

Method for Assessing Implementation of Design Build Project Delivery System in Indonesian Road Infrastructure Projects (Cases Study : Balai Besar Pelaksanaan Jalan Nasional V)

Ashri Maharani¹, Hitapriya Suprayitno¹, Herry Budianto²

Abstract - Public infrastructure, particularly road infrastructure, has a strong linkage with the economic growth of a nation. Management of road infrastructure by the DG of Highways-Ministry for PW is currently implemented by using traditional methods of DBB contract system. Although DBB approach is considered more fair for the contractor, it may not be able to create more value for the Government. Long periods of procurement, often result in undesirable outcomes such as excessive cost, unsatisfactory quality and delays in implementation time. The DB project delivery system is expected to answer the above problem and therefore, there is a need to examine how to assess the feasibility of DB Contract implementation for road infrastructure projects under the authority of BBPJJN V. This paper present the method assessment development

Term Index - Design and build (DB) project delivery system, implementation potential obstacles, supporting factors, road infrastructure projects under the authority of BBPJJN V.

INTRODUCTION

Public infrastructure, especially roads, has a strong links with the economic growth of a nation. Handling of road infrastructure by the DG of Highways, Ministry of PW is currently implemented using traditional methods DBB Contract System[4].

On behalf of the Government of Indonesia, the Directorate General of Highways, Ministry of PW and PH has the authority for the provision of road infrastructure. In order to carry out its functions effectively, the Ministry of PW is mandated to adopt DB Contract System [1]. In fact, the DB contract system implemented in the Law Decree No. 18/1999 [5]. In addition, PP RI No. 29/2000 on the Implementation of Construction Services Article 13 paragraph 1, 2, 3 and 4 [3].Therefore DB Contract System need to be investigated.

METHOD

Method of assessing the feasibility of implementing the contract will use in this research. The first thing to do is a good understanding of the phenomenon of contract which, in order to determine the second step.

The second step of determining feasibility requirements in the form of implementation contract. Without a good understanding of the phenomenon of contract, eligibility status could not be formulated properly. After the formulation of the eligibility requirements, followed by action to formulate component of the eligibility criteria, which is a derivative of eligibility requirements. After that then the fourth most difficult step is to design the measurement method to measure the feasibility of eligibility requirements that have been formulated in the second step [2].

The steps method of preparing the concept as assessment methods can be illustrated in the following flowchart at Figure 1. [2]

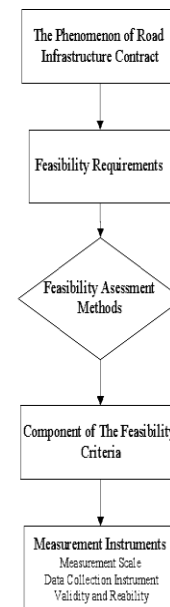


FIGURE 1. METHODS FLOWCHART OF PREPARING THE CONCEPT AS ASSESSMENT METHODS

Figure 1. Method flowchart of preparing the concept as assessment methods

¹Ashri Maharani and Hitapriya Suprayitnoare with Department of Civil Engineering, Faculty of Civil Engineering and Planning, Institut Teknologi Sepuluh Nopember, Surabaya, Email: amaharani22@gmail.com; suprayitno.hita@gmail.com

²Herry Budianto, Expert, BBPJJN V. Email: budiantoherry@yahoo.com

RESULT AND DISCUSSION

The result flowchart were shown in the figure 2.



Figure 2. Variable operational definition.

The questions in the study variables still been copied-described can be follow-up questions to be drawn a conclusion perception / opinion of the respondents.

Preliminary survey was conducted to determine the response of respondents to the questions that exist in the questionnaire and to identify the advantages DB Contract System, the readiness of the service users and service providers in implementing the DB contract system in the management of road infrastructure in some streets under the authority BBPJN V, DG of Highways, Ministry of PW and PH. Preliminary surveys conducted by questionnaire open models in which the respondent can increase or decrease the variable. The survey results are used to assign the variables as well as the preparation of the next questioner.

CONCLUSION

Research objectives has been achieved. Method for assessing DB Contract implementation has been successfully developed. The feasibility requirement consists of 5 elements. The first three, answered by the researcher, indicated that the DB Contract Implementation is feasible. Measurement instruments, in a form of a set of questionnaire, for interviews with the expert have been designed and has been tested.

The DB contract delivery system project is predicted to be relatively simple and easy to be implemented in accordance with the appropriate capabilities level of service user and service providers.

REFERENCES

- [1] Departemen Pekerjaan Umum. "Bina Marga Akan Terapkan Kontrak Design & Build Proyek Jalan dan Jembatan.". 2009.
- [2] H. Suprayitno et al. "Konsep Dasar Metoda Pengukuran Kelayakan Penerapan Sistem Kontrak Baru". *Prosiding Seminar Nasional Manajemen Teknologi XXIII*. Program MMT – ITS. 2015
- [3] Peraturan Pemerintah Republik Indonesia Nomor 29 Tahun 2000 tentang Penyelenggaraan Jasa Konstruksi.
- [4] H. Rahadian, *Langkah Awal Menuju Performanced Based Contract Melalui Extended Warranty Period*. 2009.
- [5] Undang-undang Republik Indonesia Nomor 18 Tahun 1999 tentang Jasa Konstruksi. 1999.