

## **VALUE ENGINEERING ON REQUEST FOR PROPOSAL ('VE ON RFP') – A NON-CONVENTIONAL VALUE ENGINEERING (VE) STUDY FOR VALUE DELIVERY ENHANCEMENT WITHIN DESIGN AND BUILD (D&B) PROJECT**

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### **Introduction**

Ever since the use of Design and Build (D&B) Procurement System is greatly accelerated in construction projects, Value Management (VM) integration is unavoidable in enhancing value within D&B project life cycle (Kirk, 1998). Value Engineering on Request for Proposal ('VE on RFP') Study is a VM integration that takes place during Pre Tender Stage of D&B Procurement route, preferably upon completion of RFP draft document or prior to issuance of RFP to D&B tenderers. Despite its non-conventional study characteristics, inputs and outputs, its aim of enhancing value delivery within D&B project is equally significant as a conventional Value Engineering (VE) Study does.

VE is termed as a subset of VM that has the manner in translating business project into technical requirements of design and construction for a built facility, which applies the concept of quality assurance (Kelly, Male and Graham, 2004). VE uses a disciplined and structured process in improving project value, with flexibility in the application of study methods, tools and techniques. The VE process is applicable in 'VE on RFP' Study in refining the client's and project brief statements, which to translate the strategic needs into technical terms and become source for D&B tenderers to design and construct.

Request for Proposal (RFP) is a package document to be provided to the qualified D&B tenderers to bid on a project (USDOT, 2006). It may contain, but is not limited to scope of work, design and construction criteria that perhaps includes design concepts, technical requirements and specifications. The RFP must clearly define needs, functions, performance and quality requirements essential to ensure that the project is designed

and constructed to meet those as determined by the client and including users. Thus, this article attempts to briefly discuss on 'VE on RFP' Study implementation and its benefits to the Malaysian public construction projects.

### **'VE on RFP' Study - Best Practices Application**

Within D&B procurement route, 'VE on RFP' Study intervention is earlier recommended by Kirk (1998) and recently outlined in the 'Manual of Practice for Value Engineering' as published by Design-Build Institute of America (DBIA; retrieved online in 2013). Both best practices encapsulate that the objective of 'VE on RFP' Study is to assure adequate project definition, design criteria and expectations are communicated to D&B tenderers. While the conventional Pre Tender VE Study in the Traditional Procurement route is based on the developed tender designs, specifications and bills of quantities, 'VE on RFP' Study is centred on the RFP package. The latter VE exercise involves reviewing, refining and finalizing the RFP document as to be used for the D&B tender basis.

In Diagram 1 below, the Malaysian Public Works Department (PWD) has marked 'VE on RFP/Needs Statement' intervention in the 'Value Engineering Application Guidelines for Public Projects' (PWD VEAG, 2013). In fact, the intervention has been institutionalized in the PWD's D&B project process as part of the Quality Management System Standards (SPB, 2014). Ever since, 'VE on RFP' Studies have been implemented in many D&B procured projects worth MYR50 million and above, consequent to the mandatory of VM by the Government (EPU, 2011 and EPU, 2015). The VE Study implementation is under responsibility of the client ministry, where its execution is managed by the PWD's Project Manager / Head of Project Team; and facilitated by the in-house VE Facilitators.

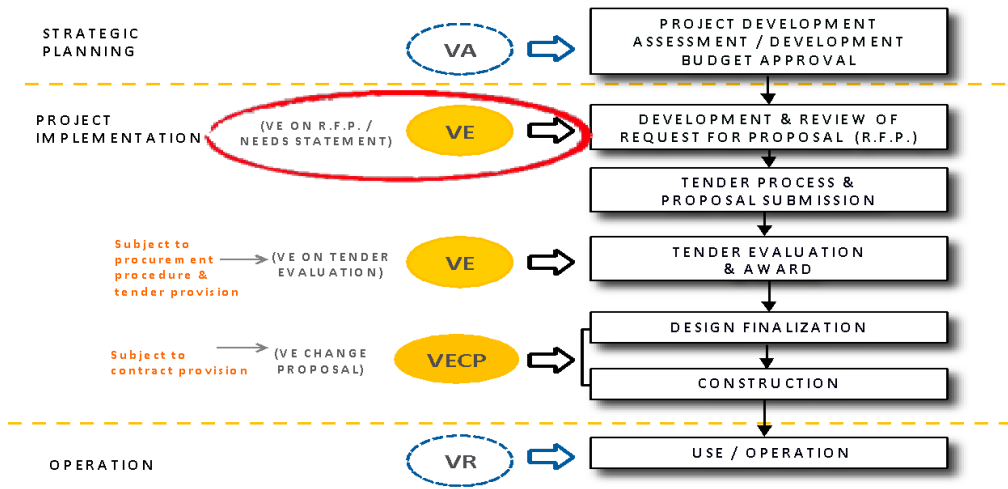


Diagram 1 – VE Interventions in D&B Procured Project (PWD VEAG, 2013)

## **'VE on RFP' Study Benefits**

The outputs of 'VE on RFP' Study are the accepted recommendations that would be incorporated or refined in the RFP. Then the document becomes an improved version of tender basis in ensuring value delivery through tenderers' proposals as responses to the given RFP. An RFP may provide a master plan or a zoning layout, or even a concept design; either as sacrosanct or guide (only) input to tenderers. This provision requires VE Study session to review and verify the design/plan and briefs included in the RFP. VE recommendations may also involve basis for tender evaluation, such as the expected Schedule of Accommodations (SOA) that would be later referred during the evaluation.

At Pre Tender Stage of Traditional Procurement route, VE Study application is viable in enhancing project value during design development (Ab Ghani R. and Ghazali Z.A., 2012). Equivalent in D&B route, value-adding benefits can be realised from 'VE on RFP' Study, which an RFP is a substance of ensuring value delivery within the project. The followings are among visible benefits of 'VE on RFP' Study as observed on actual applications in the Malaysian public construction projects:

- ✓ Clarifies, customizes and aligns descriptions or statements in the RFP briefs, pertaining scope definition, client/users needs and functional requirements, site planning, design concept, technical standards, tender requirements etc.
- ✓ Identifies, addresses and resolves issues prior to tender, concerning the project scope, site, master planning, design concept, technical, constructability etc.
- ✓ Identifies and mitigates the uncertainties that may jeopardize project value in conjunction with the project Risk Management.
- ✓ Optimizes and verifies the project cost allocations (construction cost and other related costs) due to possible cost implications of VE recommendations.
- ✓ Finalizes the RFP documentation collectively; engage all parties' responsibilities on final checking, which normally placed on Quantity Surveyor's responsibility.
- ✓ Facilitates the evaluation on tender proposals; based on the robust tender basis (the improved RFP) and VE recommendations on tender evaluation criteria.
- ✓ Improves communication and issues resolution among the project stakeholders (central agency, client, users, project team, authorities etc.)
- ✓ Improves the whole project team cooperation and work performance especially during the planning of D&B procurement tender stage.

## Conclusions

Considerably a non-conventional VE exercise at Pre Tender Stage, a 'VE on RFP' Study in the D&B procured project promotes pro-active actions and more comprehensive reviews in improving the RFP package. As the D&B tender basis, the improved RFP document is expected to be rigorous in providing project information on the client's business needs and technical requirements, which minimizes ambiguities, stimulates more competitive tenders, facilitates tender evaluation and mitigates contractual disputes. This value orientated exercise leads to value creation in the D&B tenderers' proposals as responses to the given RFP. Ultimately, the 'VE on RFP' Study intervention enhances value delivery within D&B procured project.

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