

# Bidding Method in Governmental Construction Project in Indonesia

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## 1. Introduction

Procurement is an activity undertaken to goods and services for developing infrastructure and public services by maintaining transparency, effectiveness, and efficiency. Generally, such procurement is done through public auction after certain qualifications in are met in Indonesia. Evaluation of bids is the most important stage in the determination of the public auction process because there is a technical evaluation of the cost for the entire document or the bids. This paper seeks to examine and understand how to

- (1) evaluate a contractor's offer to a knockout system in the auction process based on Presidential Decree No. 70 of 2012.
- (2) determine the order of a winning candidate to be a provider of goods/services contracting (contractors).

## 2. Overview of Procurement System in the Indonesian Government

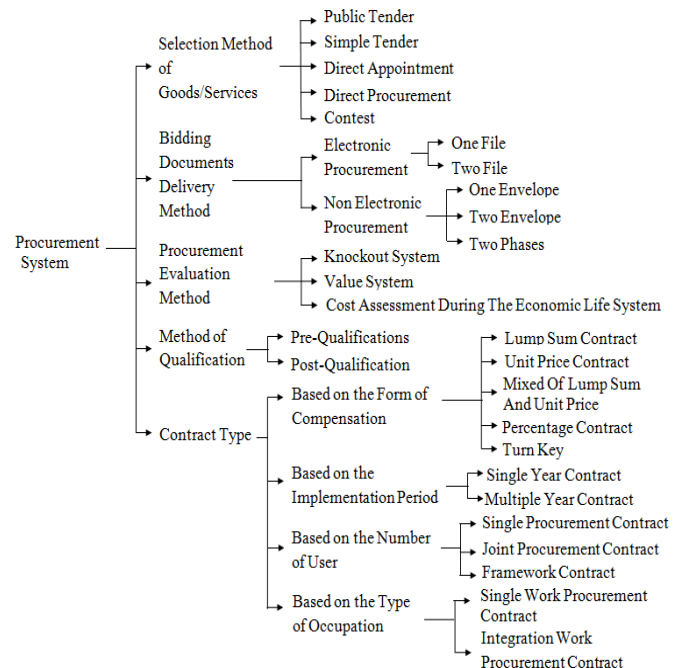
The legal basis for the bidding system is as the following:

- 1) Presidential Regulation No. 54 Year 2010 on the Procurement of Goods / Services.
- 2) Presidential Regulation No. 35 Year 2011 on the first change of Presidential Regulation No. 54 from 2010.
- 3) Presidential Regulation No. 70 Year 2012 on the second Amendment of Presidential Regulation No. 54 Year 2010.

Procurement of goods/services are partially or wholly sourced by financing from the state budget, including loans/grants received by the domestic government. Procurement of these goods/services are partially or wholly financed by The Loan/Foreign Grants (PHLN) if there are differences in the way the agreement for procurement procedures. The procurement is implemented through Self-management and a Selection of Goods/Services (Non-Electronic Procurement (Non e-Proc) and Electronic Procurement (e-Proc)).

**Figure 1** illustrates the Indonesian auction system according to the classification of construction projects in Presidential Decree No. 70 Year 2012. As shown in the second column of the figure, there are five aspects; Selection of the Good/Service, Bidding Document Delivery, Procurement Evaluation, Qualification Assessment, and Contract Type.

There are two methods for the Qualifications Assessment, namely, Pre-Qualification and Post-Qualification. Pre-Qualification is the process of assessing the competence and ability of businesses provided before bidding. Post-Qualification is the process of assessing the competence and ability of businesses bidding. The Knockout System is a method to omit when the proposal value or index is lower than certain determined standards. Based on Presidential Decree 70 of 2012, the Knockout System is used in the Selection Good/Service for Direct Procurement, Simple Tender and Direct Appointment. For construction projects than less than at contract of 5 billion rupiah, Post-Qualification in Qualification Assessment, One Envelope for the Bidding Document Delivery, and the Knockout System for Evaluation in the Procurement Evaluation are used.



**Figure 1.** Procurement system in the Indonesian Government for a construction project

## 3. Discussion

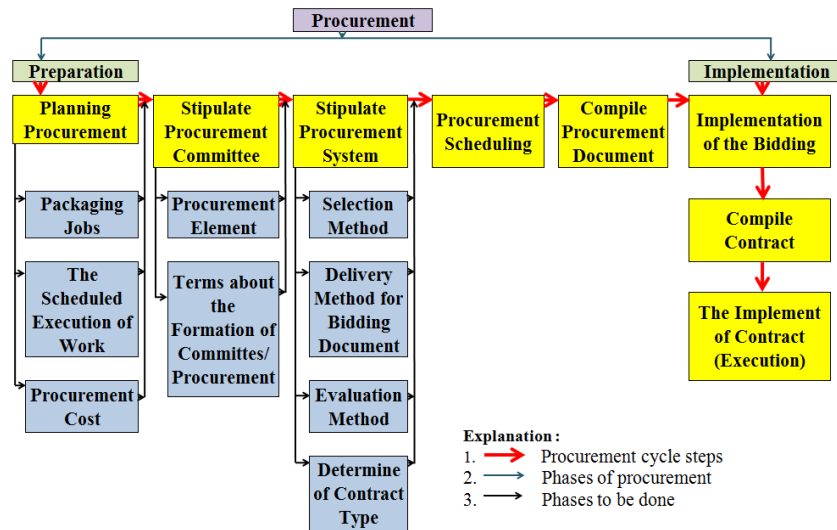
### (1) Evaluation system with the Knockout System

The Knockout System is a bidding evaluation done by examining and comparing the bidding documents to the fulfillment of the requirements set forth in the selection of providers of goods/services as the evaluation process begins, based on from the assessment of administrative requirements, technical requirements and price reasonableness. The Knockout System is often used for the Procurement Evaluation Method when selecting providers of goods and construction work in Indonesian local governments under Presidential Regulation No. 54 Year 2010 Article 48.

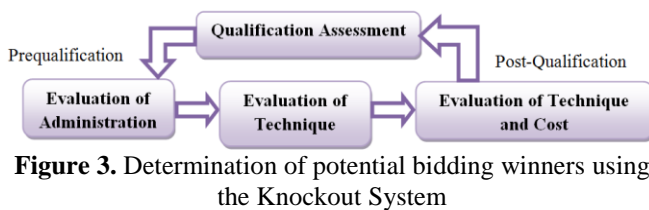
A Value System Evaluation is only used for complex work according to the specific criteria of Presidential Regulation 54/2010 Article 1 Paragraph (36). It states that "Work is a complex job that needs high technology, high risk, and specially designed equipment and/or work that is worth above 100,000,000,000 (one hundred billion) rupiah". With the presence of Presidential Decree Number 70 Year 2012, service providers (contractors or consultants) can have the opportunity to compete in bidding on projects that are both government projects and private projects.

**Figure 2** describes the steps of the procurement system which must be passed and completed by the bidders (contractors). Before continuing on to the next step, bidders have to finish all the requirements contained in this step.

Providers that do not pass the Qualification Assessment at any stage are designated as a "failure". The provider with the lowest bid price is potentially qualified as a winner when they satisfy both the administrative and technical requirement



**Figure 2.** Flow of the procurement system



**Figure 3.** Determination of potential bidding winners using the Knockout System

**Figure 3** shows the process for determining the potential bidding winners through the Knockout System. The first stage is a prequalification, which consist of the evaluation of administration step. In this step, the bidding documents from the bidder are evaluated using an Evaluation of Administration, Evaluation of Technique, and Evaluation of Technique and Cost.

## (2) Examples found in the Jombang Regency

To learn how to decide on a winning bidder, two government projects in Jombang Regency were traced. Fund sources were Revenue and the Expenditure Budget for the Jombang Regency Budget Year 2012 and Year 2013.

1. Project Name : Classroom Rehabilitation of  
Johonowinong Elementary School  
Located : Gudo Sub-District, Jombang Regency,  
East Java Province, Indonesia  
Owner Estimate (OE) : IDR 295,656,000

**Table 1** Bill of quantity (BOQ) for three bidders, C<sub>1</sub>, C<sub>2</sub> and C<sub>3</sub> for procurement for a classroom rehabilitation project.

**Table 1.** Bid results for the classroom rehabilitation project for Johonowinong Elementary School.

Bidder Name	Components of the Bid Price				Offers after Arithmetic (IDR)	Percentage of the OE	Bidding Evaluation	Result
	Preparation Costs (IDR)	Structure Costs (IDR)	Architecture Costs (IDR)	Electrical Costs (IDR)				
C <sub>1</sub>	2,875,000	168,710,978	175,133,514	179,414,752	254,214,000	85.98	Pass	The Winning Bidder
C <sub>2</sub>	2,875,000	56,473,448	57,636,917	59,817,838	262,559,000	88.81	Fall	
C <sub>3</sub>	2,875,000	3,045,000	3,045,000	3,045,000	269,667,000	91.21	Fall	

**Table 2.** Three Bill of Quantity (BOQ) and bid results for the Kabuh Tapen Road building

Bidder Name	Components of the Bid Price		Offers after Arithmetic (IDR)	Percentage of the OE	Bidding Evaluation	Result
	Preparation Costs (IDR)	Structure Costs (IDR)				
K <sub>1</sub>	30,432,325	1,317,750,032	1,483,000,500	86.98	Pass	The Winning Bidder
K <sub>2</sub>	30,435,400	1,325,750,031	1,491,803,900	87.29	Fall	
K <sub>3</sub>	30,431,850	1,327,750,000	1,494,000,100	97.42	Fall	

There are some differences in the total costs due to differences in structure and the architecture components. This table shows the bid prices and their percentages for OE (IDR 295,656,000) determined by the local government. C<sub>1</sub> was the winning bid with the lowest bid price of IDR 254,214,000 (85.98%).

2. Project Name : Kabuh Tapen Road Building  
Located : Kabuh Sub-District, Kudu Sub-District,  
Jombang Regency, East Java Province,  
Indonesia

Owner Estimate (OE) : IDR 1,708,920,000

The Tapen Kabuh Road Construction Project is a project to repair the structure of the road. There are two important components in the BOQ.

**Table 2** shows the BOQ for three bidders, K<sub>1</sub>, K<sub>2</sub> and K<sub>3</sub>, and shows the bid prices and their percentages for OE (IDR 1,708,920,000). K<sub>1</sub> was the winning bid with the lowest bid price of IDR 1,482,000,500 (86.98%).

In these two projects, the Knockout System was applied through not only an assessment of work quality from the bidders, but also for the lowest bid price offered.

## 4. Summary

- (1) There are three methods of bid evaluations in Indonesia, the Knockout System, Value Sytem, and Cost Evaluation, based on Presidential Regulation No.70 Year 2012.
- (2) Indonesian local governments often use the Knockout System for projects that are less than 5 billion rupiah, and use the Value System for projects that more than 5 billion rupiah and also more complex and complicated work projects.
- (3) The Knockout System was used for construction projects based on the least percentage of the bid price for the price estimated by the local government, Jombang Regency.

## References

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