30/12/2013

CORRIGENDUM - III

RFP for selection of Agency for implementing ePDS with POS Terminals for Department of Civil Supplies and Consumer Affairs, GoG.

Tender No: **GEL/PDS/POS-04**

Following is a list of changes that have been incorporated in the RFP document:

Sr No	Annexure/ Section / Clause No.	Existing Terms	Revised Terms
1.	Terms and Conditions/clause 28/Uptime in implementation	<table><tr><td>Location</td><td>Response Period</td><td>Resolution period</td><td>Penalty for Downtime</td></tr><tr><td>Anywhere in Goa</td><td>30 mins</td><td>1hr</td><td>@0.25% of the relevant phase for delay of every 2 hrs subsequent to the permitted Resolution period</td></tr></table> Penalty shall be applicable if the call is not responded within 30 mins. If any parts need to be replaced, then the same shall be done within 1 hour including data transfer and completion of complaints in totality.	<table><tr><td>Location</td><td>Response Period</td><td>Resolution period</td><td>Penalty for Downtime</td></tr><tr><td>Anywhere in Goa</td><td>4 hrs*</td><td>8 hrs *</td><td>@0.25% of the relevant phase for delay of every 2 hrs subsequent to the permitted Resolution period</td></tr></table> *working hours. Penalty shall be applicable if the call is not responded within 4 working hours. If any parts need to be replaced, then the same shall be done within 8 working hours including data transfer and completion of complaints in totality.
2.	ANNEXURE "A" (TECHNICAL BID FORMAT)/ The Bidder / Prime Bidder (In case of consortium) shall satisfy all of the criteria below/Sr. no 2	Bidder/ Prime Bidder (in case of consortium), should have executed **atleast 1 similar Project** in PDS in India** supplying minimum **500 POS terminals** and should be running successfully **for the last 6 months**. ******Similar Project: supply, installation including maintenance of POS Devices with required software for POS	Bidder/ Prime Bidder (in case of consortium), should have executed **atleast 1 similar Project** in PDS in India** supplying minimum **200 POS terminals** by SI or OEM and should be running successfully **for 6 months**. ******Similar Project: supply, installation including maintenance of POS Devices with required software for POS
3.	Annexure "A"(Technical Bid Format)/ The Bidder / Prime Bidder (In case of consortium) shall satisfy all of the criteria below /Clause 5	The Bidder / Prime Bidder (in case of consortium), must have an annual turnover of not less than Rs. 10 crores in each of the last three financial years not before 2009-10.	The Bidder / Prime Bidder (in case of consortium), must have an annual turnover of not less than Rs. 5 crores in each of the last three financial years not before 2009-10.

4.	Annexure "D"(Technical Specifications of POS Devices)/Specifications/Clause 5	GSM/ GPRS/Ethernet/PSTN	GPRS , GSM, Ethernet & PSTN [All Mandatory]
5.	Annexure "D"(Technical Specifications of POS Devices)/Specifications/Clause 11	Single SIM, Dual SIM is optional, 2 SAM slots	Dual SIM with 2 SAM slots
6.	Annexure "D"(Technical Specifications of POS Devices)/Specifications/Clause 15	STQC Certified scanner / Non STQC Certified scanner suitable for Aadhar authentication	STQC Certified scanner suitable for Aadhar Authentication.
7.	Annexure "D"(Technical Specifications of POS Devices)/Specifications/Clause 21	242 m x108mm x 32/64 mm	Minimum 242 m x108mm x 32/64 mm
8.	Annexure "D"(Technical Specifications of POS Devices)/Specifications/Clause 27	Not Available	Dust and Water Resistance: IP51 Dust and Water Resistant
9.	Annexure "D"(Technical Specifications of POS Devices)/Specifications/Clause 28	Not Available	Internal Memory: Storage Capacity: 4 GB
10	4. Project Background/4.5 FPS Automation Process	Refer RFP	Refer below Section I
11	5. Scope of Work/II Development of Software for POS terminals	Refer RFP	Refer below Section II

12	Annexure "E"(Use Cases of POS Application)/Use Case -I	Refer RFP	Refer below Section III
13	Annexure "E"(Use Cases of POS Application)/Use Case -II	Refer RFP	Refer below Section IV

Section I

4.5 FPS AUTOMATION PROCESS:

❖ **Strategy to be adopted**

In e-PDS, FPSs will be equipped with a POS with GPRS connectivity. Food grains will be given manually at FPS but authentication and record of transaction on server is done through this POS. Each Beneficiary is provided with a Smart Ration Card (SRC).Each FPS owner with a FPS incharge Card (FPSIC) and each Godown Incharge with a Godown incharge card (GIC)

Basic infrastructure proposed at (a) Godowns: POS and GIC, (b) FPS: POS and FPSIC.

1. **Issuance of the commodities by Godowns to FPS Incharge**

   1.1 Online mode

   1.1.1 Godown Incharge will insert the FPSIC and the GIC into the POS.

   1.1.2 The POS will read the card details and will fetch the entitlements for the FPS.

   1.1.3 The Godown Incharge will issue the entitled quantity to the FPS Incharge. The transaction will be updated on the server, FPSIC, GIC and POS.

   1.2 Offline mode

   1.2.1 Godown Incharge will insert the FPSIC and the GIC into the POS.

   1.2.2 The POS will read the card details and will fetch the entitlements for the FPS from the GIC or POS.

   1.2.3 The Godown Incharge will issue the entitled quantity to the FPS Incharge and update the FPSIC and GIC. Whenever the connectivity is available, all the transactions flagged as "offline" will be updated on the server, FPSIC, GIC and POS.

2. **Issuance of the commodities by FPS to the Beneficiaries**

   2.1 Online mode

   2.1.1 FPS sales person inserts FPSIC in POS Device

   2.1.2 POS reads the details of the FPS current stock allocation and stock status.

2.1.3 FPS sales person inserts the SRC of the beneficiary in POS device.

2.1.4 POS reads the ration card number and sends it to the server through GPRS to get beneficiary's entitlement balances.

☞ In case the member's biometric has not been authenticated yet

STEP I: The Finger print template (FPT) is captured and sent to UIDAI for authentication

STEP II: If the authentication succeeds, the captured FPT is stored on the SRC, POS and the Server

STEP III: If the authentication fails, go to STEP I with second FPT and repeat

STEP IV: Atleast 4 fingers to be stored per person and best match to be recorded

☞ In case the member's biometric has been already authenticated with UIDAI i.e The FPT is already stored on the SRC and POS

STEP I: The Finger print template (FPT) of the member is matched with the FPT stored on the SRC and POS

STEP II: If the authentication fails, go to STEP I with second FP and repeat.

2.1.2 FPS sales person enters the quantities to be issued to beneficiary and submits to the server.

2.1.3 Server updates the transaction and gives the success report. Detailed transactions are updated on the FPSIC ,POS and the SRC

2.1.4 A receipt is printed and the commodities are issued to beneficiaries.

2.1.5 For the next transaction the beneficiary can choose to go to another FPS as his/her food account balances are maintained on the server and on her smart card.

2.2 Offline mode*

2.2.1 FPS sales person inserts his FPSIC in POS Device

2.2.2 POS reads the details of the FPS current stock allocation and stock status.

2.2.3 FPS sales person inserts the SRC of the beneficiary in POS device.

2.2.4 POS reads the ration card number and gets beneficiary's entitlement balances from the FPS card and POS

☞ In case the biometric is stored on the SRC

> STEP I: The FPT is matched with the FPT on the SRC against the member
>
> STEP II: If the authentication fails, go to STEP I with second FPT and repeat.

☞ In case the biometric is not stored on the card or POS, issuance will be done and the transactions will be recorded ['N'**attempts to be allowed]

2.2.5 FPS sales person enters the quantities to be issued to beneficiary and stores the transactions on the FPSIC, POS and SRC.

2.2.6 A receipt is printed and the commodities are issued to beneficiaries.

2.2.7 Whenever the connectivity is available, inserting either FPSIC/SRC into the POS, all the offline transactions stored on the cards shall be updated on the server.

* The POS application will have facility to restrict issuance if biometrics of member collecting the commodity is not stored on the SRC on 'Nth'** attempt.

**N – To be decided by DCSCA.

1. SCOPE OF WORK

I) Geographical Scope of project:

The project roll-out will be across the state at the following locations:

Location	No. of Locations
FCS Godowns	10
FPS	501
Total	**511**

II) Development of Software for POS terminals.

❖ **Development and Testing of POS application**

The selected vendor will depute two programmers at NIC Delhi for development of the POS software application in close coordination with NIC Delhi team. The software will have to be certified by NIC Delhi before operationalizing the same.

❖ **Licensed product and Services**

The selected vendor would be required to obtain license/authorization for any software or hardware or services to fulfill its performance obligations under this contract. In case of any infringement on this by vendor, GEL will not be responsible for the same.

❖ **Functional Scope of the Software for POS**

The Software for POS should handle the following functionalities.

1. **Issuance of the commodities by Godowns to FPS Incharge**

   1.1 Online mode

   1.1.1 Once the Godown Incharge inserts the FPS incharge Card (FPSIC) into the POS, POS Application will read the card details and will fetch the entitlements for the FPS from NIC server.

   1.1.2 On issuance of commodities to the FPS Incharge, POS application will update the transaction to the server data as well as the FPSIC , Godown Incharge Card (GIC) and on POS.

1.2 Offline mode(Mandatory that after issuance all the transactions on the FPSIC has to be updated on the server)

    1.2.1   Once the Godown Incharge inserts the FPS incharge Card (FPSIC) into the POS, POS Application will read the card details and will fetch the entitlements for the FPS from POS.

    1.2.2   On issuance of commodities to the FPS Incharge, the POS application will display a success message and save the transactions on the FPSIC, GIC and POS flagged as 'offline'.

    1.2.3   Whenever the connectivity is available, all the transactions flagged as "offline" will be updated on the server, FPSIC, GIC and POS.

2. Issuance of the commodities by FPS to the Beneficiaries

2.1. Online mode

2.1.1 Once the FPS incharge inserts FPSIC & SRC in POS Device, the application will check if any transactions in the FPSIC & SRC are flagged as 'Offline' and if so update them onto the server. Incase there are any transactions onto the server which are not updated on the SRC, the POS application should write those transactions onto the SRC & POS. Then the POS application will fetch the details of the FPS current stock allocation and stock status from the server. All transactions on the server ,FPSIC should be synchronised to the latest by the POS application

2.1.2 Next, the POS application will read the ration card number and send it to the server to get beneficiary's entitlement balances.

2.1.3 Biometric authentication of the beneficiary will be facilitated by the software

    ☞   In case the member's biometric has not been authenticated yet

       STEP I: The application will capture the Finger Print Template (FPT) and send to UIDAI for authentication.

       STEP II: If the authentication succeeds, the application will save the captured FPT on the SRC, POS and the Server.

STEP III: If the authentication fails, the application will display a message about the failure and an option for authentication of FPT with second finger. (Repeat form Step I)

STEP IV: The application will store atleast 4 FPT and the best match will be recorded.

☞ In case the member's biometric has been already authenticated with UIDAI i.e The FPT is already stored on the SRC and POS

STEP I: The POS application will match the FPT with the FPT stored on the POS and the SRC against the member.

STEP II: If the authentication fails, the application will display a message about the failure and an option for authentication of FPT with second finger. (Repeat from Step I)

2.1.4 In case last transaction of issuance to the beneficiary was offline

STEP I: The application will update all the transactions from the SRC and POS which are flagged 'offline' onto the server.

2.1.5 Then the POS application will display a screen to select the commodities and enter the quantities to be issued. Once entered, the application will submit all the details to the server.

2.1.6 POS application will update the transaction and gives the success report and will also update the FPSIC, SRC and POS after every successful transaction.

2.1.7 Next, the application will print a receipt about the transaction carried out and the FPS incharge will issue the commodities to the beneficiary with the receipt.

2.1.8 Since the POS application updates the food account balances on the server, SRC, FPSIC and POS; for the next transaction, the beneficiary can choose to go to another FPS.

***All transaction should be synchronized across the Server, POS, FPSIC & the SRC at the end of day. This would include inclusion and deletion of beneficiaries to a FPS too.**

2.2 Offline mode *

2.2.1 Once the FPS sales person inserts his FPSIC in POS Device, the POS application should read the details of the FPS's current stock allocation and stock status from the FPSIC.

2.2.2 Next, the FPS incharge inserts the SRC of the beneficiary in POS device.

2.2.3 POS application will read the ration card number and get beneficiary's entitlement balances from the FPSIC.

☞ In case the biometric is stored on the SRC
STEP I: The POS application will match the FPT with the FPT stored on the POS and the SRC against the member.
STEP II: If the authentication fails, the application will display a message about the failure and an option for authentication of FPT with second finger. (Repeat from Step I)

☞ In case the biometric is not stored on the card, issuance will be done and the transactions will be recorded with a flag that "goods are issued without authentication" ['N'**attempts to be allowed]

2.2.4 Then the POS application will display a screen to select the commodities and enter the quantities to be issued. Once issued, the POS application will display a success message and save the transactions on the FPSIC,POS and SRC, flagged as 'offline'.

2.2.5 Next, the application will print a receipt about the transaction carried out and the FPS incharge issues the commodities to the beneficiary.

2.2.6 Whenever the connectivity is available***, inserting either FPSIC or SRC into the POS, all the offline transactions stored on the FPSIC and the SRC will be updated on the server by the POS application.

*** In case the offline transaction are not synced with the server by the end of day the system should have a mechanism to raise an alert on the server as well as provision to block the POS functionality if offline data is not synced for H^^ hours.

* The POS application will have facility to restrict issuance if biometrics of member collecting the commodity is not stored on the SRC on 'Nth'** attempt.

* Synchronization of all the transactions on the server, FPSIC,POS and GIC has to be accurately handled on connectivity by the POS application i.e. POS application will synchronize the transactions pertaining to the beneficiary SRC onto the server, FPSIC,POS and the SRC as needed. In case the SRC holds the latest transactions, the server, the POS and the FPSIC will be updated. If the server holds the latest transactions, the SRC, POS and the FPSIC will be updated. If the POS holds the latest transactions,the Server ,the SRC , and the FPSIC will be updated.

**N – To be decided by DCSCA.

^^H – To be decided by DCSCA.

Section III

Use Case I – Entitlement Withdrawal by Beneficiary at FPS

The smart card of beneficiary is inserted in the POS	Details (Ration Card no, Name) are displayed on the screen. Member Names including name of the head are listed for selecting one member name.
User selects one name who is taking the entitlements and puts the finger on the finger print camera. Presses the SUBMIT button	Ration Card Number, Member Name, Finger print template, Bio authentication takes place. POS ID, FPS Smart card number, FPS ID shall be sent to the central server through GPRS. Ration card number, Member Name, finger print template, date, POS ID, FPS ID are stored in a transaction table. Ration Card Number is searched in the food account table and balance entitlements are read and displayed on POS device screen. Text boxes are displayed against each commodity to enter commodities to be withdrawn as shown in the screen
User enters the commodities to be withdrawn and presses SUBMIT button	FPS ID, POS ID, Commodities to be withdrawn, Ration Card number, Smart Card Number are sent to server through GPRS. FPS ID, transaction ID. Ration Card number, Commodities withdrawn are saved in the transaction table. Food balances are reduced with the quantities withdrawn. Success report is displayed on the POS screen.
User prints the receipt. Handovers the commodities to the beneficiary,	

Section IV

Case II – Offline issue when there is no connectivity

It is expected that there may be problems in the connectivity sometimes and online authentication and check for balance PDS commodities is not possible. In those situations, beneficiary should not be denied issuance of PDS commodities but should be issue offline.

User selects 'Offline Issue Button'	System checks for GPRS connectivity and if there is no connectivity instructs to insert Beneficiary Card and FPS card.
Cards will be inserted.	Card is read and name and member details are displayed on the screen.
Member is selected and Member puts the finger on the screen	Bio authentication will be done.
	A screen appears asking for entry of PDS Commodities to be issued.
User enters the quantities to be issued and Presses enter.	Receipt is generated after storing the Quantity details with some flag in the smart card of the beneficiary as well as on the FPS card with some unique transaction id.
When beneficiary card, flagged to indicate offline issue, is inserted in any POS , the details are to be updated on the central server, if the transaction has not yet been updated from FPSIC,POS. Beneficiary card ,POS offline issue flag will be updated	
When FPSIC flagged to indicate offline issue is inserted in any POS with connectivity all the offline transactions stored in the card will be updated in the server. If any transaction has already been updated from beneficiary card it will not again be updated. Off line issue flag will be updated accordingly.	