

**ANALYSIS OF THE PRICE UNIT PRICE CONTRACT IN THE REHABILITATION CONSTRUCTION  
PROJECT BUILDING FACILITIES OF PUBLIC WORKS AND THE ADMINISTRATION OF THE  
SAMARINDA CITY SPACE**

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The contract is an agreement between the service user (owner) and the service provider (contractor) to make a transaction in the form of a capability between the service provider to do something for the service user with a sum of money in exchange for the results of negotiations and negotiations between the two parties. The contract is an agreement between the service user (owner) and the service provider (contractor) to make a transaction in the form of a capability between the service provider to do something for the service user with a sum of money in exchange for the results of negotiations and negotiations between the two parties.

In this study the validity test and reliability test are used to determine an item to be used.

The application of work contracts in the construction projects for public works infrastructure and public space construction in Samarinda is still poorly implemented in the field. And as for the indicators that affect the employment contract there are still many obstacles that affect the contract.

Keywords: Employment contracts, Application of contracts, Indicators that affect employment contracts.

## **Introduction**

### **1. Background**

In the implementation of construction project, contract is a bond between the owner of the project as a service user (owner) with the service provider (contractor). The existence of construction contract is very important considering that the service provider is almost always have a weaker position than the position of service users or service users are more dominant than the service users, where the redeployment almost always have to Fulfill the draft contract made by the service users because the service users always put themselves higher than the provider.

Construction services is one of the problems in the development of the law in Indonesia that demands the regularity of the problem due to the complexity of its problems, where the legislation that governs the rights

and obligations of industry actors Construction is only regulated in the law No. 18 of 1999 on construction services which entered into force in 2000 and the implementation rules.

However, in the course of implementation of the work while in the field, there are often some obstacles such as mistakes in the application of employment contracts that resulted in the project not running as early expectations, either due to negligence Owner and contractor in fulfilling their obligations and responsibilities. Therefore, researchers are interested to further analyze the application of the contract and any indicators affecting the work contract in the field, especially on the project "Contract Analysis of Unit price in the building rehab construction project Public works infrastructure and the arrangement of the City Room Samarinda "

## 2. Problem formulation

From the background above, the discussion leads to two things as follows:

1. What are the indicators that affect the application of the unit price contract in the building Rehab construction project Public works infrastructure and the arrangement of Samarinda City room?

2. What are the advantages of using a unit price work contract on the implementation of the building rehab construction project Public works infrastructure and the arrangement of Samarinda City room?

## 3. Problem limits

The problems are limited to the following:

1. This research only reviews about unit price work contracts.
2. This study uses SPSS method version 23.
3. The study was conducted against 22 respondents consisting of 7 contractors, 5 supervisors, and 10 public works.

## 4. Intent and purpose

1. To be able to know the application of the contract of work on the implementation of construction project of rehab building facilities Public works infrastructure and the arrangement of the city Room Samarinda.

2. To be able to know the advantages of using unit price contracts in the construction project.

## 5. Research Benefits

The research benefits that are to be achieved in this study are as follows:

1. Theoretically

A. To enrich the science in the Construction contract management.

B. To train the ability to conduct scientific research and formulate the results of research into the form of writing.

C. To apply the theories obtained from the school of lectures and connect with the practice in the field.

2. Practically

Practically, the results of this research can be used as a consideration material to solve problems arising in relation to construction work contracts.

## 5. The Writing Sitematika

To facilitate the discussion and preparation of this final task, the author makes writing systematics.

The principal order of final assignments is as follows:

Chapter 1 Introduction

This chapter suggests the background, formulation of problems, limitations of problems, intentions and purposes of writing.

Chapter II Literature Review

This chapter contains an explanation of the basic systematic theory that has to do with the final task done.

Chapter III Research Methodology

This chapter contains and explains in detail the place, condition and location of the research, how to collect data and how to analyse it, and the data that has been obtained either the primary or secondary data that has to do with the writing of the final assignment.

## Review of the Library

### 1. Understanding of contracts

The agreement or contract is a translation from the English language of contract law, while in Dutch it is called over *Scomsrecht*. An agreement or contract is an event where a promise to someone else or where two people promise each other to carry out a thing. The form of the Covenant is a series of words that contain the promise or the ability spoken or written. The

contract or approval stipulated in the book III of the Civil law of the Indonesia's KUH is equal to the agreement. An agreement or approval is an act by which a person or more increases himself or herself towards one or more persons. The understanding of the contract can be concluded that the contract contains the promises that were previously approved, namely the rights and obligations inherent to the party that made it in written or oral form, if made in writing then the contract It would be more functional to ensure the legal capacity.

### **1.1 Legal contracts**

The contract law is based on a principle reflected in a Latin phrase that is "pacta sunt servanda" which means "agreement must be in the Tepati". A contract always starts with offer and acceptance (acceptance). Without the offer and acceptance as the foundation of a contract, there is nothing to be promised. And as such, the principles of your pacta sunt become void.

Along with globalization and the development of international markets, we need to know the principles of contracting in different legal systems. In the course of the legal difference of contract not only on its legal basis, but also how it is formed, its implementation, the termination of its contract, and even compensation in contracts

### **1.2 Contract system**

The most important element in a cooperative process between various parties to create a certain system that has been agreed is a contract. Construction work contracts are created separately according to the stages in the work consisting of construction work contracts for the planning work, construction work contracts for execution work and contract work contracts for the work Supervision.

## **2.3 Types of contracts**

In the construction world, the agreement between the owner and the Contracting Party is tied in a contract of employment. The legal arrangements of the construction contract project are governed by the parties involved and in accordance with the provisions of the applicable laws and regulations (CRIMINAL Code article 1601b). This construction project contract is a written document and is obliged to explain the general safety agreement and the orderly building because a construction project is a high-risk job.

The types of construction contracts according to decree 80 year 2003 are:

#### 1. Based on the form of rewards

##### Lump sum

Contract Lump Sum Decree 80/2003 outlines that a lump sum contract is a contract of procurement of goods/services for the completion of all work within a certain deadline, with a definite and fixed amount of price, and all risks that may occur in the work completion process are fully borne by the goods/services provider.

This contract system is more precisely used for the purchase of goods with a clear example, or for the type of construction work that the volume calculation for each element/type of work can already be identified with certainty based on the plan drawings and technical specifications. The binding price in this system contract is the total price quote. This definition is not much different from the Perpres 54/2010 as amended by Perpres 70/2012 that a Lump Sum contract is a contract of procurement of goods/services for the completion of all work within a certain time limit as stipulated in the contract, with the following provisions:

- Exact and fixed amount of prices and no price adjustments possible;

- All risks are fully borne by the goods/service provider;
- Payment is based on the product/output stage produced according to the contents of the contract;
- The work-oriented nature of outputs (output based);
- The Total price of the offer is binding; Dan
- No added/less work allowed.

#### □ Unit Price (unit price)

Unit price contract is a contract of procurement of goods/services for the completion of all work within a certain time limit, based on the exact and fixed unit price for each unit of work with a specific technical specification, whose job volume is still approximate while, while the payout is based on the result of a joint measurement of the volume of work that has actually been implemented by the goods/services provider For unit price contract systems, added/less work is possible based on the results of shared measurements of the required work. The consideration to vote in this way is because for the accuracy of the measurement of high work volume is required surveys and very deep research, many details and samples, a long time so that the cost is very large, when the measurement is also easier in the implementation, other side of the work is urgent and should be implemented immediately, so that for the work whose nature such condition is not appropriate when used

- Unit price is definite and fixed for each unit or element of work with certain technical specifications;
- The volume or quantity of its work is still approximate when the contract is signed;
- The payout is based on the results of a joint measurement of the volume of work actually implemented by the provider of goods/services; And it may be possible to add/less work based on shared measurements of the work required

### **2.4 Kontrakt Unit Price**

According to Yasin (2006), unit price contracts are contracts where the volume of work listed in the contract is approximate and will be remeasured to determine the volume of work that is actually implemented.

According to government Regulation (PP) No 29 years 2000 article 21 paragraph 2 says: "Contract construction work with the form of unit price rewards as intended in article 20 paragraph (3) letter A number 2 is a contract of service for the completion of all work within a certain period of time based on the definite and fixed unit price for each job based on the results of a joint measurement of the work Furthermore, in the explanation of this paragraph is written: in the work with the form of unit price rewards, in the event that the correction calculation of the bid price breakdown due to arithmetic errors, the total bid price may change, but the unit price can not be changed. Arithmetic correction can only be performed on multiplication between volumes and unit prices. All risks due to changes due to arithmetic correction become the sole responsibility of the service provider. Designation of the auction winner based on the corrected bid price. The next bid price is corrected to be the contract price (job value) according to Robert D. Gilbreath (in Supriyanto,2013), the unit price describes the variation of Lumpsum contract. Given that Lumpsum includes a definite/fixed price for all or some parts of the job, the unit price only determines the unit price of the unit or volume. The Total contract value is set by multiplying the unit price by the volume of the work executed.

According to Mc. Neil Stokes (in Supriyanto,2013), in unit price contracts, service providers are paid a definite amount for each unit of work implemented. In order to avoid disputes over how much actual work is performed, each unit of work must be appropriately

determined. In using the unit price method, service users estimate the risk of the amount of work to be executed; Te. 4reenter the approximate risk of employment made by the service user or the planner. This estimate, although new estimates should be accurate and therefore the total construction costs can be estimated appropriately. The service provider is at the risk of the unit price increase stated in the contract. If the service provider bids on the basis of the job unit, he bases the price at the cost of implementing the anticipated amount of work. If during the work execution period of the work is much reduced, then the cost per unit of work will usually be greater than expected. Conversely, if the number of units of work is much increased, then the price of the unit that is done can be dropped, so the original unit price becomes high. This is unfair ". From the explanation above, it can be concluded that the form of unit price contract does not contain the risk of service users pay more because the volume of work stated in the contract is greater than the actual fact that the service provider gets unexpected profit. In contrast, the service provider also does not bear any risk of loss when the volume of actual work is greater than that stated in the contract because the one paid to the service provider is a work that is actually implemented. The problem in this form of contract is the sheer amount of remeasurement work to be done together between service users and service providers to determine the volume of work that is actually implemented. The existence of the results of the work together gives the opportunity of collusion between service users and service provider officers. In addition, this will be troublesome for service users because it has to provide power and cost to remeasurement. According to the reference book for contractors, under the condition of Unit price contract. Contractors are

only required to fill the job unit price for each item that the volume has provided. Payments to contractors will be based on the realization of the volume of work executed, no risk of volume errors to be taken into account. According to Suharto (2001), a contract with a fixed price unit (unit price) is often encountered when the type of work and the specifics can be clearly determined, while the amount or magnitude of the work is not yet to be known appropriately. For example, on road construction work. For this contract can be arranged based on the unit price per cubic land moved, per cubic meter of asphalt to be done and others. In industrial development projects, these types of contracts are usually used for insulation work, port dredging, and earthwork for the site. According to Evrianto (in Supriyanto,2013) The unit price contract is the price assessment of each unit of work that has been done before construction began. The owner has counted the number of units contained in each element of work. Based on the meaning of the unit price contract, it is understandable that the alliance occurs against the unit price of each job type/item so that the contractor only needs to determine the unit price to be negotiable for each item in the contract. Determination of the price of this unit should accommodate all possible costs such as overhead, profit, unexpected costs and costs to anticipate risk. The use of this type of contract becomes appropriate when the project has the following characteristics: The project can be clearly defined, the actual quantity of each job is difficult to estimate accurately before the project starts. Unbalanced methods are methods used by contractors in unit price quotes without changing the overall price. Contractors Use this method to benefit from several aspects of the project. For example, by raising the unit price on early occupations as the cost of mobilization of tools or materials is required. This

method can also be utilized if the contractor wants to use the project owner's money as a fresh fund to finance the project implementation if the contractor is actually experiencing difficulties in providing financial problems. Another factor underlying the use of this method is the owner's fault in doing/preparing the owner's estimate. If there is a difference between the actual quantity and the quantity of estimated results is generally different (20%-25%) Then the unit price for each item can be re-negotiated. Another thing the owner can use is to identify less work plus more accurately so as to eliminate unbalanced bid practices. In this type of contract, the payment will be made to the contractor whose size corresponds to the installed quantity according to the result of its measurements. Therefore, the owner needs to convince the measurement results of the contractor by doing their own measurements. The downside of the use of this type of contract is that the owner cannot identify the actual project costs until the project is completed. To prevent this uncertainty, the quantity calculation of each unit needs to be done accurately. Looking at the characteristics of this unit price contract, the types of projects suitable for contracts of this type are projects with quantity estimation that can not be done accurately, such as earthwork, highway, pipe fitting and so on.

## 2.5 Definition of Statistic Product and Service Solition (SPSS)

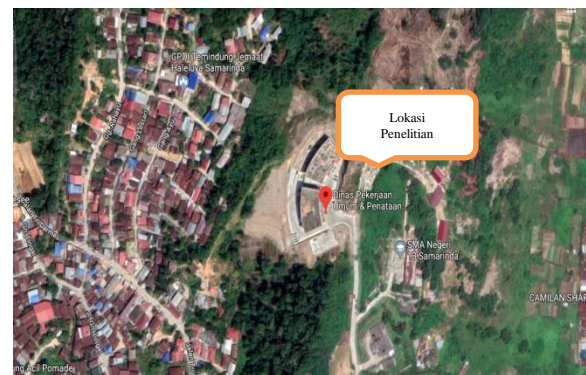
Statistic Product and Service Solition (SPSS) is an application software program that has the ability to analyze and process statistical data with fairly high accuracy, as well as a data management system in the environment Graphics by using Descriptive menus and dialog boxes that are simple and easy to understand how to operate them. SPSS is often used in

a variety of marketing research, control and quality improvements, SPSS can read various types of data or insert data directly into the SPSS data editor. Analysis results appear in the SPSS Output Navigator. Data Editor is a window for data processing.

## Research Methodology

### 3.1 Research location

The research site is the rehab building infrastructure facilities public works and the arrangement of the city Hall Samarinda Jl. H. Achmad Amins, Mt. Lingai, Kec. Sungai Pinang, Samarinda City, East Kalimantan



Gambar 3.1 Lokasi Penelitian  
(Sumber : Google Maps, 2019)

### 3.2 Population and samples

The population in the research that is reviewed as the author of this thesis proposal is the analysis of employment contracts on the construction Rehab project for Public works infrastructure and the arrangement of the city Room of Samarinda, the image of the sample that the author does is Management of employment contract analysis on rehab projects building public works infrastructures and the arrangement of the city room of Samarinda.

### 3.3 Data Collection Methods

In every research activity there is always data collection activities. The method of data collection in

this study according to Sulisty-Basuki (2006:147) includes:

#### 1. Primary Data

A) non-participant observation (uncontrolled observation) on this method the researcher is only observing, noting what happened. This method is widely used to examine the behavior patterns of the settlers in the PUPR building.

#### b) Questionnaire

Questionnaire, that is, the author holds, gives or disseminates a number of questions or written statements to respondents who are in the area of research objects in accordance with the problems faced or researched. The questions that will be given to this questionnaire are the questions regarding the fact and opinion of the respondent, while the questionnaire used in this research is a closed questionnaire, where respondents are asked to answer questions and answer with Choose from a number of alternatives. The advantage of closed forms is easy to complete, easy to analyze, and able to provide a range of answers.

#### c) Structured interviews

A structured interview is an interview using a list of pre-prepared questions. The same question is presented to all respondents, in a uniform sentence and sequence (Sulisty-Basuki, 2006:110). Processing data according to review of research discussion.

d) Then analysis and discussion about the factors that affect the work contract analysis with the data reference that has been processed before using SPSS method. As for the review to be discussed is about the construction activities that have work contacts.

e) After the discussion has been completed then the conclusion and suggestion of the research conducted.

#### 2. Secondary Data

Data retrieval obtained directly from the implementing contractor which is the form of data relating to contract construction work field

### 3.4 Design Research

The research flowchart below described the following research process:

1) starting from the formulation of the problem that will be discussed is how to analyze the contract of employment with data reference that has been processed by using SPSS method using SPSS method in building construction BBP Samarinda, East Kalimantan.

2) Conducting data collection which is the primary data obtained directly by means of direct observation (observation) on the construction activities in the field/project, interview direct question and answer related to the research of contract analysis on the project, while other data is the secondary data obtained from the contractor as an implementing, and also take data from previous research library sources.

3) processing data in accordance with review of research discussion.

### Discussion

#### 4. General Project

The rehab project is a building facility for public works and the arrangement of the city Hall of Samarinda, East Kalimantan province. With the contract value of Rp. 1,405,473,000.00 (one billion four hundred five million four hundred seventy three thousand rupiahs). By implementing contractor CV. FURQAN JAYA TEKNIK. Project execution time starts for 150 calendar days (5 months).

#### Questionnaire respondents

For the research conducted on the building rehab projects Public works infrastructure and the arrangement of the city Room Samarinda. It is located on Jl. H. Achmad Amins, Mt. Lingai, Kec. Sungai

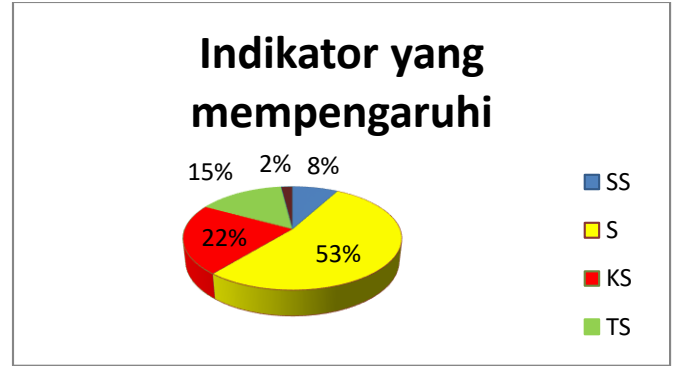
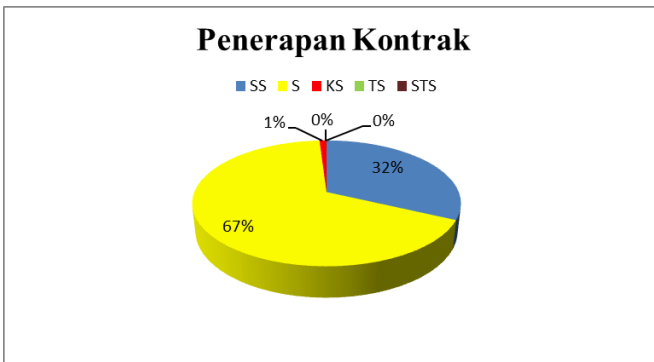
Pinang, Samarinda City, East Kalimantan. In this research, the number of questionnaire that was spread to respondents at the project building rehab projects of PUPR consists of:

1. Contractor: 7 persons.
2. Supervisor: 5 persons.
3. Public Works Office: 10 persons.

So the total number of respondents was 22 respondents.

The following is the recapitulation of the questionnaire obtained from some literature and the results of interviews.

Kode Pertanyaan	Jawaban				
	SS	S	KS	TS	STS
X1.1	5	17	0	0	0
X1.2	7	15	0	0	0
X1.3	10	12	0	0	0
X1.4	6	15	1	0	0
Jumlah	28	59	1	0	0
Presentase	32	67	1	0	0
Presentase Terbesar	67				



### Uji Validitas Instrumen Penelitian

The validity test in this study was used to measure the legitimate or the VALIDOF a questionnaire. A questionnaire is said to be valid if the questionnaire's question is able to reveal something measured by the questionnaire. In this research, a research instrument is said to be valid or relevant if the value of the R-count coefficient is greater than the R-table value that can be seen based on the number of respondents (n) at a significance of 5%, which is obtained 0.432. So if the value of the R-count coefficient > 0.432 then the research indicator or instrument will be said to be valid or relevant. The following is an example of the first variable validity test calculation using the Pearson product moment method:

Description:

$X_y$  = index number of correlation "R" Product moment

N = number of subjects

$\sum x$  = Number of research results between x and Y scores

$\sum x^2$  = number of x score results



$\sum y$  = number of Y scores

### Reliability Test

The reusability test is used to determine whether the questionnaire remains consistent when used more than one time the same symptom with the same measuring device. The Cronbach Alpha statistical test used to test the reliability level of a variable is said to be reliable if the Cronbach Alpha value is  $> 0.60$ . When Alpha approaches one, its data reliability is increasingly reliable (Ghozali, 2009). To test the realibility of the questionnaire used the following

$$\text{formula: } r_{11} = \left( \frac{k}{k-1} \right) \left( 1 - \frac{\sum Si}{St} \right)$$

Description:

R11 = Coefficient of reliability

$\sum Si$  = number of score variants of each item

St = Variance Total

K = Number of items

### Reliability Test

Tabel 4.8 Hasil Akhir Uji Reliabilitas

Cronbach's Alpha	N of Items
0.909	18

The reliability testing of the Cronbach Alpha formula was done using the Statistic Product and Service Solution (SPSS) 23 software program for Windows. A data is reliable when the Cronbach Alpha value is greater than 0.60, and when the Cronbach alpha value approaches a value of one (1) then the reliability of the data is increasingly reliable. It can be seen above that the Cronbach Alpha value of the counting writer is 0.909 which means that the value is greater than 0.60 = 0.909  $> 0.60$  Then it can be said that the data used by the author is data that is realbels.

### Closing

## 5. Conclusion

Based on the results of analysis that has been done, both in the literature review, as well as the results of the processing of interviews and questionnaires from the respondents, it can be concluded as follows:

1. Indicators that affect the work contract obtained the largest value of 53% answered agree, meaning indicators that affect the construction work contract in the project. State that there are still many obstacles to the building of public works infrastructure and the arrangement of Samarinda city space that affects the contract. As for the indicators that affect the employment contract, rising prices on the market (X 2.5), the scope of work changes, the existence of additional work outside the work agreed in the contract (x 2.6), material/material quality changes (x 2.8), material input delay (x 2.9), material sent not in accordance with the order (x 2.10), labor shortage (x 2.11) Minimal workforce expertise (x2, 12), weak communication (x2, 13), late Foreman (x 2.14), delay in equipment (x 2.15), Shortage of workers (X 2.16), inadequate supervision (X 2.17), weak control of project time (X 2.18), low coordination (X 2.19).

2. Implementation of construction work contract obtained the largest value of 67% answered agree, meaning the application of construction contract work in the building rehab projects Public works infrastructure and the arrangement of the city of Samarinda is already applied in the field. The indicator of the contract implementation is, (the application of contracts is already in accordance with the specific terms and general conditions of contract (X 1.1), the existence of advances provided by service users to service providers with guarantees, for the implementation of the project (X 1.2), the employment period in accordance with what has been approved in

the contract (X 1.3), the contract price must be agreed or applied in accordance with the details contained in the list of quantity and contract price (XI. 4). So from the results of analysis using SPSS obtained the highest value 0.700 of the question X 1.4 and 0.504 of the lowest result X 1.1. is declared valid if the calculated R value is greater than R table 0.432.

[validitas-dan-uji-reliabilitas-instrumen-skripsi-kuantitatif-dengan-spss/](#) google copyright 2018

### 5.1 Suggestion

1. To avoid indicators/constraints that often occur in the party owner and contractor should consider and take into account any possibilities that occur, so as to minimize and not result in losses and failures in the implementation. So that the constraints that occur in the field can be avoided.

2. From the implementation of the contract using SPSS analysis The author gives suggestion that the declared valid when R count is greater than r table and on the project's work R calculate greater than R table so from the result of SPSS calculation already meet the terms and conditions

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