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GePNIC[®], driving National and International Procurement

8th ASIA PACIFIC PUBLIC ELECTRONIC PROCUREMENT NETWORK
CONFERENCE
(Digital Transformation of e-GP)

5-6 December 2022 Manila, Philippines

National Informatics Centre,
Ministry of Electronics & Information Technology
Government of India , Government of India
New Delhi

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Government eProcurement System of National Informatics Centre (GePNIC[®]), 8th ADB eGovt Procurement Conference

Background and Objectives

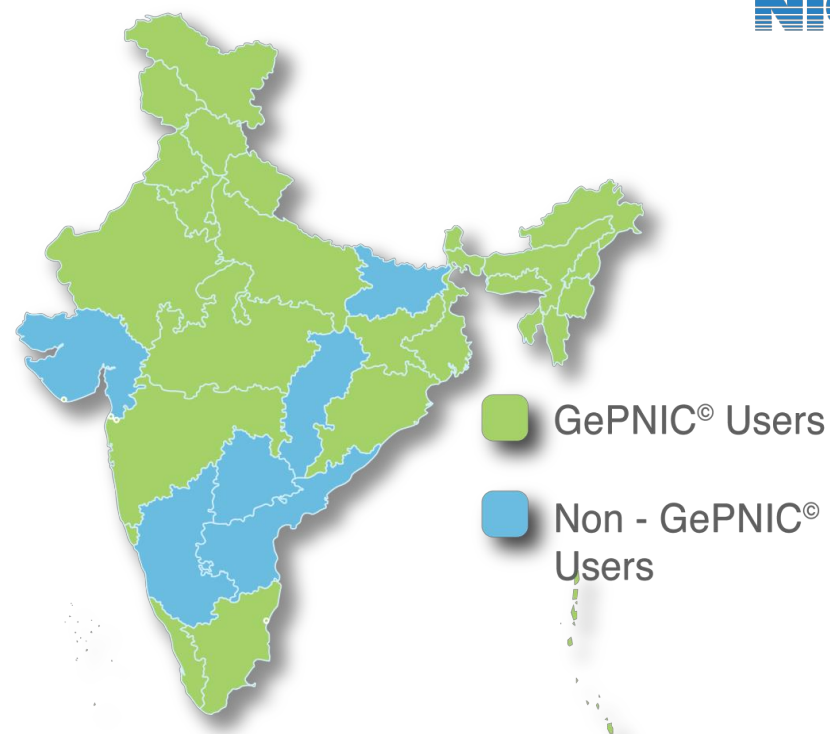
- About National Informatics Centre, Min of electronics and Information Technology.
- Government eProcurement system of NIC, GePNIC is a Government developed , owned and managed eGP platform to facilitate online electronic tendering.
- Over the last decade, the platform has evolved catering to end user requirements and in turn has rich feature, functionality and security stack.
- It caters to the complete gamut of procurement through electronic means.
- Implemented across India in 31 Provinces (States / Union territories) and over 708 Central Government Entities, facilitating National and Global Tenders with multi currency.
- Also facilitates, eAuction for conducting forward and reverse auctions.
- Single product , Configurable features, Quick On boarding .
- Meeting Objectives of Transparency, Authenticity, Security, Non discrimination, Accountability.

Association with ADB

- Government eProcurement system of NIC, GePNIC was first assessed as ADB as early as 2008-2010, Govt of Odisha (province in India)
 - Case to case basis assessment
 - Extensive configuration to meet ADB requirements in terms of templates and other unique features.
 - Mumbai Metro Rail Corporation [128 sheet Price bid template]
 - Provinces whose eGP is not assessed by ADB, were allowed to process their tenders thru CPPP
- It was followed by comprehensive assessment by World Bank as well as ADB
- Provinces using other eGP systems were also allowed to use CPPP
- As its implementation was extended in SAAS model it was easy to extend services to all within no time.
- Many suggestions by ADB have been incorporated in GePNIC to make it more versatile.

Magnitude of Trade facilitation

- Government eProcurement system of National Informatics Centre, GePNIC is the core engine which facilitates eGovernment Procurement (eGP) across India and is implemented as Central Public procurement Portal (eprocure.gov.in/cppp) since 2012
- Average monthly transactions ~ 0.1 Million electronic tenders worth 22.26 Billion USD approx.
- Caters to 75-80% of procurement needs of India
- Certified by World Bank as well as Asian Development Bank
- Certified by Standard for Testing and Quality Certification, for (Security, Functional and Hosting Infrastructure)



**9.5
Million
Tenders**

**Worth
1739
Billion
USD**

**0.4
Million
Bidders**

**0.46 Million
Procuring
Entities**

Magnitude of Growth in the last three lustrums

GePNIC® completes

15 Years of Excellence

*Our journey over the Three Lustrums
while Driving Transparency in
Public Procurement*

Tenders

Bids

Value

#Tenders

2007-08 : 0.07 Lakh	2011-12 : 0.58 Lakh
2016-17 : 6.82 Lakh	2021-22 : 14.24 Lakh

#Bids

2007-08 : 0.1 Lakh	2011-12 : 1.37 Lakh
2016-17 : 19.52 Lakh	2021-22 : 41.59 Lakh

Value

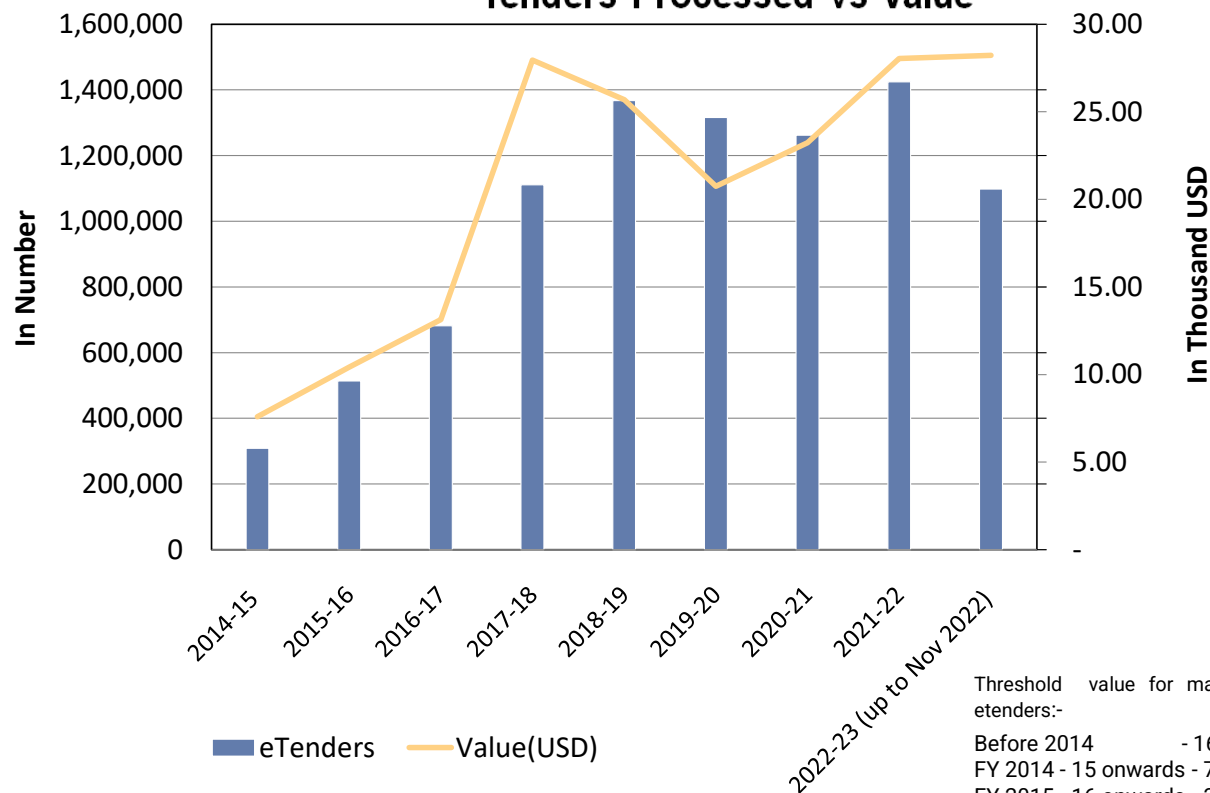
2007-08 : ₹ 0.21 Lakh Cr.	2011-12 : ₹ 0.52 Lakh Cr.
2016-17 : ₹ 8.91 Lakh Cr.	2021-22 : ₹ 21.28 Lakh Cr.

2007-08 2011-12 2016-17 2021-22

Graph not to scale

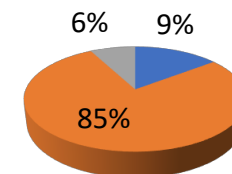
Implementation Timeline, Growth at a Glance

Tenders Processed vs Value



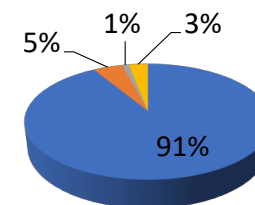
Percentage share of Tender Category

■ Goods ■ Works ■ Services



Percentage share of Tender Type

■ Open ■ Limited ■ Single ■ Other



Threshold value for mandatory adoption of eTenders:-

Before 2014 - 16044 USD & above
FY 2014 - 15 onwards - 7940 USD & above
FY 2015 - 16 onwards - 3009 USD & above

Reduced Costs for Government and Vendors

- Online Procurement has led to paperless trade practise, huge cost savings
- No physical travel , No paper bids by vendors
- No news paper Advertisement, reduced tender publishing costs
- Saves cost of Tender Fee as it is waived off due to online procurement
- Free portal registration for Bidders, No per tender cost, leading to better L1 rates
- Interest bearing Escrow account for Earnest Money Deposit (EMD)

Case eg – India oil Corporation [IOCL], a procuring entity, used to hire warehouse(s) to store bid documents and employed a big team to manage the same. After adoption of online tendering all bids are stored in electronic mode and just one person manages the activity.

Inclusion of (a) SMEs and extending benefits

- Govt of India has enacted the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 and stipulated Preference in Procurement to MSE Bidders:
 - Exemption from Earnest Money Deposit(EMD) for participating in Tender
 - Exemption from Prior Experience and Turnover criteria
 - Award of contract to MSME bidder if its quoted rate falls within range of L1+15% to supply 25% of tendered value, If L1 is other than MSME and Contract quantity is divisible
- Udyam is unique identification allotted to each of the MSME / SMEs
- The platform facilitates identification of these bidders by online validation of their unique IDs and enables them to avail benefits.
- Price bid templates can be configured to enable automatic calculation in eGP platform

Case eg : Coal India Limited (a Procuring entity) has implemented H1(in case of reverse auction)/L1 (in case of forward auction) elimination process on it's Tendering Portal, for extending the benefits to SME Bidders by not eliminating H1/L1 bidder, If SME Bidder's quoted price falls within range of H1/L1 +15% (i.e. Tolerance Percentage) otherwise Bidder will get eliminated from tender cum auction.

Inclusion of (b) Rural areas, StartUP in trade

- 31 State/UTs (provinces) out of 37 across India have adopted this platform. Online tendering has penetrated from top level of government to Zilla Parishad (District Council) and Panchayat(Village Council).
- This has enhanced trade and participation of local bidders to a large extent.
- Prime Minister Rural Roads construction scheme's procurements has witnessed huge participation of local bidders across the country.
- Start Ups are given preferences , they are uniquely identified and verified
- Preference to Women entrepreneurs to encourage women participation

Case eg. Provinces like Maharashtra , West Bengal, Kerala , Uttar Pradesh and far flung areas of Andaman and Nicobar islands , Ladakh has witnessed increase in participation from rural areas.

Key stakeholders participation

- No Central framework available for the country which governs all procurement processes. Few States(Provinces) have enacted State specific Transparency in public procurement Act but majorly governed by Executive Directives.
- Amendments / Issue of necessary Government orders and circulars were made to start the process. One of the major challenges was of evolving a generic approach for the perceived common solution for implementing electronic Tendering, from among diverse procurement processes, procedures and formats followed by different Government agencies/ departments.

Key stakeholders were consulted during design and implementation of the eGP system. Periodic interactions through workshops, meetings are held with them to get inputs and innovate and improve. Key stakeholders comprise of :

- Categories of Government (like Central, Public Sectors, Local Bodies, Provincial Government)
- Defence and paramilitary forces
- Bidders / Vendors / Contractors
- Key Policy makers like Ministry of Finance, Ministry of Commerce
- Statutory bodies like Auditors, Vigilance , Certifying Authorities

Salient Features - Functionalities

- Caters to Goods / Works / Services contracts
- Flexibility to invite – Open /Single /Limited / Request for Proposal (RFP) / Request for Quotation (RFQ)/Expression of Interest (EOI)/Global tenders with Multi Currency/ Quality and Cost Based Selection(QCBS)/ Reverse-Forward Auction / Rate Contract / Tender cum Auction/ Facility for Single/Multiple cover(s) / Frame work agreements
- Following 4 eyed Principle , GePNIC provides Multiple Bid Openers [2 of 4]
- Facilitates Two Stage bidding, Non Disclosure Agreement (NDA)
- Auto-Tendering with customised Technical Parameter Sheet
- Configurable Price Bid templates [15] to suit Turnkey and Public Private Partnership projects
- Vendor Performance , Vendor Debarment Information, Vendor Grievance redressal
- Integrations with around 25 external systems for data exchange [SME,GSTIN,CCA,Banks,OMMAS.....]
- We consolidate procurement data from 44 entities covering at least 8 different eGP systems
- *Real time Dashboard with Key Parameter Indicators*

Salient Features - Security aspects

- Robust and Secured system - Key aspect of success and wide adoption
- Mandatory use of Digital Signatures Certificates, issued by Indian Certifying Authority (CA)
- Foreign Bidder participation using Indian Digital Certificate
- Two factor authentication for access, Role based access control
- Public Key Infrastructure based encryption for Technical and Financial Bids (Both).
- Audit logs, Time stamping, Network Time Protocol
- Role for auditors to access real data , after due authentication.
- Secured Hosting in ISO 27001:2013 & 20000-1:2011 certified Government owned Data Centres
- Provisions for Data Retention, Disaster recovery and Business Continuity
- Drastic reduction in number of cases pertaining to Right to Information (RTI), Vigilance and Court cases, Audit observations.
- Many court cases and litigations were dismissed and decisions were in favour of the system.

Effective Innovations

- **Technological Innovation**

- In early implementation days, 2009-2011 the first and foremost challenge was requirement of continuous network with higher bandwidth for uploading Bid Documents from remote corners of the country. System was designed in such a way that it could facilitate bid submission with very slow speed network.
- Providing Briefcase space in server to bidders, Mapping Signing and Encryption separately were other few.

- **Innovation in the Financial Bid process:**

- As it is the most sensitive part of any bid and also consumes lot of time in deliberating the rates to be filled in at the bidder end the same was designed to be in a template form. It provides huge flexibility to include varied requirements for capturing the financial requirements as per tender needs.
- Around 15 varied templates are made available to all users.

Effective Innovations ...continued

Unique Security measure

- To ensure secrecy, Maintaining authenticity, Providing proof of an activity like audit logs, time stamping of events, having a Network Time Protocol server to maintain uniformity across for all operations
- All documents digitally signed, all bids are encrypted at the client end to rule out chances of tampering.
- Use of PKI for encryption, Integration of all available CAs, Individual registration / Blocking of Signing certificate and Encryption certificate is a major step which provide ample flexibility in the software to handle cases of Digital Signature Certificates scenarios like lost / corrupted / validity expire

Process Innovation

- Some of the process such as Bid Opening was taking longer time and the process of Quick Bid Opening was introduced to ensure quick and instant results
- Provision of Bid Opener Pool of four, any two can open
- Provisioning of configurable functionalities has made the system more versatile. An entity can pick and choose while onboarding
- System Malfunctioning process – To handle scenarios out of control of platform to give uniform treatment to all

Sustainable Development Goals (SDG) 2030 Agenda

- **Enforce Gender Equality –**
 - Provides equal opportunity for Women Bidders to compete.
 - In Certain product categories women bidders are encouraged
- **Create Decent Work and Economic Growth –**
 - With almost 100% adoption of electronic tenders, a wealth of procurement data is created which can be analysed for price, timeliness, quality and other trends which can accelerate economic growth of the country.
 - Comprehensive dash board with various KPIs are made available for analysis.
- **Increase Industry, Innovation, and Infrastructure –**
 - Transparent and competitive tendering has lead to many successful Public Private Partnership infrastructure projects with Global participation.
 - Innovative ideas are encouraged

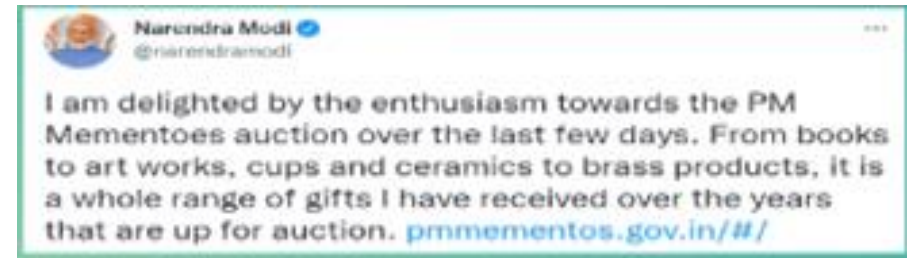
Sustainable Development Goals (SDG) 2030 Agenda

- **Reduce Inequality –**
 - Constant impetus to SMEs
 - Provisions to buy from StartUP etc has lead to level playing ground
- **Build Partnerships for the Goals –**
 - A strong partnership is built with the stakeholders.
 - Feedback and Regular interactions help in improving the eGP systems
 - Surveys / Polls are conducted from time to time.
- **Climate Action –** Considerable reduction of carbon emission due to adoption of electronic process
 - Reduction of use of paper
 - Reduction in newspaper advertisement
- **Sustainable Cities and Communities –**
 - Around 100 smart city project across India executed successfully.

PM Gift Auction 4th round



- 1219 Mementos presented to Hon'ble PM were auctioned
- Overwhelming online response
- 4025+ people participated



Various Recognition for eGP- GePNIC®

- TOP Rank in National eGovernance Service Delivery Assessment 2021(NeSDA) amongst Central Government Ministry Service portals
- Computer society of India 19th CSI SIG eGovernance Awards of Appreciation 2021 to MP Tender Portal
- “PM Mementoes – Auction” conferred with Award of Appreciation in the 18th CSI SIG eGovernance Awards 2020
- Central Public Procurement Portal (CPPP) bagged the Award of Excellence 2020 in the 18th CSI SIG eGovernance Awards
- GePNIC® bagged Silver in Data Quality Challenge Award 2020 conducted by NIC
- Coal India Limited conferred with an Award for automated e-tendering system for excellence in “**Innovation in Procurement Process**” at NATCOM 2019
- GePNIC® won South Asian Procurement **Innovation Award 2018** organised by World Bank and Procurement iNET
- GePNIC® and Govt. of Kerala both won CSI Nihilent eGovernance Award 2017 and 2013 under best eGovernance Project
- CPP Portal won Gems of India Award 2017
- GePNIC® won Two SKOCH Award for Smart Governance in 2015 and also in 2010
- GePNIC® bags eIndia Award 2014 for Govt. of Kerala and Mahanadi Coalfields Limited - Coal India Limited
- Govt. of Maharashtra awarded "Best Government to Business (G2B) Initiative of the Year 2013"
- Mahanadi Coalfields Ltd. – Coal India Limited won CII-IT Award 2011
- Odisha eProcurement implementation received eIndia Award 2009 "G2B initiation of the year" in 2011

Important Links

eGP Platform	https://eprocure.gov.in/cppp
Dashboard	https://eprocure.gov.in/eprocdashboard/
GePNIC® Product Information	https://gepnice.gov.in
eAuction India	https://eauction.gov.in
ADB/World Bank Certification	https://eprocure.gov.in/cppp/bank_docs
Awards to Stakeholders	https://gepnice.gov.in/show_content.php?lang=1&level=1&sublinkid=1790&lid=1707
Stakeholders Workshops	https://gepnice.gov.in/show_content.php?layout=&lang=1&level=1&sublinkid=828&lid=834
Monthly News Letters	https://gepnice.gov.in/newsletters.php?lang=1&EncHid=&lid=250
Testimonial(User Speak)-Sample	https://gepnice.gov.in/index.php#testimonial
Annual Reports	https://eprocure.gov.in/cppp/sites/default/files/eproc/Annualreports/CPMP-AnnualReport-2019-20.pdf
Awards & Recognitions	https://gepnice.gov.in/show_content.php?layout=&lang=1&level=1&sublinkid=1757&lid=1692
Security Quality Certification	https://eprocure.gov.in/cppp/sites/default/files/eproc/certificate/EPs_STQC_Certificate2020.pdf
eGP Bags TOP Rank in NeSDA	https://twitter.com/NICMeity/status/1537342838543118336?cxt=HHwWgMDT1dPK3tUqAA
Complete NeSDA Report	https://nesda.gov.in/publicsite/NeSDA2021_Report.pdf

Namaste

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