case Study

3.1. Research Data Description.
This research is a case study of XYZ Company, as a construction service provider/contractors, therefore the data collected, being displayed and analyzed are the project data of the company in the last 5 years with disputes problems. Selected would either be the disputes that have started within the last 5 years and have not been settled until now or the construction disputes that have been settled or solved by Alternative Dispute Resolution as of now. The limitation of the project data would be the service user from private sectors, all kinds of project which consist of Pembangkit Listrik Tenaga Mini Hdyro (PLTMH) construction project with similar capacity, similar range of contract value and similar design complexity and similar project execution. The number of project that used in research data based on limitation of are three project. The first project is PLTMH construction in Cibalapulang Cianjur, the second project is PLTMH construction in Pusaka Cianjur, and the third is PLTMH construction in Cianten Bogor.
3.2. Research Problem Analysis

3.2.1. Analysis the First Research Problem
Based on the first until the third project data which used as research data, hereby are the cause of disputes or factors correlated with the occurrence of construction disputes which have been summarized from all three project research data. The things in question are service users/owner are unable to ensure land acquisition as a whole, the uncertainty of the land acquisition would impact the timeline target of the service provider being unachievable. On the owner side, a dispute may happen due to contractor unable to achieve the deadline of the timeline as described in the contract, therefore the owner would claim penalty over contractor due to their inability to meet the expectation of the time limit. Problems related to the contract administration, opportunistic behaviour of the owner such as paying the warranty of the contract in advance of the time limit with the purpose to press the service provider to finish the job, failure in achieving technical or quality aspects and delay payment or not to paid.

3.2.2. Analysis the Second Research Problem
To answer the second problem by using expert opinion. The experts gave their opinion on the most influential factor in choosing or usage ADR. Their opinion are the first and second expert answer preservation of relationship all parties, but the third answer certainty of law. Then from the experts opinion, out of seven important factors in relation to choose or usage of ADR as mentioned in table 1, would result in three most important factor. The first expert answer preservation of relationship all parties, neutrality and confidentiality. The second expert answer preservation of relationship all parties, time spent and certainty of law. The third expert answer cost incurred, time spent and certainty of law. So, three most important factor in choosing or usage ADR are certainty of law, preservation of relationship all parties and time spent.

3.2.3. Analysis the Third Research Problem
The first improvements recommended by the three experts are to add another important factors beside the 7 factors mentioned above. The other factor recommended according to the three expert are solving the problems in quick and simple manners, expertise of the parties handling the execution of ADR (e.g. arbitrators, mediator or the court) an observing the parties related to the dispute.

The second recommendation on improvements which results from this research from the next on coming research would be to sort the ADR selection from the most recommended to the least recommended ADR and the researcher to focus on which ADR or Arbitration the experts would choose and interview the experts.

4. Conclusion
Based on XYZ Company, Ltd. case study with research data consisting of three projects with dispute, the conclusion are the following:

1. The cause of disputes or factors correlated with the occurrence of construction disputes are owner are unable to ensure land acquisition as a whole. The uncertainty of the land acquisition would impact the timeline target of the service provider being unachievable, on the owner side, a dispute may happen due to contractor unable to achieve the deadline of the timeline as described in the contract. Therefore the owner would claim penalty over contractor due to their inability to meet the expectation of the time limit, problems related to the contract administration, opportunistic behaviour of the owner such as paying the warranty of the contract in advance of the time limit with the purpose to press the service provider to finish the job, failure in achieving technical or quality aspects and delay payment or not to paid.

2. Most important factor in relation to using / choosing ADR according to the Experts are the continuity of relationships between related parties. Three important factors in relation to
using/choosing ADR according to the Experts are the continuity of relationships between related parties, law certainty and time spent.

3. The three experts recommendations on how to improve the usage/choosing ADR is to solve the problem in quick and simple manner, the expertise of the party executing the ADR and to observe the parties related to the dispute.

References
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