

AWARDS SCHEME FOR EXEMPLARY IMPLEMENTATION OF e-GOVERNANCE INITIATIVES

IX. NAME OF CATEGORY- 'INNOVATIVE USE OF ICT BY CENTRAL GOVERNMENT PSUs'

Name of the Project:

Online Reverse E-Auction System for MM(Purchase) and Project Contracts Dept

1. Coverage – Geographical and Demographic :-

(i) Comprehensiveness of reach of delivery centres,

1. It caters to MM(Purchase) and Project Contracts departments of the organization and its suppliers and contractors.
2. The contracts awarded by Project contracts dept are finalized by the Reverse E-Auction System. There are 30 officers in Project Contracts Department and 288 contractors who can use the system.
3. For MM/Purchase department during 2013-14, 3025 numbers of e-auctions were conducted. For Projects Contracts department during 2013-14, 24 numbers of e-auctions were conducted.
4. The bidders login to the system for process from their respective locations all over the country and also abroad and place their bids in the Reverse Auction process.
5. The primary Stakeholders are officers of MM/Purchase and Project Contracts Dept and the associated suppliers and contractors (bidders).

(ii) Number of delivery centres

The service is provided over internet and hence can be accessed from anywhere using internet.

(iii) Geographical

(a) National level – Number of State covered

Pan-India

(b) State/UT level- Number of District covered

Pan-India

(c) District level- Number of Blocks covered

Pan-India

Please give specific details:-

(iv) Demographic spread (percentage of population covered)

Since the service provided is completely internet based, it can be accessed from anywhere.

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2. Situation Before the Initiative (Bottlenecks, Challenges, constraints etc with specific details as to what triggered the Organization to conceptualize this project):

Only Basic Reverse E-Auction Engine was available. The basic reverse e-auction package was implemented for Marketing transport e-auction and the National e-governance award was received in the year 2008 for the same. Earlier in single auction multiple parties cannot bid in different currencies.

In MM(Purchase) department the facility of Reverse E-Auction with multiple foreign currencies was implemented. Using this facility, different bidders are able to bid in different currencies in a same auction at the same time.

Projects contracts Reverse E-Auction have some other complex features like handling case with convertibility various taxes like VAT, Excise duty, Service Tax, etc.

Tax calculation related to free issue of materials was also incorporated along with abetment based calculation of Service Tax. Earlier these complex features were not available.

3. Scope of Services/ Activities Covered (Relevance of choice of application for clients/ PSU, extent of e-enablement in terms of number of processes/services, extent to which step in each service/process have been ICT- enabled #)

- The concerned application was chosen to bring transparency in the whole procurement and award of contracts procedure.
- Entire workflow along with relevant approval (authorization of relevant bidders for specific Auctions) is done in online mode.
- Complete data generated and processed during various workflows of the system is electronic and available in Server database.
- Total service delivery is ICT enables via electronic (Web based) mode.

4. Strategy Adopted

- (i) The details of base line study done
- (ii) Problems identified,
- (iii) Roll out/implementation model,
- (iv) Communication and dissemination strategy and approach used.):

Existing processes in the MM and Projects Contracts departs were studied in detail. In comparison to the existing base model, the problems in using the existing e-auction package were identified.

→The major problems of MM department were:

1. Purchasing from Foreign sources in foreign currency (Multi currency e-auction).
2. Purchasing in foreign currency as well as in Indian Currency in single purchase order (Mixed currency e-auction).

→The major problems of Project Contracts department were:

1. Multiple parameter bidding for single item in an auction.
2. Calculation of end price based on applicable taxes, duties, free material issue, abetments for comprehensive contracts.

System was developed within the scheduled time frame. Feedbacks from a prospective users were taken into account during the design phase. During implementation, firstly the E-auction package for MM department was rolled out. After successful implementation of MM/Purchase e-auction the e-auction package for Projects Contracts was rolled out.

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5. Technology Platform used-

(i) Description,

- **Server Environment:** Windows 2008 R2(64 bit) - IIS 7.5(Application Server)
- **Programming Language:** Microsoft ASP
- **Database:** Microsoft SQL Server R2
- **Client-side:** HTML, JavaScript

(ii) Interoperability

The developed system can operated using any web browser from any platform (Operating System)

(iii) Security concerns

Sufficient security aspects were implemented with implementation of Digital Signatures in the system

(iv) Any issue with the technology used

Nil

(v) Service level Agreements(SLAs) (Give details about presence of SLA, whether documented, whether referred etc. #)

Service level commitments made with the internal dept as per standard practices

6. Enhancement of Productivity (Give details about impact on volume of transactions handled per employee, Productivity of machines/ resources#)

During 2013-14:

MM(Purchase): Total 10874 bidders participated in auctions placed by 49 dealing officers. Total no of bids processed is 63326.

Projects Contracts: Total 121 bidders participated in auctions placed by 6 dealing officers. Total no of bids processed is 1287.

7. Efficiency Enhancement (Give specific details about the following #)

- (i) Volume of transactions processed
- (ii) Coping with transaction volume growth
- (iii) Time taken to process transactions,
- (iv) Accuracy of output,
- (v) Number of delays in service delivery

- (i). Total bids processed is $(63326 + 1287) = 64613$
- (ii). Sufficient planning for server resources were done with future projections in contention
- (iii). Transactions are processed in OLTP mode. No processing time is needed
- (iv). Completely accurate output was received
- (v). No Delay

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8. Service Delivery – Business/ Client Centricity (Give details about improvement in interaction with clients and outcome for clients, relevance of access points, Length and Breadth of services provided online etc. #)

The process of procurement and award of contracts has been made more transparent bringing more satisfaction to all stakeholders. All bids are processed in completely online way to reduce the total time taken in the process.

9. Citizen/ Client Centricity (Give specific details on the following#)

- (i) Impact on effort, time and cost incurred by user,
- (ii) Feedback/grievance redressal mechanism,
- (iii) Audit Trails,
- (iv) Interactive platform for service delivery,
- (v) Stakeholder consultation

- (i). with online facility of filing of their bids users are saving a lot of time in comparison of manual bids.
- (ii). Proper feedback was taken and incorporated in the system.
- (iii). Complete Audit Trail is available and provided as and when required.
- (iv). The system is online and hence completely interactive
- (v). All concerned stakeholder were consulted and trained before roll-out.

10. User convenience (Give specific details about the followings #)

- (i) Service delivery channels (Web, email, SMS etc.)
- (ii) Completeness of information provided to the users,
- (iii) Accessibility (Time Window),
- (iv) Distance required to travel to Access Points
- (v) Facility for online/offline download and online submission of forms,
- (vi) status tracking

- (i). Service is delivered in online mode.
- (ii). All relevant information like list of auction is provided to the users.
- (iii). E-Auctions are available during the scheduled time.
- (iv). No need to travel. Completely online mode on internet.
- (v). All concerned stakeholder were consulted and trained before roll-out.
- (vi). All relevant details has been made available.

11. Innovation (Give details on how the usage of technology is exemplary, any use of new and emerging technology, impact on number of steps required, identification and removal of bottlenecks/ Irrelevant steps etc. #)

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12. **Defined and Achieved outcomes** (Give details about extent of improvement in terms of organizational objectives, output targeted in the beginning of the project and output achieved, extent to which the project is able to reach/ fulfill the requirements of planned beneficiaries etc. #)

The project was envisaged to speed up the process of procurement and award of contracts. In addition its objective was to bring in transparency to the whole process. After implementation all initial goals were achieved and concerned stakeholders expressed complete satisfaction.

13. **Sustainability** (Give details about sustainability w.r.t. technology (technology used, user privacy, security of information shared- Digital Signature/ Encryption etc. #), Organization (hiring trained staff, training etc#), financial (Scope for revenue generation etc. #)

- Technology involved is Microsoft ASP, which is one of the latest technologies.
- All the user information is accessible only on secure login.
- In house skilled man power is available within the organization to attend to enhancements and maintenance requirements.
- For increased Security and Integrity DIGITAL SIGNATURE have been implemented
- Training of technical staff is done on regular basis on both upcoming technologies as well as refresher courses in already trained areas. Technical trainings are planned after taking training requirements.

14. **Adaptability Analysis**

- (i) Measures to ensure adaptability and scalability
- (ii) Measures to ensure replicability
- (iii) Restrictions, if any, in replication and or scalability
- (iv) Risk Analysis

- (i) All suitable measures have been taken to ensure adaptability and scalability.
- (ii) Suitable measures have been taken to ensure replicability like proper user taring and manuals.
- (iii) Nil
- (iv) Risk Analysis done and suitable Risk Mitigation plans made and implemented to ensure smooth functioning of the system.

15. **Comparative Analysis of earlier Vs new system** with respect to the BPR, Change Management, Outcome/benefit, Change in legal system, rules and regulations

Earlier the award of contracts by Project Contracts dept was done on manual basis, after implementation, the business process was re-engineered to online mode. The outcome was improved considerably, by improving the time in preparation of comparative statements.

In MM(Purchase) Dept the auction was enabled with multiple currency in the same auction. Currency Exchange rates were taken care by auction engine. This completely eliminated the calculation errors involved in such process.

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16. Result Achieved/ Value Delivered to the beneficiary of the project-(share the results, matrices, key learnings, feedback and stakeholders statements that show a positive difference is being made etc):

(i) To organization, To citizen, Other stakeholders

- The project has helped in implementing the e-auction packages in MM/Purchase department and Projects Contracts department.
- The e-auction package thus developed has helped in reduction for procurement cost for the organization.
- The Project reaches out to customers cutting across the geographical boundary nationally as well as globally.
- The project helps the stakeholders to conduct e-auction in mixed as well as multi currencies.
- It helps to finalize different categories of Project Contracts related e-auction (as each contract has its own distinct features.)
- The system improves transparency and confidence amongst all stakeholders.
- It reduces time and lessens the paper work involved in normal tender process.

17. Extent to which the Objective of the Project is fulfilled-(benefit to the target audience i.e.G2G, G2C, G2B, G2E or any other, size and category of population/stakeholder benefited etc):

This System has benefited MM/Purchase department and Projects Contracts department of the organisation and their tenderers.

For MM/Purchase department during 2013-14, 2170 numbers of e-auctions were conducted and 10874 bidders (suppliers) had participated. Total 49 dealing officers placed auction to meet the purchasing need of the organization. A total of 63326 bids were processed. The in house built package has helped in addressing their needs in a significant manner.

For Projects Contracts department during 2011-12, 24 numbers of e-auctions were conducted and 121 bidders (contractors) had participated. Total 6 dealing officers placed auction in awarding contracts for various jobs inside the organization. A total of 1287 bids were processed. The in house built package has helped in addressing their multi faceted and unique requirement.

The reverse e-auction system has been catering to G2C Segment.

18. Other distinctive features/ accomplishments of the project:

- Implementation of Digital signature for better Authorization, security and integrity.
- Bidding can be done in ones native currency.
- Multiple Currency can be user by different bidders in single auction
- Automatic extension of time if bids are received in the last 4 minutes of the auction duration.
- Automatic display of remaining time during auction period.
- Higher user satisfaction due to auto calculation of all taxes and duties.
- Improved tender processing time due to complete elimination of data input error by tenders.