



e-GP: a Good Practice in Public Procurement

CPTU, IMED, MoP



### **Presentation Outline**

- Overview of e-GP System in Bangladesh
- Authentication framework in e-GP system
- Security related issues
- e-GP Inter-operability

# **Joint Collaboration**





ADB

In 1999 WB and ADB conducted joint review of the country portfolio performance and prepared an action plan for government on public procurement



entral Procurement Technical Ui

### Public Procurement Digitization Legislatives



# Modernization of Public Procurement Electronic Government Procurement (e-GP)



National e-Government Procurement	e-GP) Portal of the Government of the Pe	ople's Republic of Bangladesh

About e-Government Procurement (e-GP) System

portal is accessible by the PAs and PEs through internet for their use.

· Web-only bids to save state millions next year: World

. CPTU reaches at the new height --Signing MoU for e-

· e-GP training for registered bidders starts -November 27,

Payment through Payment Gateway in the e-GP

eGP Training of Registered Tenderers

efficiency, transparency and accountability in the public procurement process in the country.

Agencies (PAs) and Procuring Entities (PEs).

News and Events

System - Important

2011 - Important

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Type your Keyword here	Tenders	Search Advance Search
Go To 🔌 📗 Tenders 📑 Annual Pro	curement Plans 🛛 🝸 Awarded Contracts	🔏 Debarred Tenderers 📑 Reports

National e-Government Procurement (e-GP) portal (i.e. http://eprocure.gov.bd) of the Government of the People's Republic of Bangladesh is developed, owned and being operated by the Central Procurement Technical Unit (CPTU), IME Division of Ministry of Planning. The e-GP system provides an on-line platform to carry out the procurement activities by the Public Agencies - Procuring

The e-GP system is a single web portal from where and through which PAs and PEs will be able to perform their procurement related activities using a dedicated secured web based dashboard. The e-GP system is hosted in e-GP Data Center at CPTU, and the e-GP web

The e-Government Procurement solution introduced under the Public Procurement Reform (PPR) Process is being supported by the World Bank and being used by all the government organizations which will help in ensuring equal access to the Bidders/Tenderers,

Tenderers can pay Registration Fee, Tender Document Fee through DBBL Nexus card and

Wednesday, 20 Jun, 2012 14:25:59 BST

1					
Forgot Password?					
New User Registration					
PE User Registration					

Help

- > User Registration Flowchart
- . . . . . . .
- > User Registration Steps
- 🔉 User Registration Manual Bangla
- > User Registration Manual English
- > Oser Registration Manual English
- Frequently Asked Questions (FAQ)

#### Important Messages and Support Details

- The Government of the People's Republic of Bangladesh has approved the e-GP guidelines in pursuant to Section 65 of the Public Procurement Act, 2006. As per approved guidelines, e-GP system is being introduced in two phases.
- . In the first phase, e-Tendering will primarily be introduced

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View All Notifications

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# e-GP: Key Features

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Single uniform national web portal

**Centralized registration system** 

**Comprehensive system from proc. plan up to final payment** 

(e-Tendering + e-Contract Management)

Automatic proc. performance monitoring (e-PMIS)

Robust security features & back-up arrangement with full redundancy to ensure uninterrupted service.

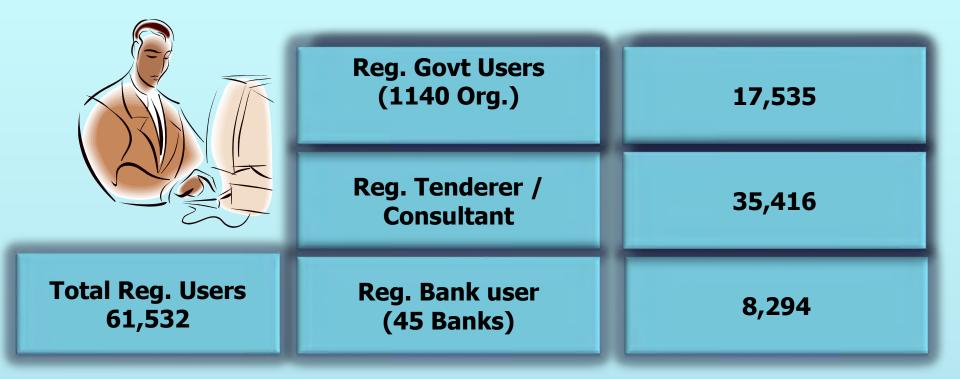
Harmonized with MDB guidelines

Self sustainable model – system is generating adequate fund

# e-GP: Commendable Progress

Period	Tenderers	Tenders	Value Cr BDT
Jun-12	295	14	24
Jun-13	1,067	498	496
Jun-14	9,238	8,436	5,704
Jun-15	15,559	26,102	20,352
Jun-16	22,186	57,935	48,412
June-17	33,792	102,958	91,071
upto Aug-17	35,416	109,328	98,297

# E-GP: Users (August, 2017)



# **Competitiveness for Innovation**

# Agv. Number of responsive tender

Agv. Number of tender submittion



GP



### Authentication framework of e-GP System

- Some information is public, they are accessible to everybody.
- The private data are accessible through valid log in sessions. User can log in after validation of user id and password.
- e-GP system didn't save Users password, instead it save the password's hash. One user can log in to e-GP system after his given password's hash and the saved password's hash matches.
- There is checking in every module to prevent unauthorized access and modification of data. Audit trail is maintained for every kind of activity of the users. SSL TLS is implemented for secured channel.



Role based e-GP System

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### Role based Access:

#### Roles:

- e-GP Admin
- Tenderer/ Consultant
- Media Users
- Account Officer
- External Evaluation Committee
- Media Users
- Auditors



### Continue....

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#### Roles:

- Organization Admin
- Procuring Entity (PE) Admin
- Procuring Entity (PE) User
- Authorized Officer User
- Authorized User
- TEC/ PEC User
- Secretary User
- Opening Committee User
- Head of Procuring Entity User
- Bank Admin
- Bank User (Maker, Checker)



### Bangladesh Context

- Bangladesh exercise e-Signature
- PKI: Already in the system but not exercise in e-GP system



# e-GP System Security

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### Confidentiality is

to prevent the disclosure of information to unauthorized individuals or systems

### Availability

Information must be **available** when it is needed

### Nonrepudiation

Ensures that the sender cannot deny sending the message

#### Authentication

verifies the identity of the user or system that created the information Integrity is data has not been altered in Unauthorized manner since it was created, transmitted or stored

#### Authorization

Upon providing identity, the individual provides key or password that will allow access to system

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# e-GP System Security

**Encrypted Data transmission** 

**Authenticated web application** 

**Everyday malware scanning** 

Last login time display

# e-GP System Security

**Encrypted tender information till opening** 

Integrity of submitted tenders

Audit log of all activity of all users

**Session based user access** 

**Unsuccessful login control** 

**Password complexity control** 

#### **Before Encryption**

ltem No (1)	Description of Item (2)	Measurement Unit (3)	Quantity (4)	Point of Delivery (5)	Delivery Period (in days) (Note:1) (6)	Country of Origin (7)	Unit Price in Figure (BDT) (8)	Unit Price in Words (BDT) (9)	Total Price in Figure (BDT) (10)	Total Price in Words (BDT) (11)
1	Desktop computers	nos	50	escb munshigonj	90	China	50000.123	Fifty Thousand point One Two Three	2500006.150	Twenty-Five Lakh AND Six point One Five
2	Laptops	nos	50	escb munshigonj	90	China	60000.001	Sixty Thousand point Zero Zero One	300000.050	Thirty Lakh point Zero Five
								Grand Total :	5500006.2	Fifty-Five Lakh AND Six point Two

The Goods covered by this Tendering process shall require to be delivered in accordance with this Delivery and Completion Schedule. No credit will be given for earlier completion.

#### Please click on 'Encrypt' button to encrypt the form

Sign Sign with PKI Encrypt Save

e-Signature / Hash of Document :

3bf3bfba3235d415ff775fe47ba6ae8753b2822c

#### **After Encryption**

ltem No (1)	Description of Item (2)	Measurement Unit (3)	Quantity (4)	Point of Delivery (5)	Delivery Period (in days) (Note:1) (6)	Country of Origin (7)	Unit Price in Figure (BDT) (8)	Unit Price in Words (BDT) (9)	Total Price in Figure (BDT) (10)	Total Price in Words (BDT) (11)
1	Desktop computers	nos	50	escb munshigonj	90	z27SetuTprY=2zPSm	liCpJVMuSz4=vO0iW	dP1ZmovmYxc=xgh1C K8gXj+Shn6mw3z7VQ vcYpOSERm/sCye6gv 3pd9ShRs061NM/g==	oT07BnDQg98=qKZN	F0Fn5xn/YBw=5w7MT ZRnXI3g0J1VSvV3QKb v6zdvCCYe9UUqcQGi sBP2lq3FV9LqC0FX3 +SkXn6O
2	Laptops	nos	50	escb munshigonj	90	SpyYL+oFktE=iP/Vw	hjun9HR+wr0=+w9v4	1dCKFJplYdk=m0yF2 xoQ5h5S4ogMcBAK5 DaKDHDyUyxT+MTxv 8rFWS2LcMhurELIIQ= =	vc1+57TJet4=eBW12	qyWgYYEyNB8=FGG Cc9ut0sWnEiNL7wtK EKmdZwabo9qm0+DN f3VgITc=
								Grand Total :	AWxQ7AU0BOk=Jbx	S1P09VAI1d0=3hMg7 Q3tJsUCg9BwEiw0R1 VEcvbjQ/AwHIVMj5AZ ri6eAon3dEcQzg==

The Goods covered by this Tendering process shall require to be delivered in accordance with this Delivery and Completion Schedule. No credit will be given for earlier completion.

#### Please click on 'Save' button to save the form

Sign Sign with PKI Encrypt Save

e-Signature / Hash of Document :

3bf3bfba3235d415ff775fe47ba6ae8753b2822c

# User Alert System in e-GP



Email Alerts go to the registered email address

eGP System Mail Box





### Security and Infrastructure of e-GP System

#### e-GP New Data Center at BCC and Mirror at CPTU

- A. Four numbers of Next Generation Firewall from two different top rated vendors installed in redundant fashion
- B. Separate Web Application Firewall to continuously monitor web traffic and measures against web vulnerabilities and exploits
- C. SIEM (Security Incident Event Monitoring) solution to monitor all logs and perform real-time analysis of security alerts generated by all network hardware and applications
- D. State of art email system setup to server huge requirement of email exchanges though e-GP System
- E. Load balancers to distribute loads between computing devices and offload https traffic (i.e. encrypted channel) of e-GP System



### e-GP Inter-operability

- e-GP System is a highly interoperable system.
- Different type of systems and products are accessing data from e-GP system through authenticated web services.
- Bill board, mobile apps and other procuring agency's system are accessing e-GP system's data through web services.
- e-GP system is operating system independent. Anyone can access e-GP system from any operating system through CPTU's prescribed browsers.



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# **Scopes of Inter-Operability:**

A. Budget Integration with centralized Annual Procurement Plan (IBAS)

**B.** National ID verification from Election Commission

C. Enrollment with Trade body (Trade License, Certificate of Incorporation etc.)



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## **Scopes of Inter-Operability:**

D. Integration with Central Bank for Credit Assessment by Credit Information Bureau and Surveillance of Anti Money Laundering Activities

E. Integration with Banks to facilitate post qualification on Bank Solvency, Tender Security

F. Integration with Police Clearance System (For Social Criteria)



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# **Scopes of Inter-Operability:**

G. Integration of Contract Payment with Central Accounting System

H. Contract progress monitoring by Implementation Monitoring and Evaluation Department

I. Integration with Treasury System for transferring revenue to treasury



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## **Scopes of Inter-Operability:**

J. Integration with National Board of Revenue for verification of TIN, TAX return and other TAX obligation

K. Company registration verification and Authenticity of Audit Report from RJSC (Registrar of Joint Stock Company)

L. Integrating Audit Activities with Office of the Comptroller and Auditor General

ইলেকট্রনিক টেন্ডার ঝুট-ঝামেলা নেই আর

0

Electronic Tender Makes Procurement Simpler

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e-GP: Simple Speedy Secure

**Thank You**