

# Procurement on Government Sponsored Research Projects and Deeper Insight on Procurement Tool: PMSS

Nikit Nair<sup>1</sup>, Prof. Balkrishna Narkhede<sup>2</sup>, Ankur Chaturvedi<sup>3</sup>

<sup>1</sup>Department of Production Engineering, Veermata Jijabai Technological Institute, Mumbai, Maharashtra, India

<sup>2</sup>Department of Production Engineering, Veermata Jijabai Technological Institute, Mumbai, Maharashtra, India

<sup>3</sup>Department of Dyestuff Technology, Institute of Chemical Technology, Mumbai, Maharashtra, India

## ABSTRACT

This Article focuses on how procurement activities are executed in Government sponsored research projects. The purpose of the paper is to highlight the importance of procurement management as a successful project management practice. This review article also projects the importance of procurement tools & technique in execution of successful procurement management. Procurement Management Support System (PMSS) is one such tool which has proved to be efficient in handling procurement activities in TEQIP (Technical Education Quality Improvement Programme) research institutes.

**Keywords:** Procurement, Research, procurement tools, PMSS

## I. INTRODUCTION

Research projects emphasize on making something novel, an inventive or innovative model to nullify the problem in the existing product or process. These projects are always at huge stake because the satisfactory functioning of prototype or the results of the final product could be slightly deviated from the expected. Moreover, sufficient money has also been incurred on procuring raw materials and other relevant resources. Research projects are bound to have varied requirements and the requirements sometimes could be out of scope. There is always a risk of scope change, as far as research projects are concerned, and so is the risk of immediate project requirements. Requirement Gathering is an important stage, especially when there is a set of projects under a common portfolio. There is diverse requirement from respective projects. However there can be similarities too. Here comes, the importance of procurement management. It is necessary to read and understand all the requirements and try to club the similar requirements for placing bulk orders, thus following economies of scale.

Procurement is considered as the vital part of Project Management. Procurement encompasses the whole process of acquiring property and/or services. It begins when an agency has identified a need and decided on its procurement requirement. Procurement continues through the processes of risk assessment, seeking and evaluating alternative solutions, contract award, delivery of and payment for the property and/or services and, where relevant, the ongoing management of a contract and consideration of options related to the contract. Procurement also extends to the ultimate disposal of property at the end of its useful life [1].

Project Procurement Management basically involves following processes [2]

**Plan:** Process of documenting project procurement decisions, specifying the approach and identifying the potential seller which meets our requirements.

**Conduct :** The process of obtaining seller responses, selecting a seller and award of contract.

**Control:** The process of managing procurement relationships, monitoring the contract performance, and making corrections and changes, as appropriate.

**Close:** The process of completing each project procurement.

## II. METHODS AND MATERIAL

The report projects the procurement methodology adopted at world bank sponsored research projects carried out at Institute of Chemical Technology, Mumbai under Technical Education Quality Improvement Programme (TEQIP) and the greater emphasize is laid on procurement tool viz Procurement Management Support System (PMSS).

The procurement process which was followed by the Institute in this entire project phase was:

- a) For item costing less than INR 5000, one can directly place the order to a vendor through siddhi which is an Intranet portal for online procurement. For this, the practice was to first register in Sidhi and then based on approval from concerned department such as TEQIP Co-ordinator, Stores, Accounts and finally from the Nodal Procurement-Head, PO gets released.
- b) For item costing between INR 5000 to 25000, again the procurement will be initiated through siddhi, but here, they invited atleast three quotations for that respective item, and based on lowest bid, order is processed through the channel mentioned in the above step.
- c) And for equipment or set up costing more than INR 25000, procurement was initiated through National Project Implementation Unit (NPIU) developed procurement tool called PMSS i.e Procurement Management Support System. This tool is so well organized that one can procure item through this very easily and we can initiate procurement of items costing upto INR 10 Lakhs under Shopping.

### PMSS: The way for Procurement

The PMSS is used to support and monitor the procurement activities of the institutions, which are selected for the project. PMSS will help the procurement activities by reducing time, standardizing the processes, ensuring transparency, support decision making and

compliance with agreed norms. Apart from the institutions, PMSS will also be used by the SPFUs (State Project Facilitation Unit) and NPIU (National Project Implementation Unit) for procurement as well as monitoring activities. The process is briefly explained as below:

➤ **Prepare Plan:** For any procurement to begin, it is mandatory to prepare a procurement plan. In procurement plan, there is a need to enter all the item details like its brief specification, estimated cost, Quantity and Procuring department. And it is quite obvious to mention the package name, because this will be the identification of that particular item. Adjoining justification should be included supporting the same, wherein one needs to justify the need of respective procurement. Also need to mention the estimated financial sanction date. Once the plan is prepared, it has to be further processed for director approval.

➤ **Initiate:** Once, Institutional Director have approved the plan, then commences the procurement stages. The item having its estimated cost as less than INR 10 Lacs, procurement must be initiated under shopping. For item costing more than INR 10 Lacs, the procurement option is by NCB (National Competitive Bidding).

#### ❖ Important Rules for Shopping :

1. Advertisement is not required for Shopping; however advertisements may be used to increase competition.
2. A minimum of 3 quotations are required for procurement to proceed under the shopping method. If 3 quotations are not received, then last submission date may be extended or the procurement process can be cancelled.
3. Last Date of submission of quotations to be 15 days from the date of issuing letter of invitations. The procurement coordinators can extend this date if the date happens to be a public holiday.
4. Quotation validity should be at least 15 days from the date of opening of bids.

➤ **In Progress:** The detailed procurement steps are executed over here. Here, one can find all the items

whose procurement status is still in progress. There are different stages under this system which needs to be carried out properly. The stages are listed below

### STAGE 1: INVITATION LETTER

Once you have initiated the process, the first stage is generating invitation letter for Quotations. For these, it is mandatory to follow the below steps:

**Step 1:** Terms and conditions must be clearly specified. For eg: Quotation Validity, Training & Installation Clause, if required, Last Date & Time of Submission of Quotation and Warranty.

**Step 2:** This step includes detailed technical specification. Place of Delivery and Delivery period should also be specified.

**Step 3:** Entering all the supplier details.

**Step 4:** Once supplier details are entered, defining the payment terms becomes very important. Based on the progress of procurement, percentage of payments is released, For eg: 90% against delivery & installation and 10% against Satisfactory Acceptance. These have to be decided priorly.

**Step 5:** Once all these details are entered, invitation letter can be generated.

**Note:** Format of Invitation Letter also needs to be uploaded in the Institutional website so that even the local or national vendors can send their quotations.

### STAGE 2 : QUOTATION OPENING

It is very much essential that atleast three quotations has to be there so as to further proceed the procurement. Otherwise, the process has to be reinitiated.

Based on the predefined timeline, quotations are opened in front of the procurement committee chaired by Procurement Nodal Head and other committee members. Minutes of the Quotations are prepared which encompasses the list of members present, and the vendors who have responded to the Invitation for Quotation. It is also desired to mention the time and date

of Quotation Opening. Some steps involved under this stage are:

**Step 1:** Entering the Quotation Opening data which includes the Quotation Minutes and Quotation data. Following questionnaires are needed to be answered:

- Is Quotations Received ?
- Is Quotation Duly Signed ?
- Quotation Reference Number
- Quotation Received Date
- Quotation Validity
- Unconditional Discount offered, if any (%)
- Readout price without taxes

**Step 2:** Responses of the above questionnaires are recorded and is given for the approval of all the committee members.

### STAGE 3: QUOTATION EVALUATION

This stage is basically carried out so as to generate an comparative statement inferred from the quotations. It gives an idea about which vendor have meet our specification with the lowest bid, considering all our terms and conditions. This forms the basis for recommendation of Award of contract.

**Step 1:** Quotation Evaluation Data for each supplier needs to be filled by carefully reading the quotations. The common questionnaires under this step are as listed below:

- Are the Delivery terms as specified ?
- Are the Payment terms Agreed ?
- Is Training Included ?
- Is Testing / Installation / Commissioning included ?
- Is the Quantity as specified ?
- Is the Place of Delivery as specified ?
- Is the Quotation technically responsive ?
- Is their any Price correction ?
- Reasons for Price Correction (which can include arithmetic error or discounts are offered, if any)
- Evaluated price
- Comments
- Readout Price without taxes

**Step 2:** Once the questionnaires are responded, again there is a need to take approvals of all the committee members on it. And upload the scanned copy on the system.

#### STAGE 4: RECOMMENDATION OF AWARD & PO GENERATION

Based on the system generated evaluation report and comparative statement prepared by the end user, they finally recommend the vendor with proper justification to whom the contract has to be awarded. The L1 supplier is identified and is finally given the award of contract.

#### GENERATION OF PURCHASE ORDER

**Step 1:** Once the L1 is recommended for award of contract, then start the process of Purchase Order Generation. Here the unique PO number is generated first and then all the cost associated with the items has to be entered which includes unit cost details plus all the taxes (VAT, CST) and other charges such as Octroi-Excise charges. ICT being a government body, have an excise and Octroi Exemption. These certificates can be generated from the store department. So basically Octroi-Excise charges are nil. Once all these details are entered, system generated PO is released on which authorized signatory has to be there. And then can be finally mailed to the L1 supplier.

**Step 2:** Before sending PO to the supplier, it is mandatory to first scan the PO and then has to be uploaded in the system.

#### STAGE 5: GRN PAYMENTS

**Step 1:** After the receipt of PO, the vendor has to dispatch the material as per the terms and conditions. Once the consignment is received, it is very much essential to keep a record of all the documents supporting the same. After which you need to enter Goods Received Note (GRN) details. It is generated once items are received.

These details basically includes:

- Item code
- Item Name
- Comments ( Satisfactory Delivery/ Installation )

- Received Quantity
- **Stock Register Name:** It is basically a name or address given to an asset registry folder where all the items details are stored.
- Serial. No which indicates the item number and
- Item Distribution: There is a possibility that the particular items which have been procured have to be distributed among different departments. So such details have to be mentioned over here.

After entering this details, **Asset Register** has to be prepared which consist of a system generated serial unique number which has to be saved and taken print out in our Institutional letter head and after the signature of Procurement Nodal Head, the scanned copy has to be uploaded again on the system.

Once, asset register is uploaded, we need to print GRN. These are a system generated received note on which, there has to be a signature of receiving officer and authorized signatory who has certified it. Then again, the scanned copy of the same has to be uploaded in the system.

**Step 2:** Entering payment details. After successful delivery and installation and satisfactory acceptance, payments have to be released. Once cheque is ready, cheque details have to be entered in the system.



**Figure 1:** A process flow diagram showing procurement stages

### III. CONCLUSION

Procurement reform is a protracted process and there are many obstacles along the way and therefore needs to be effectively managed. This report has presented a detailed study on selected factors that influence the procurement function. These factors are: project financing, accountability, Information and Communication Technology adoption and internal control system. The

overriding objective of a state's public procurement system is to deliver efficiency and "value for money" in the use of public funds. The efficient working of the tool PMSS has really helped out in procuring research equipments, thereby, accountable for achieving the deliverables on time.

#### IV. REFERENCES

- [1]. Waters D. (2004). Introduction To Supply Chain Management, (2nd Edition), Palgrave Macmillan, Britain
- [2]. PMI- A Guide to the Project Management Body of Knowledge (PMBOK® Guide)- Fifth Edition
- [3]. International Journal of Business and Commerce Vol. 3, No.1: Sep 201354-70(ISSN: 2225-2436)
- [4]. Government of Kenya (GOK). The Public Procurement and Disposal Act (2005). Kenya Gazette Supplement No. 77 (Acts No.3). Nairobi: Government Printer.
- [5]. Trepte, T. (2004). Regulating Procurement: Understanding the Ends and Means of Public Procurement Regulations. Oxford: OUP
- [6]. Magnus Blomberg. Developing a strategic procurement process- A case study at Boliden AB
- [7]. Japheth Ocharo Kiage. International Journal of Business and Commerce Vol. 3, No.1: Sep 201354-70(ISSN: 2225-2436).
- [8]. PMSS: User Guide, Compulink Systems Ltd. Plot no. 38, Rajiv Gandhi IT Park, MIDC, Hinjewadi, Pune-411057
- [9]. PMSS:Website <http://www.teqip-pmss.com/PMSSLIVE/Source/General/Navigation.aspx>
- [10]. Munyi Catherine Wanja , Chege Moses Gichuho, International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064