



FOOD, SUPPLIES & CONSUMER WELFARE DEPARTMENT
GOVERNMENT OF ODISHA

Request for Proposal For

**Fair Price Shop Automation under PDS
Supply and Deployment with
application and maintenance of PoS
devices in Fair Price Shops in Odisha**

[RFP Document No: 06-FSCW/23.04.2016]

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List of Abbreviations used in this document

AAY : Antyodaya Anna Yojana
ANP : Annapurna
APL : Above Poverty Line
BPL : Below Poverty line
BDO: Block Development Officer
BFD: Best Finger Detection
CSCs : Common Service Centers
DB: Database
DBMS: Database Management System
FS&CW department: Food Supplies and Consumer Welfare department
PHH : Priority House Holds
FPS : Fair Price Shops
Gol : Government of India
GoO: Government of Odisha
GP : Gram Panchayat
PMU : Project Management Unit
GUI: Graphical User Interface
MIS : Management Information System
NFSA : National Food Security Act' 2013
NIC : National Informatics Centre
NPR : National Population Register
OEM: Original Equipment Manufacturer
OSCSC: Odisha State Civil Supplies Corporation
OTP : One Time Password
ePoS: Electronic Point of Sale
RC: Ration Card
RCMS : Ration Card Management System
SDC: State Data Centre
SCMS: Supply Chain Management System
SLA: Service Level Agreement
STQC: Standardization Testing and Quality Certification
PDS : Public Distribution System
UAT: User Acceptance Test
UIDAI: Unique Identification Authority of India
WFP : World Food Programme

1. Introduction

1.1 Objective of the RFP

The objective of the Request for proposal (RFP) is to solicit bids from interested parties for carrying out activities related to Fair Price Shop automation under end-to-end computerization of Public Distribution System (PDS) and as part of the implementation of National Food Security act 2013 (NFSA) across the state of Odisha by the Food Supplies & Consumer Welfare Department (FS&CW Dept.), Government of Odisha. The implementation of FPS Automation with a view to modernize the FPS operations is to ensure that food grains under PDS reach intended NFSA beneficiaries. Implementation would follow a phased approach, eventually covering all the districts of Odisha within the timelines defined in this document. This document contains information on topics relevant for the project including detailed discussions on the business and technical requirements for implementation of the solution. The bidders are expected to examine all instructions, terms, project requirements and other information in the RFP and respond to the requirements as completely and in as much relevant detail as possible with focus on demonstrating bidder's suitability to become the implementation partner of OSCSC and FS&CW Dept., Government of Odisha.

1.2 Schedule for the bid process

Sl. No.	Information	Details
1	RFP No. and Date	<i>RFP No: 06-FSCW. dated 23rd April 2016</i>
2	Last date for submission of written queries for clarifications	2 May 2016 by 1700 hrs Email : mdoscsc@gmail.com
3	Date of pre-bid conference and Venue	3 May 2016 by 1600 hrs OSCSC Conference Hall
4	Release of response to clarifications	7 May 2016
5	Bid validity period	180 days from the last date (deadline) for submission of proposals.

6	Last date (deadline) for submission of bids	19 May 2016 by 1400 hrs To be submitted at - OSCSC
7	Opening of Pre-Qualification	19 May 2016, 1600 hrs OSCSC Ltd
8	Opening of Technical Bids- Presentation, demonstration, etc.	20 and 21 May 2016, 1130 hrs
9	Opening of Financial proposals	25 May 2016 by 1130 hrs
10	Contact person for queries	Managing Director OSCSC Ltd
11	Addressee and address at which proposal in response to RFP notice is to be submitted	OSCSC Ltd C/2, Nayapalli, Bhubaneswar-751012

1.3 Fact Sheet

Clause Reference	Topic
6.8.3	<p>The method of selection is: [Least Cost Basis after Technical evaluation method]</p> <p>Least Cost Basis after Technical evaluation method shall be used to select the Agency for FPS transformation for end to end computerized PDS solution in Odisha related processes for the State of Odisha.</p> <p>All the bidders who achieve at least 80 % in the technical evaluation would be eligible for Financial Bid opening and comparison. In case number of bidders scoring 80% or above are less than 3, then top 3 scoring bidders with score not less than 60% would be considered for financial Bid opening and comparison.</p>

Clause Reference	Topic
	Consortium up to maximum one partner (Primary Bidder+ 1 Partner only) is allowed.
6.4.2	RFP document can be downloaded from the websites www.foododisha.in , www.oscsc.in , www.odisha.gov.in , www.tenders.gov.in . The bidders are required to submit the document Fee (non-refundable) of Rs.10,000/- (Rupees Ten Thousand Only) by Demand Draft in favour of “ Odisha State Civil Supplies Corporation Ltd. (OSCSC) ” and payable at Bhubaneswar from any of the scheduled commercial bank/Nationalised Bank, along with the Proposal. Proposals received without or with inadequate RFP Document fees shall be rejected.
6.4.3	Bidders shall submit, along with their Bids, EMD of Rs. 40,00,000 (40 lakhs only), in the form of a Demand Draft issued by any nationalized bank in favour Odisha State Civil Supplies Corporation Ltd. (OSCSC), payable at Bhubaneswar, and should be valid for 90 days from the last date for submission of the RFP
8.2	Total project period is for 5 years (including 2 Year of warranty and 3 year AMC support).
6.17	The selected vendor must handover all deliverables to Managing Director, OSCSC and exit successfully within stipulated time.
6.3.1	FS&CW department or OSCSC shall hold a pre-bid meeting with the prospective bidders on 3 May at 1600 hrs in the office of the OSCSC Ltd, C/2, Nayapalli, Bhubaneswar. The Bidders will have to ensure that their queries for Pre-Bid meeting should reach to Managing Director Odisha State Civil Supplies Corporation Ltd. (OSCSC) by e-mail only or before 1700 hrs on 2 May 2016 E-mail: mdoscsc@gmail.com
6.7.2	The Proposal should be filled by the Bidder in English language only.
6.12	The bidder should quote price in Indian Rupees only. The offered price must be exclusive of all taxes. Tax component should be mentioned separately.

Clause Reference	Topic
6.5	Proposals/ Bids must remain valid 180 days after the last date of submission of bid.
6.5	Bidders must submit an original copy and one additional copies of each proposal along with one copy of non-editable CD for Prequalification & Technical Proposal Only one original copy of the Commercial Proposal should be submitted.
6.7.3	<i>Managing Director , Odisha State Civil Supplies Corporation Limited (OSCSC),</i> Head Office C/2 Nayapalli, Bhubaneswar - 751012 EPBX - (0674) 2395391/2394956 /2391953 Fax - (0674) 2395291/2390199 Email : mdoscsc@gmail.com
6.7.3	Proposals must be submitted on or before 19 May 2016, 1400 hrs. Proposal received after the date & time prescribed shall be rejected.

1.4 Back ground on the Public Distribution System (PDS)

India's Public Distribution System (PDS) is one of the world's largest food security schemes. The PDS was created in 1997 by modifying the previously universal Public Distribution System to improve the targeting of subsidies to people that most needed them. PDS is operated under the joint responsibility of Central Government and State Governments /Union Territory (UT) Administrations. The Central Government is responsible for procurement and allocation of food grains. The operational responsibilities for lifting and distributing the allocated food grains within the States/UTs, identification of eligible families, issuance of ration cards to them and supervision over distribution of allocated food grains to eligible card holders through the Fair Price Shops (FPSs) are that of the State/UT Governments.

In September 2013, the National Food Security Act was passed in the parliament. Under the Act, coverage of the food subsidy is extended to 67% of the total population of the country; 50% in urban areas and 75% in rural areas. For the state of Odisha, the ceiling stands at 82% of the rural population and 56% of the urban population, 78% of the entire state population covered under AAY (Antyodaya Anna Yojana) and PHH (Priority Households). The Act mandates a change in entitlements, such that the priority households are entitled to 5kg of rations per individual per month, with AAY households continuing to be recognized as a separate sub-category, receiving 35kg food grains (rice, in case of Odisha) per household per month.

Modernization of Public Distribution System (PDS) including its end-to-end computerization is a priority area for the Government of Odisha. With the enactment of the National Food Security Act (NFSA), 2013, computerization of PDS has acquired greater importance.

In view of the above, Government of India, Department of Food & Public Distribution has prepared a scheme under the 12th Five Year Plan (2012- 17) for the implementation of End-to-End Computerization of PDS in all States/UTs on cost sharing basis with state Food Departments. The scheme comprises implementation of two components, namely, Component-I i.e. digitization of beneficiary and other databases, computerization of supply-chain, setting up of portal & grievance redressal mechanism and Component-II i.e. FPS automation.

1.5 PDS in Odisha

Odisha is the 11th most populous state in India with a population of 41,947,358 (according to the 2011 Census). PDS domain in Odisha is spread over 16,000 FPS in 314 Blocks and 109 Urban Locations in 30 districts.

After implementation of NFSA' 2013 in Odisha, Priority households are entitled to 5kg of grains (rice/wheat/mix of rice and wheat) per individual per month and for AAY families within priority list, entitlement is 35 kg rice per household per month. The population to be covered under NFSA as beneficiaries as per GoI guidelines is at 82.17% for rural areas, and 55.77% for urban areas as per 2011 Census.

1.6 Steps taken by GoO towards transformation of the PDS

1.6.1 Beneficiary Identification

GoO has successfully completed the digitization of beneficiary data and distributed new bar-coded ration cards consistent with the requirements of the NFSA. The process of digitization is a dynamic and continuous process to accommodate updates and corrections in beneficiary data. In order to support the process GoO has set up RCMS centers at block level and urban body (Municipal Corporation and municipality) level across the states. These centers would enable the beneficiary to walk down with relevant documents and update their details which shall include but not limit to detail such as addition/deletion of members, mobile records etc.

In addition to general updates GoO also plans to improve the existing Aadhaar seeding ratio and data quality. In order to achieve high ratio of Aadhaar seeded ration cards multiple methodologies are under implementation.

2. Project Overview

2.1 Need and objectives of the project

The motivation to reform the PDS in Odisha comes from the fact that the current system faces a number of issues and changes would be required in order to transform the operations of the PDS under NFSA. :

- Automating FPS transactions will be required at FPS points to check leakages due to misreporting of sales
- Measures for enhancing FPS viability will be required
- Need to ensure complete transparency on PDS operations to officials and beneficiaries alike
- An effective grievance redressal needs to be provided for beneficiary empowerment

The proposed solution has been designed as to enable the above mentioned changes and to thus achieve the following objectives:

- **Proper targeting of subsidy** – Ensure that deserving beneficiaries get rations according to their entitlement
- **Leakage reduction** – Reduce pilferage and diversion of food grains throughout the PDS value chain;
- **Improved stakeholder convenience** – Reduce system complexity and increase ease of operations; create solution buy-in and support from consumers as well as other internal stakeholders

2.2 Overview of PDS transformation solution

The PDS solution consists of nine key elements that map to the PDS value chain segments: beneficiary identification and enrollment, supply chain processes, FPS transactions and grievance redressal. It combines the transformation of each process in these four segments to create a complete and robust solution to improve the effectiveness and The GoO has developed a customised solution for end-to-end PDS transformation that draws from the lessons from the various pilots conducted across the state. It also incorporates several elements of the 'Best Practice Model' proposed by WFP which was developed using a benchmarking exercise of PDS reforms in eight states across the country (Andhra Pradesh, Chandigarh, Chhattisgarh, Gujarat, Karnataka and Odisha, Haryana and Tamil Nadu), and builds on the lessons learned in these states.

The 9 elements of the customised solution are shown in the figure below.

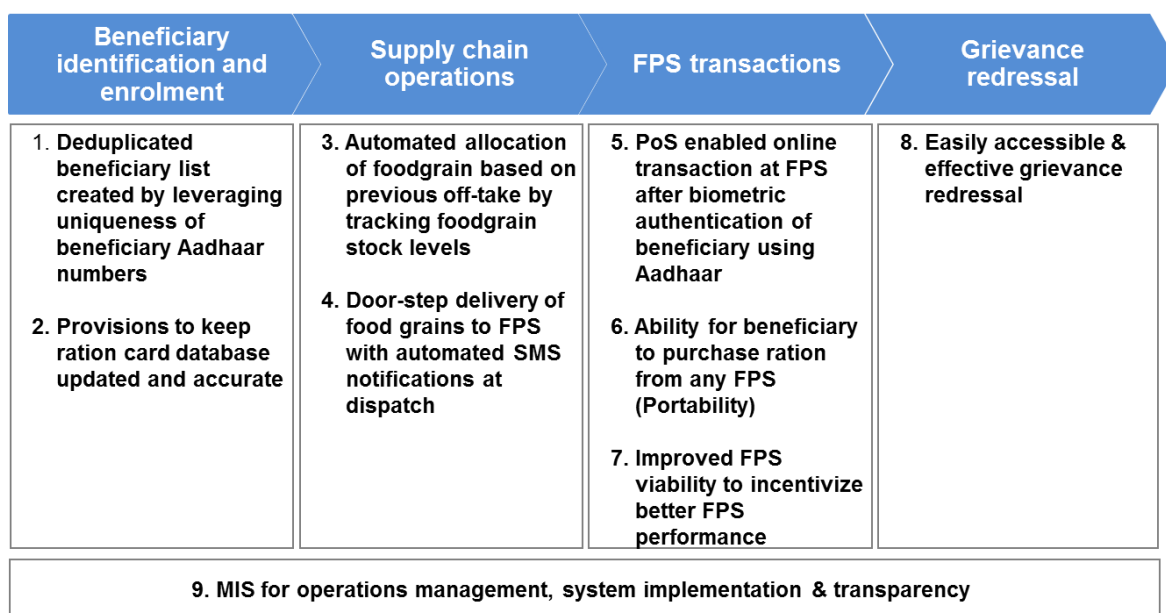


Figure 1: Key features of the solution for PDS transformation in Odisha

The elements of the solution build on the existing activities in Odisha, for example in the areas of supply chain operations and grievance redressal, and also introduce key processes and systems for FPS transactions and beneficiary list digitisation, drawing on lessons learned from the respective pilot projects in Odisha and other states.

- A de-duplicated beneficiary list has been created by identifying priority households as per the criteria finalised by Government of Odisha. . A ration card database management system (RCMS) has been introduced to make changes to beneficiary details, and also ensure the database is updated for changes to the Ration Card database.
- The process for automated allocation of food grain has been integrated with the existing Supply Chain Management System (SCMS) functional at Depots. .
- Key changes are proposed to be introduced at the FPS, including PoS enabled transactions and beneficiary authentication, FPS portability to provide beneficiaries with choice and foster competition amongst FPS and improved FPS viability to provide incentives to FPS dealers to provide better services to beneficiaries.
- A new multi-modal grievance redressal platform dedicated for PDS would be created in accordance with NFSA' 2013. Finally, a detailed MIS system will be developed to track and monitor the PDS in Odisha and improve transparency and accountability; this will be integrated with the SCMS and FPS Automation as well as linked to the transparency portal <http://www.foododisha.in>.

2.3 Indicative scope of work for Vendor

GoO would augment service delivery of food grain at Fair Price Shops by inclusion of Point of Sale (PoS) devices to achieve the following objectives.


1. To track all transactions at FPS
2. To make the transaction data available in public domain
3. To ensure that PDS items reach the intended NFSA beneficiaries
4. To use Aadhaar platform or other modes like OTP for authentication of beneficiaries

The indicative scope of work for vendor implementing the FPS Automation in Odisha shall include:-

1. Supply, Commission and Maintain PoS devices as per technical specifications and requirement to be finalised by FS&CW Department, GoO in about 8850 FPSs by March 2017..
2. Develop and maintain PoS application (client end) based on technical requirements as per the FS&CW department, GoO. Tentative set of requirements are mentioned in Section 3 of this document.
3. Develop, commission, maintain central application (Server end), MIS portal, with various reports required from time to time. An indicative list of reports would be finalized in SRS.
4. To ensure the integration of solution with AUA, SMS gateway as per the specifications of GoO.
5. To ensure that PoS supports offline mode capabilities with ability to sync the transactions data as and when connectivity is resumed.
6. To ensure manual update of PoS data files to FPS automation database, updating corresponding reports, external interfaces and MIS/Dashboard. These data files would be exported from PoS modules when no data connectivity is available for long durations and hence disabling PoS to synchronize with FPS automations server.
7. To ensure that POS device is compatible with any operating system with Graphic User Interface (GUI), Java Virtual Machine or equivalent support and should be accompanied by software development kit for third party application development.
8. To ensure that PoS has restricted access, and no applications can be used or installed unless agreed upon by the FS&CW department, GoO.
9. To ensure that the PoS devices, application software functionalities and any other components, equipment, peripherals involved in implementation of solution meet the guidelines brought out jointly by UIDAI, Indian Banks' Association, National Payments Corporation of India and Institute for Development and Research in Banking Technology & available at <http://uidai.gov.in/financial-inclusion/microatm-standards.html> & or standards issued by IDRBT, UIDAI, RBI, IBA, Government authorities (if any) and should continue to comply with any amendments / changes made to these standards by the above referred authorities, without any additional cost to the Purchaser.
10. To ensure that POS supports mechanism for Aadhaar/Mobile seeding and addition of Proxy/Nominee as per the requirements in the document.
11. To ensure that Guidelines mentioned in the web site of Food & Public Distribution Department for FPS automation are adopted. <http://pdsportal.nic.in/main.aspx>.
12. Bidder will be responsible for engaging a 3rd party Quality certifying agency (STQC or cert-in certified agencies) to conduct the assessment / review for the application software (both client and server end) before "Go Live" without any extra cost. The

FS&CW Department shall have the right to audit and inspect all the procedures and systems relating to the provisioning of the services. If there is any change / addition in the application's functionality then the Solution Provider will have to obtain the STQC Certification for the changes / additions. Bidder has to ensure that the POS device – is certified by STQC (refer PoS device standards published on pdsportal.nic.in and any subsequent versions).

13. Bidder shall be independently and exclusively responsible for all forms of testing and should follow a formal defect tracking system.
14. FPS automation is a part of a larger transformation project for PDS. As mentioned in para 2.2, the PDS comprises of multiple value chain segments – Beneficiary Identification, Supply Chain Automation, Grievance Redressal Modification, MIS creation etc. all of which would be computerized. The system developed for FPS automation must be compatible with all these systems. The bidder would be needed to co-ordinate with related stakeholders to ensure compatibility of their system, and develop web services as required for integration with other components of FPS automation.
15. Bidder will host/ maintain all IT-infrastructure related to the project and hand-over only after exit. At FPS level, the selected vendor would be responsible for supply and deployment of E-PoS device and bar code scanner.
16. Bidder will be responsible for ensuring the effective training of government officials, technical teams, FPS owners and other authorized stakeholders.
17. Bidder will be responsible for ensuring the resolution of any issue/fault/errors/Hardware failures during the implementation or maintenance phase within the defined SLA's in section 8.1 of the document.
18. The Vendor shall assist the Purchaser in identifying potential risks in the devices, remedy of any of the identified risks, develop strategies to measure, monitor and mitigate those risks and implement new controls.
19. In addition to security features deployed in the technology, Vendor's operational procedures should ensure protection of the Purchaser from business risk (from system error, human error, negligence and mismanagement) and fraud risk (loss due to intentional deception by employees, customers, agents, external entities, etc.).
20. Bidder would be responsible for managing all the updates on PoS and MIS as suggested by the GoO to improve the existing solution for entire duration of contract.
21. Bidder shall be responsible to place its development team in Bhubaneshwar or any other location in Odisha to capture requirements at no additional cost to GoO
22. Bidder shall be responsible to benchmark the minimum data bandwidth required for seamless functionality of solution in online mode and meeting the performance requirements of the solution.
23. Solution Provider shall provide a comprehensive/Replacement warranty for two year from the date of Go Live for all equipment in an implementation phase (refer section 3.13) and on-site AMC for 3 years from the date of expiry of warranty.
24. FS&CW department, GoO, may extend the contract of Maintenance for next two years after successful completion of contract period. Cost of Maintenance till end of 5 years from Go-live Date should be provided with financial proposal.

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25. Ownership of IPR and Source code developed for central application and PoS Device shall be with FS&CW Department, GoO. The solution provider shall hand it over to the Government representatives at the time of exit.
 26. Bidder is required to carry out all such changes/enhancements in PoS client Software as are necessitated due to change(s) in ePDS application mandated or designed/deployed by Gol. Accordingly, all such changes shall be deployed/replicated in the PoS machines at all field locations without affecting business continuity.

3. Project Implementation Phase

3.1 Overview of the process to be implemented for FPS transformation

The FPS serves as a focal point for PDS, as they are the interface to the people who are the ultimate intended beneficiaries. As has been well documented by a large number of reports over the years, there are significant inefficiencies faced in FPS operations related to leakage of food grains, poor quality of service to beneficiaries and lack of transparency of operations, all of which ultimately affect the beneficiaries. A variety of solutions have been piloted over the years across states and geographies to address these issues and have seen varying degrees of success.

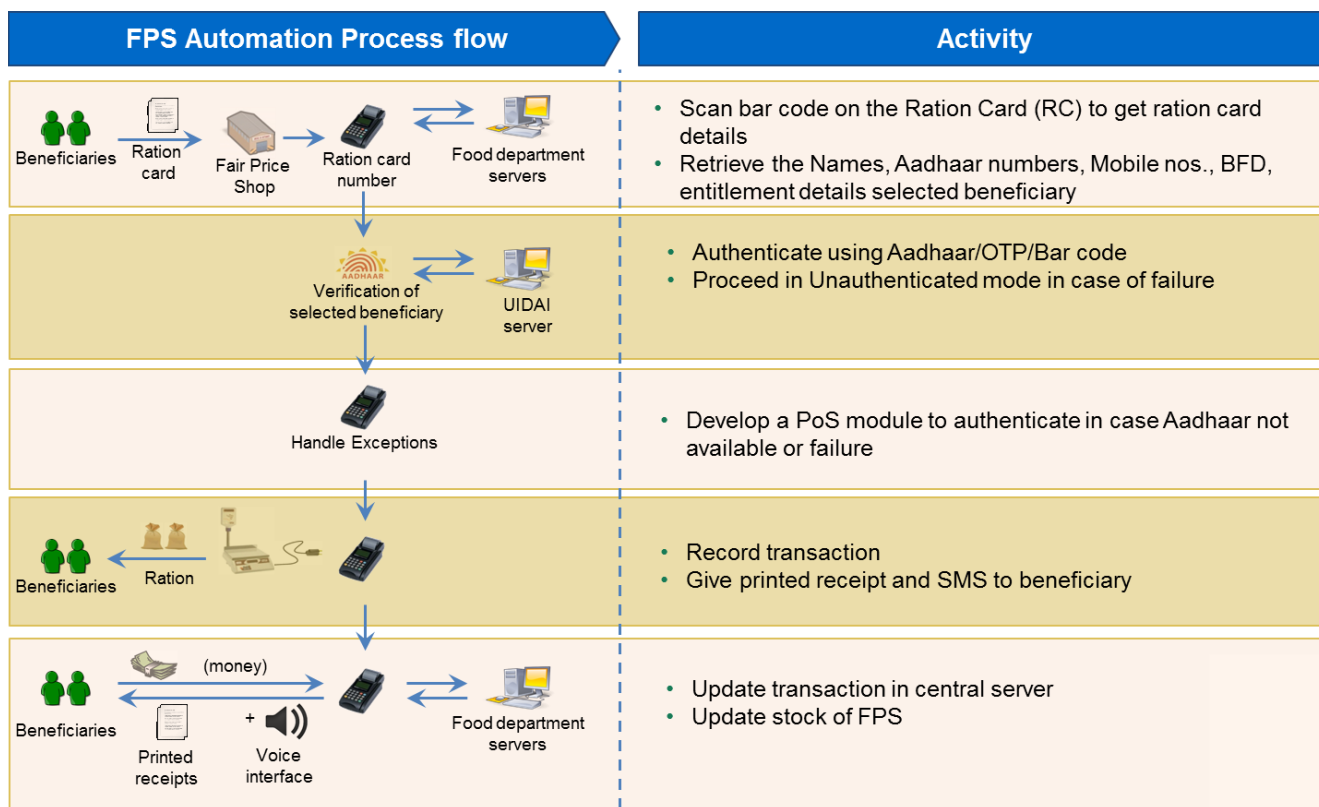
Improving the operations at FPS is not simply a technological challenge as there are many systemic issues which affect the performance. These include poor commission structures and incentive for FPSs, disempowerment of beneficiaries due to lack of choice of FPS, knowledge of rights and low visibility for food officials due to poor monitoring. Thus, there are three parts to the customised solution for FPS transactions. The first component is a purely technological solution which uses **point of sale (PoS) enabled online transactions** to record sales and verify the identity of the beneficiary with minimal manual intervention (to reduce avenues for leakage). The second component involves providing greater choice to beneficiaries through **FPS portability** (thereby increasing stakeholder convenience), which will be implemented under the fully automated PDS system in selected areas where there is 24x7 connectivity & electricity. The third component involves **improving FPS viability** by incentivising FPSs for better performance (to drive honest practices and provide adequate compensation).

The current RFP is intended to bring on-board the selected vendor as implementing partner to deploy, integrate, rollout and maintain the **point of sale (PoS) enabled transactions and FPS portability**.

PoS enabled online transactions solution

The following figure displays the process flow for FPS transactions:

Figure 4: Process flow of the proposed solution for FPS automation



There are 5 steps that will take place once FPS transactions are through PoS. A full list of contingency measures is provided, in the event that the PoS fails to work for any reason.

1. Entitlement Determination and Beneficiary authentication

All ration cards will be bar coded with beneficiary ration card details in order to prevent duplication or falsification. When a beneficiary visits the FPS, the bar code will be scanned using a bar code reader linked to the PoS, which will pull up beneficiary details and entitlements from the system in order to continue with the process of authentication, entitlement distribution, transaction completion etc.

Beneficiary authentication will be conducted prior to making any sale at the FPS. Biometric authentication involves validating the beneficiary's ration card and verifying his/ her identity by capturing the fingerprint data using a PoS in the FPS and cross-checking it with the "Aadhaar" information stored for the beneficiary on the UIDAI servers. The beneficiary is then required

to place their finger(s) on the device. Once the fingerprints are captured, this data will be sent in real-time to the Aadhaar server in order to verify the beneficiary's identity. Once verified, the beneficiary's ration card account can be accessed. This online biometric authentication reduces the scope for manipulation of sales records by the FPS dealer as each beneficiary has a unique biometric identity and no transactions can be made without authentication.

Under the process specified above biometric authentication of beneficiaries will be required prior to any transaction being initiated. There are likely to be some beneficiaries who for reasons of old age or disability will be unable to visit the FPS every month to claim their entitlements. *These beneficiaries only will be provided the option to nominate one or two individuals to purchase rations on their behalf. These nominees' Aadhaar details will be linked to the beneficiary's ration card, and authentication will be performed as described above.*

Intermediate process: Beneficiary authentication at the FPS requires Aadhaar UID number linkage. However, it is likely that FPS automation will be rolled out prior to 100% Aadhaar enrolment across the state and Aadhaar seeding of ration cards will happen post-distribution of cards. In the event that beneficiaries do not have UID numbers linked to their ration card, as an intermediate process OTP authentication would be used. Under this process PoS device would initiate the OTP process, SMS containing an OTP would be sent to the registered mobile number of the beneficiary and same would be verified on PoS. For beneficiaries who do not have UID and registered mobile number seeded, PoS would distribute grains in the unauthenticated mode, however PoS would chose this mode automatically and would not provide as option to operator. Once the beneficiary household has been enrolled by NPR and the UID numbers have been generated, seeding will take place either at the backend and the system or through the PoS machines at FPS.

2. Entitlement display

Once authentication is complete, and the beneficiary's identity has been verified, the entitlement details of the beneficiaries will be displayed. This process will be automated and the entitlement will be displayed as per information retrieved in previous step. Entitlements would be based on the beneficiary's RC category (Priority Household/AAY/Annapurna) and the number of family members in the backend database of the food and civil supplies department. This would be an independent database which will communicate with RCMS, SCMS and transparency portal to get/ send data.

3. Ration distribution

Depending on the beneficiary's **unused** entitlement for the month, input from the beneficiary for the type & quantity of commodity required and the availability of grain in the shops, the FPS owner will weigh the food grain in order to hand it over to the beneficiary using an electronic weighing machine. Details of the commodity and weight will be entered into the PoS.

4. Transaction logging

Real time logging and transfer of transaction details to the FPS Automation database servers will take place. The details that will be automatically logged for every transaction are the beneficiary's identity including ration card number (based on the biometric authentication), the weight and type of grain being sold (determined by the electronic weighing process), the FPS code of the dealer (generated using the PoS). This will be transferred to the FPS Automation database server which allows for real time stock reporting and inventory management and for allocations to be based on actual off-take from the FPS, which is essential for state-wide stock management as the system allows for portability. In the event the PoS fails to work for any reason, contingency measures will be applied as described in the next sub-section.

5. Information exchange

The beneficiary will be informed of the transaction details, including amount of food grain sold and payment to be made. The PoS will have an inbuilt printer and the beneficiary will be provided with a receipt which can be used as a proof of transaction, and SMS shall be sent to registered mobile number with details of transaction. Additionally, to ensure that illiterate or disabled beneficiaries understand all details of the transaction, the PoS may have a local language voice interface that reads out details of the transaction.

Contingency measures for FPS transactions

The customised solution requires data connectivity and reliable electricity infrastructure. There are some remote locations where there is no electricity or data connectivity. For these cases, a long enough lead time would be incorporated into the roll-out plan to simultaneously develop this infrastructure to enable implementation of the solution.

Moreover a comprehensive connectivity and electricity survey needs to be undertaken at the FPSs to determine the best ISP, SIM Card should be purchased by the FPS Dealer from the service provider providing best reliable connectivity.

There will be other instances, however, where transactions may fail due to system errors, or temporary lack of data connectivity or electricity. In these instances, contingency measures for FPS transactions have been designed with the following guiding principles.

- Solution 1: In the event that there **is no electricity and the battery back-up of the PoS has been exhausted**, transactions will have to be undertaken manually. Beneficiaries will be required to visit their home FPS, where the FPS owner will cross-check the ration card details against the monthly sale register and issue grain accordingly, and making note of this in the physical sales register. Once electricity connection is resumed, the FPS owner would have to add these transactions to PoS via option provided in PoS, all these transactions need to be marked in MIS/Dashboard as no electricity transactions ---the transactions need to be uploaded by the FPS Dealer.
- Situation 2: In the event that there is **no data connection at the time of the transaction**, the beneficiary will be required to visit their *Home FPS* (FPS to which the card has been attached to). For beneficiaries with seeded Aadhaar, the authentication would be done in a buffered mechanism and the data stored in the PoS would be used for retrieval of entitlements. Details of all transactions carried out in this offline mode will be stored in the PoS and automatically uploaded to the FPS Automation database server when data connectivity returns. Should there be any discrepancy between the amount of food grain issued and the actual entitlement, this will be adjusted against the following month's quota.
- Situation 3: In case the **PoS is not functional** for reasons other than no electricity or no data connectivity, the FPS owner will contact the technical helpline, to be set up by the vendors for this purpose. This will be set up as per the terms of the annual maintenance contract with the device suppliers. Basic troubleshooting will be done over the phone; for more serious glitches a member of the technical team will login through a remote connection. If still the problem persists a member of the technical team will be sent to the FPS for rectification. Surplus PoSs will be procured to manage contingency situations, and these can be configured by the technical support staff and installed at an FPS as required. In the interim, transactions will have to be undertaken manually, which is feasible at the beneficiary's home FPS as per the procedure defined in situation 1 above.
- Situation 4: While the first pass rate for UIDAI/NPR biometric authentication is more than 90%, if the **authentication of a particular beneficiary fails 2 times**, the

transaction mechanism will switch to One Time Pin (OTP) mode. Once the second try is unsuccessful there will be an automatic trigger which sends a pin to the registered mobile number and the transaction will be carried out using the OTP and the beneficiary's ration card number. In the case of OTP facilitated transactions, the process for retrieval of entitlement details is the same as in online biometric authentication facilitated transactions.

- Situation 5: In case the **OTP mechanism also fails 1 time**, PoS would initiate an unauthenticated mode. The authentication failure shall be flagged and the beneficiary shall be allowed to retrieve a fixed percentage of his /her entitlements. In case of Offline, the entitlements shall be retrieved based on the data stored in the internal memory of the PoS.
- Situation 6: In case the Printer Paper is finished in PoS, transaction should continue as under normal process, however indication should be available on POS and MIS/Dashboard.

The department shall generate a weekly/fortnightly list of such failed authentications and visit these beneficiaries for a fresh BFD enrolment. This would also act as a means of physical verification of the FPS Automation activities.

FPS portability

A number of problems in the PDS system from the power imbalance between the FPS owner and the beneficiary. Under the current system with no portability, the beneficiary is attached to a single FPS regardless of its performance or service quality. This creates an opportunity for FPS owners to provide poor quality service, sell a lower quantity of food grain relative to the beneficiary's entitlement or claim no availability of stock, without significant penalties.

To counter this issue, FPS portability will be implemented under the fully automated PDS system in selected administrative units/areas where there is 24 x7 connectivity & electricity. Under this system beneficiaries can purchase food grains from any FPS of their choice, which results in greater competition amongst FPS. This shifts the balance of power towards beneficiaries who will be able to choose any FPS that ensures proper service quality, thereby weeding out poorly performing FPS over time. Also, beneficiary convenience will get increased as they can now easily purchase ration at desired locations, which can sometimes be an issue because of address changes and relocations.

3.2 Detailed Functional requirements PoS module (client side)

The e-PoS solution should meet the requirements of all the modules as described in the sections below. The solution must also address all the possible complications that may arise during implementation.

With implementation of PDS transformation solution, the transactions at the FPS will be processed through a PoS with real time uploading of transaction details to the FPS Automation database server. This will also allow for portability of beneficiaries and will enable real time monitoring of stock levels at the FPS. The following are the steps involved in processing a transaction via a PoS:

1. Authentication of beneficiary by verifying the beneficiary's biometrics
2. Information on beneficiary household and entitlement details retrieved based on daily automatic synchronization.
3. Distribution of ration after weighing of grain using the electronic weighing machine
4. Transaction details (quantity and type of grain, ration card number, Card Type, FPS number, Global Unique transaction ID, Authentication scenario, Name of Beneficiary, Date and Time of transaction, Portability information etc.) are logged onto FPS automation server. These details would later be shared with other department servers as per the requirement
5. Communication of transaction to the beneficiary through a printed receipt and over a voice interface

These steps are detailed in section 3.1.

The successful bidder has end to end responsibility for carrying out these steps. Along with fulfilling the software and hardware requirements the successful bidder is also accountable for the on-site implementation of these steps. Thus the bid document must include details of all additional requirements (infrastructure, manpower, training etc.) needed to perform the activities detailed in sections 3.1.

3.2.1 PoS boot up and Login

Table 1: PoS Boot up and Login

Module	Activity
PoS Boot up	<ol style="list-style-type: none"> 1. Perform health check of the PoS 2. Establish connectivity and perform diagnostics of the connectivity e.g. signal strength, battery, bandwidth, other QoS parameters, connectivity status with external servers 3. Check memory status, if below threshold (80%) raise an alarm 4. Send PoS Id (configured id or Mac address) with geolocation to central server with status-active, low battery, offline, etc. 5. Send Health Check status to MIS with timestamp 6. Sync with RCMS and download all details of Ration Cards attached to that particular FPS
Home Screen	<p>Once the boot up is complete. The home screen should show three icons.</p> <ul style="list-style-type: none"> • Login • Reports • PoS Settings
Login	<p>The login screen should display the below 4 fields:</p> <ul style="list-style-type: none"> • Biometric Authentication (Aadhaar) • Username and Password • Select level of login (drop down) - FPS owner-with 2-3 Names, Official, Social Audit • Select Scheme- PDS (with Feasibility to add more schemes) <ol style="list-style-type: none"> 1. The biometric authentication should be enabled only if online connectivity is available. Otherwise this option should be displayed but should be disabled. On the other hand in case connectivity is available, then the username and password option should be disabled. 2. Once biometric authentication fails for 2 times in online mode, then the username and password option should be enabled.
FPS owner Home screen-FPS owner login	<p>Display the following options:</p> <ul style="list-style-type: none"> • Billing/Sale of Commodity (Section 3.2.2) • Transaction Cancellation (Section 3.2.6) • Aadhaar/Mobile Number seeding (Section 3.2.8) • Stock Management (Section 3.2.7) • Reports (Section 3.4) • Add Proxy/Nominee (Section 3.2.9) • Best Finger Detection (Section 5.1.1) • User Management • System Settings

3.2.2 Billing Sale of Commodity- POS with Active Data Connection

Active data connection or online state is defined as the state where minimum data bandwidth or signal strength is available to complete the transaction, it shall be responsibility of the

vendor to benchmark the requirements keeping in view the overall performance of the solution. For any scenario where minimum requirement is not met, application should switch to offline mode without any manual intervention and should switch to online mode whenever minimum requirements are met.

3.2.2.1 Authentication and Retrieval of Entitlements

The PoS will have an inbuilt bar code scanner/external Bar code scanner to scan the bar code on the ration cards, which would then be used for retrieval of beneficiary details of scanned ration card. Once the details of beneficiaries are available, based on the credentials of selected beneficiary authenticated process shall be initiated. Below table gives the detailed authentication scenarios.

In case bar code scanner is not functional or bar codes are not readable, option to manually feed the ration card number should be available

The system must have the option of allowing transactions even if Aadhaar authentication or OTP authentication is not possible due to unavailability of Aadhaar number/registered mobile number for the beneficiary. The system would however flag all the transactions that occur without authentication. The requirements for these are clearly mentioned as a part of contingencies and exception management in section 3.2.10.

Table 2: Authentication and Retrieval of Entitlements- POS with Active Data Connection

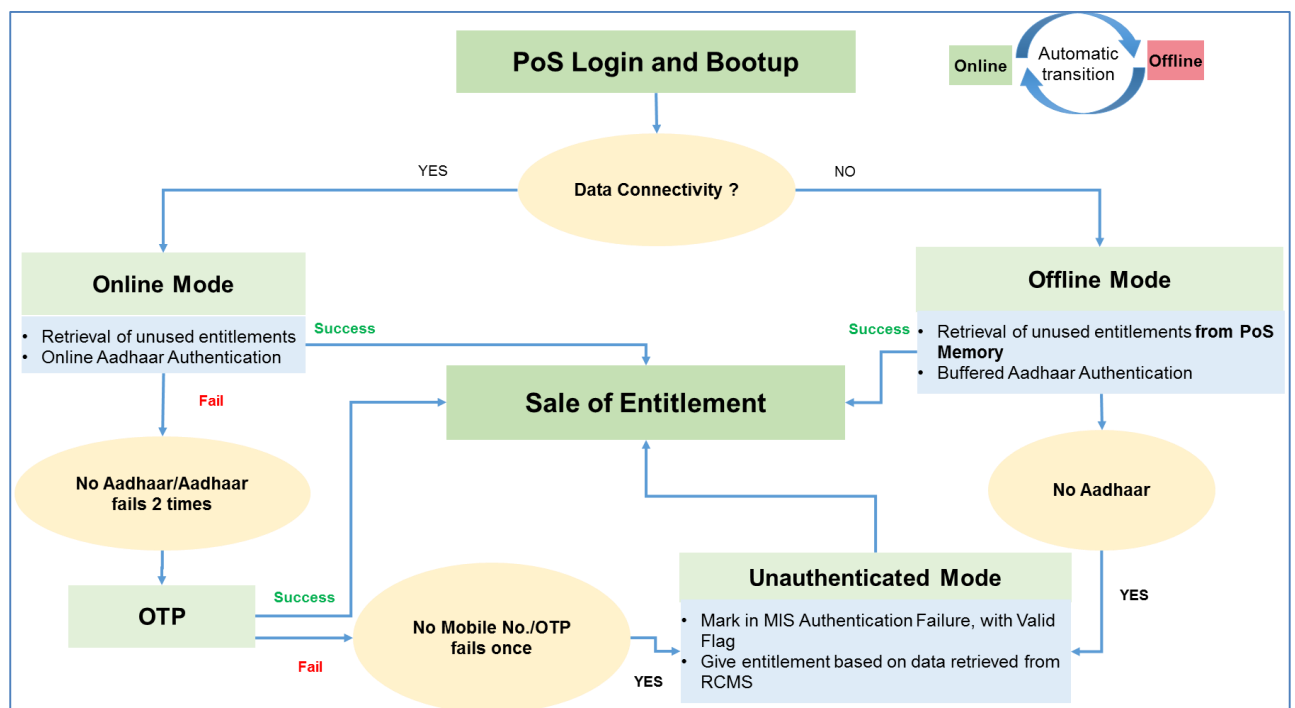
Activity	Software Functionality
Beneficiary Authentication and retrieval of entitlement-Online with Aadhaar Number Available for selected Beneficiary	<ul style="list-style-type: none"> The bar code on the Ration Card (RC) is scanned using the bar code scanner on the PoS or Ration card number is manually entered on available space PoS module will transmit this RC number to the FPS Automation server The FPS automation server authenticates the RC number and returns the household details (card type, names , Aadhaar number, Mobile number) of all the beneficiaries and Approved Nominee/Proxy members attached to this ration card Along with household details, details of BFD (Best Finger detection), entitlements (Used/Unused) of all the beneficiaries attached to this ration card are retrieved. These details are stored in a temporary memory on the PoS PoS displays the names of beneficiaries attached to the scanned RC and names of nominees (if any) This retrieval should happen within a stipulated time (preferably 3 seconds)

Activity	Software Functionality
	<ul style="list-style-type: none"> • The beneficiary selects his/her name from the list of household members displayed in the PoS by using the touch screen or the keypad • The above selection triggers the Aadhaar authentication process, and enables “start scan” button on the screen. • Start Scan is selected and biometric scan of the beneficiary’s fingerprint is taken (If BFD details are present, application displays the BFD finger index). The scan process should be controlled with timer, in case no finger is detected within 30 seconds of initiating scan application should time out. “Start Scan” button should be enabled after the time out. This shall not be accounted as authentication failure. • On successful scan the PoS transmits the Aadhaar number (received from the FPS Automation database and stored in the temporary memory of the PoS) and biometric image of the fingerprint scan through the AUA and ASA servers to the UIDAI CIDR server • The UIDAI server matches the Aadhaar number and fingerprint against the Aadhaar database and the sends back a yes/no answer to the PoS. Success or Failure of Aadhaar authentication is displayed on the PoS • Authentication should happen within 5 seconds • In case authentication response is not received from UIDAI within defined timeframe, application should mark the authentication status as failed and proceed to next step. On completion of transaction, information for failure due to timeout should be updated with transaction record on MIS/Dashboard • Ensure security of data as per standards of UIDAI • Aadhaar authentication should be tried twice before proceeding with transaction and marking the transaction as Aadhaar failed • Before start of second try, information message to try different finger should be displayed • In case of failure of Aadhaar authentication, error code received from UIDAI server should be stored as part of transaction details and made available on dashboard reports
OTP (One time Password) method: Registered Mobile number available and biometric authentication fails 2 times Or Registered mobile number available and No	<ul style="list-style-type: none"> • After biometric authentication fails 2 times consecutively for the same beneficiary or when No Aadhaar seeding has been done for the beneficiary and with registered mobile number available. OTP Authentication process is initiated automatically, with alert indicating initiation of OTP process (Mobile

Activity	Software Functionality
Aadhaar number is linked to selected beneficiary	<p>number to which OTP is sent should be displayed on the screen, option to edit the mobile number should not be available)</p> <ul style="list-style-type: none"> • central OTP server generates an OTP and communicates it to the mobile number mentioned against the ration card number and to the PoS • OTP SMS should reach beneficiary within 15 seconds • Option to resend OTP should be available on screen after 30 seconds of sending 1st OTP, only one resend should be allowed post which resend button is disabled • For scenario where OTP is not received by Application from FPS automation server due to poor data connectivity a time out should be available. Application should automatically proceed to unauthenticated transaction on expiry of timer. Transaction is flagged for such occurrences in MIS/Dashboard • This OTP received on the beneficiaries' mobile is entered in the PoS • The PoS matches the manually entered OTP (received by the beneficiary via SMS) to the one communicated by the central server to the PoS • If OTP is a match to the one communicated by central server to the PoS then transaction is authenticated and PoS displays the entitlement details. • All Transactions are marked in MIS/dashboard for Aadhaar failure transactions or Aadhaar missing, and OTP passed transaction
Beneficiary Authentication and retrieval of entitlement- in case OTP fails	<ul style="list-style-type: none"> • PoS displays the entitlement details retrieved from FPS Automation server on OTP failure
No Aadhaar/No Mobile is linked to Ration card in RCMS	<ul style="list-style-type: none"> • The bar code on the Ration Card (RC) is scanned using the bar code scanner on the PoS • PoS module will transmit this RC number to the FPS Automation server • The FPS Automation server authenticates the RC number and returns the household details (card type, names of members) of all the beneficiaries and Approved Nominee/Proxy members attached to this ration card along with the entitlement details • These details are stored in a temporary memory on the PoS • PoS displays the names of beneficiaries attached to the scanned RC and names of nominees (if any) • The beneficiary selects his/her name from the list of household members displayed in the PoS by using the touch screen or the PoS keypad

Activity	Software Functionality
	<ul style="list-style-type: none"> PoS should enable the option to distribute ration using entitlement details fetched after Bar code scan of Ration card All transactions are marked as Unauthenticated transactions in MIS/Dashboard along with information of missing Aadhaar and Mobile number for beneficiary
Beneficiary sends a Unregistered Nominee on his behalf	<ul style="list-style-type: none"> Process defined in section 3.2.9 should be followed

Figure 5: Process flow Authentication Mechanism for FPS automation



3.2.2.2 Information on entitlement details

Once the beneficiary has been authenticated for the transaction to proceed it is necessary to retrieve the household's unused entitlements for the month.

The key activities to be performed when the PoS is online are:

1. When the RC number is sent to the FPS Automation server the unused entitlement details should also be retrieved and temporarily stored on the PoS's working memory but not displayed

2. After the authentication process is completed the unused entitlement details of the entire household is mapped to the particular ration card should be displayed on the PoS screen

In case there is no data connectivity, the PoS should work in “Offline Mode”. The functional requirements of the PoS in offline mode are outlined in [Section 3.3 “Offline Mode Capabilities”](#)

Table 3: Information on entitlement details-PoS with Active Data Connection

Activity	Software Functionality
Retrieve entitlement details	<ul style="list-style-type: none"> On Bar Code scan of Ration Card(RC) FPS Automation server sends the following: The total entitlement of the House hold for the ongoing, and from previous months if any The quantity of food grains already purchased from entitlement The price of each commodity per unit The remaining entitlement of food grains This information is retrieved from the RC DB server and stored temporarily on the PoS
Display of entitlement details	<ul style="list-style-type: none"> After successful biometric/OTP authentication the PoS should display Total entitlements of the entire household Unused entitlement details of the entire household Used entitlement details of the entire household Available shop stock for each commodity The display should come up within 5 seconds Blank field to enter the purchase commodity quantity
Failed Aadhaar Authentication, Failed OTP Authentication or No Aadhaar and No Mobile registered	<ul style="list-style-type: none"> For Beneficiaries with failed Aadhaar Authentication and failed OTP authentication For beneficiaries with no Aadhaar seeding and no Mobile numbers entitlement details should be displayed based on scanned ration card number, following information is displayed Total entitlements of the entire household Used entitlement details of the entire household Unused entitlement of the entire household Available shop stock for each commodity The display should come up within 5 seconds Blank field to enter the purchase commodity quantity

3.2.3 Weighing of grain

The amount of grain that the beneficiary wants to purchase should be weighed using an electronic weighing machine attached externally to the PoS.

Electronic weigh machines should be optional external peripheral, under no circumstances absence of weigh machine should stop the transactions on PoS. There should be a

mechanism to detect and report the status of weigh machine is attachment with PoS, and status should be available on MIS/Dashboard

The key activities to be performed are:

1. The Ration Card determines type and quantity of grain for the RC holder
2. The grain is then weighed using the electronic weighing machine
3. The quantity figure is transferred from the weighing machine onto the PoS.

3.2.3.1 Measuring of Superior Kerosene Oil (SKO)

The FPS Dealer dealing with SKO should be able to transact SKO through PoS devices. Here, the quantity of SKO as per entitlement is measured and delivered to the RC holder and same is recorded in the PoS device for recording and updating the FPS Automation Server.

Table 4: Weighing of grain- PoS with Active Data Connection

Activity	Software Functionality
Enter total quantity of food grains to be purchased	<ul style="list-style-type: none"> Once the entitlement details are displayed on the PoS the same is to be ticked after verifying the same from the RC holder Solution should verify the entered quantity for purchase against the available entitlement of the household and stock available in the shop for each commodity Error message for invalid quantity should be displayed if verification fails for any of the above scenario Values of the order 3 decimal for commodities measured by weight, 2 decimal for commodities measured for volume and no decimals for commodities measured as Packets The solution should have option of using/removing the electronic weighing machine from the whole process
Weighing of grain using electronic weighing machine	<ul style="list-style-type: none"> Grains would be measured by the electronic weighing machine Weight would be fed to the PoS working memory PoS should not let the transaction proceed if quantity to be purchased is less than the quantity measured by weighing machine , i.e. one should not get more or less than one's entitlement

3.2.4 Transaction logging

Once the grain has been weighed and distributed to the beneficiary, the transaction details have to be uploaded to the FPS Automation server.

The key activities to be performed when the PoS are online are:

1. Record following information PoS's working memory
 - a. Name of beneficiary/Nominee
 - b. Card Type
 - c. FPS Number
 - d. Global Unique transaction ID
 - e. Portability information (Original FPS of Ration card)
 - f. Offline/Online Status of Device while transaction is done
 - g. Type and quantity of each commodity purchased
 - h. Date and Time of Transaction
 - i. Mobile numbers used for OTP
 - j. Authentication sequence (Information of all authentication steps followed to complete transaction e.g. Aadhaar failed, OTP passed.)
 - k. Amount Paid for transaction
2. Once the transaction is complete these details along with ration card number and FPS owner's code are transferred to the FPS Automation Database server

In case there is no data connectivity, the PoS should work in “Offline Mode”. The functional requirements of the PoS in offline mode are outlined in Section 3.3 Offline Mode Capabilities

The following table summarizes the process flow:

Table 5: Transaction logging- PoS with Active Data Connection

Activity	Software Functionality
Transaction Logging	<ul style="list-style-type: none"> Each transaction should be identifiable by a globally unique transaction ID Solution should display total cost of purchase for the transaction before completion of transaction and give option to go back to previous module/screen in case any changes are required by beneficiary On beneficiary acknowledgment of funds and quantity option to distribution should be available Consolidate transaction details and store them in the working memory. Transfer data from PoS to the FPS Automation server Transmission of details should happen on real time basis, before start of next transaction

3.2.5 Communication of transaction

The PoS must have an inbuilt printer so as to provide the beneficiary with a receipt which can be used as a proof of transaction. Additionally to ensure that the beneficiary understands all details of the transaction it is recommended that the PoS have a local language voice interface, to overcome the problem of illiteracy.

The key activities to be performed are:

1. After the transaction is completed a receipt of the transaction details is printed in the local language
2. The transaction details are communicated to beneficiary via SMS to his/her registered mobile number
3. The transaction details are also communicated to the beneficiary verbally in the local language via a voice interface
4. Module should have option to reprint the transaction receipt before proceeding to next transaction
5. For scenario where Print Paper is not available/finished, transaction should continue and update should be sent on MIS/Dashboard, and indicator should be available on POS to replenish the paper

Table 6: Communication of transaction-Online Mode

Name of Option	Software Functionality
Printed receipt after successful transaction	<ul style="list-style-type: none"> • Post confirmation of transaction details by beneficiary, solution triggers print of receipt, ensuring that there is physical proof of each transaction. The receipt should clearly mention the following: • Date & time of transaction • Name of Beneficiary • Globally unique Transaction ID • FPS name and code • Type and quantity of PDS item delivered • Total amount paid to FPS • Unused entitlement
SMS after successful transaction	<p>On receipt of transaction completion details FPS Automation application triggers transaction completion SMS to registered mobile number of beneficiary using SMS gateway details shared by GoO. SMS should contain details of transaction:</p> <ul style="list-style-type: none"> • Date & time of transaction • Name of Beneficiary • Globally unique Transaction ID • FPS name and code • Type and quantity of PDS item delivered • Total amount paid to FPS • Unused entitlement
Local language voice interface	Voice interface should verbally communicate transaction details to the beneficiary in the local language prior to the commencement of transaction logging
Reprint Transaction Details	Option to reprint transaction details should be available before proceeding to next transaction

3.2.6 Transaction Cancellation

PoS module should give option to cancel the existing transaction and update the stock details accordingly, cancellation is allowed for transactions done within the limited duration of time. This duration is configurable within the system. Cancel transaction process should follow no authentication procedure.

On completion of transaction cancellation, process for transaction logging (Section 3.2.4) and transaction communication (section 3.2.5) should be followed, a new transaction ID is generated which is sub ID to original transaction ID

In addition to information mentioned in transaction logging section 3.2.4, printed transaction return receipt should have updated information of remaining entitlement and return commodity along with the total amount of money to be collected back from FPS

3.2.7 Stock Management at PoS

On receipt of grains from the warehouse, the FPS operator would be required to issue an e-acceptance note via stock management module on the PoS, this note is updated to SCMS via central application. E-acceptance note should be created and identifiable with globally unique ID.

E- Acceptance note should have following fields

- Select the allocation month for received commodities
- Update Vehicle/challan number in e-acceptance note
- Show the monthly allocation of the FPS based on the selected allocation month. Allocation values would be retrieved by central application from SCMS post integration of solution
- Show dispatched/lifted values of stock from warehouse based on waybill/challan number entered
- Show received stock for selected month of allocation
- Update the quantity of commodity received in respective units (Option to use Bags, Drums should be available along with Kgs, Lts and packets)
- Show final stock available at the FPS
- Remarks space to update any issue in received stock

On receipt of commodity, FPS owner would update the e-acceptance note for above mentioned parameters. E-acceptance note with globally unique id is updated to central application, which further reconcile the information and updates the details to different components of E2E computerization such as:

- Supply Chain Management System
- Backend Database
- MIS/Dashboard
- Government of India Portal

The PoS should be able to generate and store the stock reports in PDF/Excel/Word format and allow the user to retrieve them from the PoS. Refer section 3.4 for MIS/Dashboard details

Stock Management module should be able to trigger notifications on the PoS and MIS/Dashboard for condition where available stock shop is reduced below certain configured percentage value. Percentage value should be configurable and is calculated as percentage of available stock with respect to allocated stock of each commodity for each FPS.

3.2.8 Aadhaar Number/Mobile Number Seeding

Home screen for FPS login should enable an option for Updating Aadhaar number and mobile numbers, selecting the option should redirect the application to update process as per the requirements in below table.

Seeding should follow an approval based process, where all records with updated Aadhaar/Mobile numbers should be available on the MIS/Dashboard for verification by the department. Once verified, option should be available on MIS/Dashboard for updating to beneficiary management database via web service integration or manually via RCMS application. MIS/Dashboard should show the status as per the chosen option.

Once updated to beneficiary management system (RCMS) these records are synchronized with FPS automation backend database through periodic synchronization mechanism. Post synchronization of FPS automation database and beneficiary management system (RCMS), these updated values shall be available for transaction.

Table 7: Seeding of Aadhaar Number and Mobile number Via PoS

Name of Option	Software Functionality
Update Aadhaar Number/Mobile number – Online	<ul style="list-style-type: none">• The bar code on the Ration Card (RC) is scanned using the bar code scanner on the PoS or Ration card number is manually entered on available space• PoS module will transmit this RC number to the FPS Automation database server• The FPS automation server authenticates the RC number and returns the household details (names of members, Aadhaar number, mobile number) of all the beneficiaries and Approved Nominee/Proxy members attached to this ration card• The beneficiary selects his/her name from the list of household members displayed in the PoS by using the touch screen or the keypad
Display Aadhaar/Mobile update	<ul style="list-style-type: none">• Fields are enabled for updating Aadhaar number and mobile number<ul style="list-style-type: none">○ Update Aadhaar Number○ Update Mobile Number

Name of Option	Software Functionality
Update Required Details	<ul style="list-style-type: none"> Aadhaar and/or Mobile details are updated in the available fields of Aadhaar and Mobile number Based on the updated details Validate button is enabled as per below scenario <p><u>Only Aadhaar is Updated or both Mobile and Aadhaar are updated</u></p> <ul style="list-style-type: none"> Validate button for updated Aadhaar number is enabled Validate button triggers the Aadhaar authentication process, and enables “start scan” button on the screen Start scan is selected and biometric scan of the beneficiary’s fingerprint is taken. The scan process should be controlled with timer, in case no finger is detected within 30 seconds of initiating scan application should time out. “Start Scan” button should be enabled after the time out. On successful scan the PoS transmits the Aadhaar number (received from the RC DB and stored in the temporary memory of the PoS) and biometric image of the fingerprint scan through the AUA and ASA servers to the UIDAI CIDR server The UIDAI server matches the Aadhaar number and fingerprint against the Aadhaar database and the sends back a yes/no answer to the PoS. This is displayed on the PoS In case of failure is returned from the UIDAI, Aadhaar authentication process is retried for one time Authentication status for Aadhaar authentication is updated and stored in working memory of PoS <p>Post Aadhaar authentication, application checks the status of updated Mobile number, in case mobile number is also updated following procedure is followed</p> <ul style="list-style-type: none"> OTP Authentication process is initiated automatically, with alert indicating initiation of OTP process (Mobile number to which OTP is sent should be displayed on the screen, option to edit the mobile number should not be available) Central OTP server generates an OTP and communicates it to the mobile number mentioned against the ration card number and to the PoS OTP SMS should reach beneficiary within 15 seconds Option to resend OTP should be available on screen after 30 seconds of sending 1st OTP, only one resend should be allowed post which resend button is disabled This OTP received on the beneficiaries’ mobile is entered in the PoS The PoS matches the manually entered OTP (received by the beneficiary via SMS) to the one communicated by the central server to the PoS Authentication status for OTP verification is updated to working PoS memory along with existing Aadhaar Authentication status

Name of Option	Software Functionality
	<ul style="list-style-type: none"> Error code received from UIDAI server should be stored and available on dashboard reports in case of Aadhaar authentication failure MIS/Dashboard report is created, giving the details of update (Ration card number, Beneficiary Name, Old Aadhaar number, updated Aadhaar number, Date/Time of update, FPS Name, Flag for successful/unsuccessful authentication) MIS/Dashboard should enable option to update records on RCMS via web service or through RCMS application Verified records are updated to beneficiary management as per selected option, updated beneficiary management database is then synchronized to FPS automation database. <p>Note: Under no circumstances beneficiary data updated through Aadhaar Number/Mobile Number Seeding module should be directly used for transaction, updated data should only be available as Reports on MIS/Dashboard for GoO to take appropriate action</p> <p><u>Only Mobile No. is Updated</u></p> <ul style="list-style-type: none"> Validate button for updated mobile number is enabled Selecting to validate enables the OTP authentication procedure as defined above
Update Aadhaar Number/Mobile number - Offline	<ul style="list-style-type: none"> The bar code on the Ration Card (RC) is scanned using the bar code scanner on the PoS or Ration card number is manually entered on available space PoS module will fetch the details of ration card from the local memory of PoS The beneficiary selects his/her name from the list of household members displayed in the PoS by using the touch screen or the keypad
Display Aadhaar/Mobile update fields	<ul style="list-style-type: none"> Two Fields are enabled for updating Aadhaar number and mobile number <ul style="list-style-type: none"> Update Aadhaar Number Update Mobile Number
Update required details	<ul style="list-style-type: none"> Aadhaar and/or Mobile details are updated in the available fields of Aadhaar and Mobile number Based on the updated details Validate button is enabled as per below scenario <p><u>Only Aadhaar is Updated or both Mobile and Aadhaar is updated or only mobile is updated</u></p> <ul style="list-style-type: none"> Validate button for updated Aadhaar number is enabled The above selection triggers the buffered Aadhaar authentication process, and enables “start scan” button on the screen. Start scan is selected and biometric scan of the beneficiary’s fingerprint is taken. The scan process should be controlled with timer, in case no finger is detected within 30 seconds of

Name of Option	Software Functionality
	<p>initiating scan application should time out. “Start Scan” button should be enabled after the time out.</p> <ul style="list-style-type: none"> Scanned biometrics along with the Aadhaar ID is updated in local memory of PoS <p><u>And/or Mobile number is updated</u></p> <ul style="list-style-type: none"> Updated mobile number is updated in local memory of PoS <p><u>Actions post data connectivity is resumed</u></p> <ul style="list-style-type: none"> Buffered Aadhaar authentication is triggered if Aadhaar number was updated MIS/Dashboard report is created, giving the details of update (Ration card number, Beneficiary Name, Old Aadhaar number, updated Aadhaar number, Date/Time of update, FPS Name, Flag for successful/unsuccessful authentication) MIS/Dashboard should enable option to update records on RCMS via web service or through RCMS application Verified records are updated to beneficiary management as per selected option, updated beneficiary management database is then synchronized to FPS automation database. <p>Note: Under no circumstances beneficiary data updated through Aadhaar Number/Mobile Number Seeding module should be directly used for transaction, updated data should only be available as Reports on MIS/Dashboard for GoO for verification</p>

3.2.9 Proxy/Nominee Addition

There are likely to be some beneficiaries who for reasons of old age or disability will be unable to visit the FPS every month to claim their entitlements. These beneficiaries only will be provided the option to nominate one or two individuals to purchase rations on their behalf. These nominees' Aadhaar details will be linked to the beneficiary's ration card, and future authentications would be done via updated credentials of Nominee.

Proxy/Nominee addition should follow an approval based process, where all records with added Proxy/Nominee details should be available on the MIS/Dashboard for verification by the department. Once verified, option should be available on MIS/Dashboard for updating to beneficiary management database via web services or manually via RCMS application. MIS/Dashboard should show the status as per the chosen option.

Once updated to beneficiary management system (RCMS) updated records are synchronized with FPS automation backend database through periodic synchronization mechanism. Post synchronization of FPS automation database and beneficiary management system (RCMS), these updated values shall be available for transaction.

Added proxy/Nominee members should not be accounted as additional family member and should not be accounted for while calculating the monthly entitlement of the household

Below table gives the overall procedure to be followed for adding Proxy/Nominee to ration card, where maximum of 2 Proxy/Nominee members can be added to each ration card.


Table 8: Add Proxy/Nominee via PoS

Name of Option	Software Functionality
Add Proxy/Nominee	<ul style="list-style-type: none"> The bar code on the Ration Card (RC) is scanned using the bar code scanner on the PoS or Ration card number is manually entered on available space <p>PoS is Online</p> <ul style="list-style-type: none"> PoS module will transmit this RC number to the FPS Automation database server, which further authenticates the RC Number Verification of number of exiting Proxy/Nominee members is done, if the count is less than three than option to add details as below is enabled on the PoS Screen, else error message for maximum Nominee/Proxy member added along with the details of existing members is displayed <ul style="list-style-type: none"> Name Date of Birth Aadhaar number Mobile Number Name and Aadhaar number are mandatory fields for adding Proxy/Nominee member to ration card The above selection triggers the Aadhaar authentication process, and enables “start scan” button on the screen. Start Scan is selected and biometric scan of the beneficiary’s fingerprint is taken. The scan process should be controlled with timer, in case no finger is detected within 30 seconds of initiating scan application should time out. “Start Scan” button should be enabled after the time out. On successful scan the PoS transmits the Aadhaar number (received from the RC DB and stored in the temporary memory of the PoS) and biometric image of the fingerprint scan through the AUA and ASA servers to the UIDAI CIDR server The UIDAI server matches the Aadhaar number and fingerprint against the Aadhaar database and the sends back a yes/no answer to the PoS. This is displayed on the PoS and Record is created for verification on MIS/Dashboard MIS/Dashboard report is created, giving the details of update (Ration card number, Nominee Name, Date of Birth, Aadhaar number, Mobile number, Date/Time of update, FPS Name, Flag for successful/Failed authentication) MIS/Dashboard should enable option to update records on RCMS via web service or through RCMS application Verified records are updated to beneficiary management as per selected option, updated beneficiary management database is then synchronized to FPS automation database.

Name of Option	Software Functionality
	<p>Note: Under no circumstances beneficiary data would be updated directly on FPS automation database for the purpose of transactions.</p> <p><u>PoS is Offline</u></p> <ul style="list-style-type: none"> • PoS module will fetch the details of ration card from the local memory of PoS • The beneficiary selects his/her name from the list of household members displayed in the PoS by using the touch screen or the keypad • The above selection triggers the buffered Aadhaar authentication process, and enables “start scan” button on the screen. • Start Scan is selected and biometric scan of the beneficiary’s fingerprint is taken. The scan process should be controlled with timer, in case no finger is detected within 30 seconds of initiating scan application should time out. “Start Scan” button should be enabled after the time out. <p><u>Actions after data connectivity is resumed</u></p> <ul style="list-style-type: none"> • beneficiary record is updated on FPS backend database, however updated details should not be used/displayed in Ration card data unless updated via beneficiary management system • MIS/Dashboard report is created, giving the details of update (Ration card number, Nominee Name, Aadhaar number, Mobile Number, Date/Time of update, FPS Name, Flag for successful/failed authentication, offline status) • error code received from UIDAI server should be stored and available on dashboard report for failed authentication • MIS/Dashboard should enable option to update records on RCMS via web service or through RCMS application • Verified records are updated to beneficiary management as per selected option, updated beneficiary management database is then synchronized to FPS automation database. <p>Note: Under no circumstances beneficiary data updated through Proxy/Nominee Addition module should be directly used for transaction, updated data should be available as Reports on MIS/Dashboard for GoO to take appropriate action</p>

3.2.10 Contingencies and exception management

At the FPS, the primary aim should be to ensure that the beneficiaries get their intended food grains, regardless of the situation. Hence, contingency measures must be built in for FPS operations which account for these situations while ensuring that all data is ultimately logged on to the MIS/Dashboard which forms the basis for subsequent month’s allocation to the FPS. All occurrences of contingency scenarios should be logged and flagged onto the MIS/Dashboard, which can be tracked and analyzed to prevent misuse of the contingency



scenarios and take corrective action. Recurring problems observed can also be addressed with permanent operational solutions, such as installing additional backup infrastructure.

In light of these objectives certain recurrent and prominent contingencies have been identified and listed in the table below. Mechanisms for sustainability are also outlined for these contingencies. A detailed overview of the process related contingencies is shown in the table below:

Table 9: Overview of contingencies related to FPS transactions

Contingency	Corrective mechanism	Mechanism for sustainability
PoS (or other accessories) breaks down/ doesn't work	<ul style="list-style-type: none"> • Agile service support to replace or repair the device • The solution provider will set up a dedicated helpline and share these contact with FPS owners to log complaints • Local service support team comprising of trained and qualified staff of the solution provider to be notified • The service support team would have provision for remote login to the PoS • Spare devices to be given to FPS owner until the device is repaired • Stock of 10% buffer devices for each district would be maintained • Beneficiaries to be notified through bulk SMS, if time required to repair is high 	<ul style="list-style-type: none"> • Solution provider to adhere set KPIs to minimize downtime, refer to section 8.1 • Solution provider to provide data on downtime and conduct root cause analysis for any major disruption
Beneficiary brings Aadhaar number but does not have a valid ration card (RC lost/not present at FPS)	<ul style="list-style-type: none"> • FPS module to have provision of allowing transactions without ration cards only if the beneficiary is included in the beneficiary list, provides his ration card no. and his biometric authentication is successful for a limited no. of transactions • The beneficiary would need to get a new card issued for continuing to receive grains beyond the limited no. of transactions without ration card • No distribution of is done in case of failure of Aadhaar authentication 	<ul style="list-style-type: none"> • Option to mark Transaction as without ration card before start of transaction, by default this option should be to "Ration card available" • PoS module to flag any transaction without ration card • PoS module should have the provision of not allowing transaction for a certain Aadhaar number if valid RC is not produced for more than a period. • No distribution is done in case of Aadhaar failure, OTP authentication is not supported

Contingency	Corrective mechanism	Mechanism for sustainability
Biometric/OTP authentication fails after multiple attempts (First pass rate of Aadhaar /OTP authentication is considerably high)	<ul style="list-style-type: none"> After 2 attempts, the system should display option of using OTP mechanism automatically without any manual intervention OTP sent to beneficiary mobile number and the PoS. If OTP fails for single attempt, fixed percentage of entitlement should be given to beneficiary and such transactions should be marked in MIS/dashboard. Analysis report for failed authentication, including the beneficiary details for which consecutive failures are observed PoS records the duration for which it was offline and sends it to the MIS/Dashboard module 	<ul style="list-style-type: none"> PoS module should report failures in biometric authentication and OTP authentications (beneficiaries with poor biometric would be identified through this data and through grievances received and their biometric will be recorded again)
If Beneficiary does not have Aadhaar number attached to Ration card	<ul style="list-style-type: none"> Beneficiary should be given fixed percentage(Configurable) of total entitlement Option to flag the transaction if Aadhaar is available with beneficiary, however not updated in beneficiary database Such transactions should be marked in MIS/Dashboard, updated as reports 	<ul style="list-style-type: none"> PoS should flag all such transactions and update in MIS/Dashboard reports
If the data connectivity is not available temporarily (one-off case, for longer duration)	<ul style="list-style-type: none"> The PoS would store entitlement data for the beneficiary household and the transaction would be completed in offline mode In scenario where FPS portability has been implemented, the beneficiary would be asked to visit his/her Home FPS as the entitlement details would be recorded in the PoS of Home FPS only. Buffered authentication mechanism to be used. 	<ul style="list-style-type: none"> Solution Provider to identify cause for poor connectivity Solution provider to repair any problem/ upgrade PoS module with the devices in detecting connectivity solution provider to notify to GoO for problems identified with data connection provided by the telecom vendor

Contingency	Corrective mechanism	Mechanism for sustainability
Beneficiary cannot walk to the fair price shop because of illness, old age or disability	<ul style="list-style-type: none"> PoS module to have capability of adding a “nominee” , section 3.2.9 Normal authentication protocol to be followed for the nominee after updated details are available in FPS automation database 	<ul style="list-style-type: none"> PoS module to flag the exceptions
Beneficiary wants to add/update his mobile number on the database	<ul style="list-style-type: none"> PoS module should have the provision for the beneficiary to update his or her mobile number after biometric verification 	
Electronic weighing machine (or the cable linkage to PoS) breaks	<ul style="list-style-type: none"> PoS module to have provisions for the FPS owner to distribute ration without linkage of weighing machine to PoS by entering the weight manually 	<ul style="list-style-type: none"> All Transactions without weigh machine should be flagged by PoS

3.2.11 Contingencies and exception management for stock management

Stock/Commodity distributions, cost and distribution cycle may vary on FPS level, FPS automation solution should have capability to configure pricing and distribution periods to FPS level using backend Application, below are some of the exception scenarios for managing and distribution of commodities to be catered to

1. Date of distribution for all commodities may be extended beyond the calendar month
2. Date of distribution for subset of commodities may be extended beyond calendar month, and distribution for remaining commodities would end as per normal monthly cycle
3. Distribution for entitlement for multiple months may be done in single month, distribution may be for subset of commodities or all commodities
4. Distribution for remaining entitlement for a particular month along with new entitlement for next month may be done together in single month (e.g. From 25Kg entitlement, the beneficiary purchased 15Kg in current month, post that due to unavoidable circumstances no further distribution could be done for the month. In such scenario it shall be possible to distribute remaining 10Kg plus 25Kg for entitlement in single month distribution)
5. Option to add, remove and change any additional quota/commodity/change of price during any time of month
6. Option to control price/quantity/commodity/ at FPS level
7. Option to add/remove any commodity along with other configuration options
8. Option to cancel the transactions under normal authentication process section 3.2.1 and Section 3.3
9. Option to receive and issue stocks within other FPS

3.2.12 Configurable parameters via MIS/Dashboard

Functionality of the solution is controlled by multiple parameters, below are list of configurable parameters that should be available via FPS automation application, user should be able to configure/add/delete/modify these parameters. Vendor should be responsible for monitoring the impact of all the parameters and apply consistency checks

1. Change of commodities attached to ration card type, per the requirement of GoO
2. Quantity of allocated quantity of each commodity to each ration card type
3. Quantity of allocated quantity of each commodity to each ration card type based on location of FPS (State/District/Block/FPS)
4. Distribution cycle dates for each distribution cycle for individual FPS, however default option to configure distribution cycle across State/District/Block should be available
5. Distribution cycle dates for each commodity for individual FPS, by default all commodities across all FPS should have same distribution cycle
6. Price of each commodity as per ration card type

7. Price of each commodity configurable at individual FPS, option should be available to set the price of commodity by State/District/Block/FPS
8. Percentage value of allocated quantity of commodity to be distributed in case of authentication failure, e.g. only partial commodity should be sold to beneficiary in case of Aadhaar failure, the value of partial commodity should be configurable as percentage of total allocation. Configuration should be allowed on per commodity
9. Transaction cancellation duration, beneficiary is allowed to cancel any of the previous transaction during the defined time period
10. Suspension of any FPS, where distribution would not be possible post suspension till suspension is revoked
11. Minimum percentage value of stock available in FPS for each commodity with respect to allocated quantity of distribution month, if the stock is reduced below this minimum value for any commodity notification is sent to FPS and dashboard for replenishing the stock

3.3 Offline Mode Capabilities

The solution described in above sections depends on data connectivity linking the PoS with the central servers. However, as the solution will be rolled out across Odisha in all FPS, it is expected that data connectivity outages would take place during transaction process. This section describes the functional requirements that the PoS H/W and the software should support in while working in scenario of data connectivity outage i.e. in the Offline Mode.

3.3.1 Information on entitlement details-PoS with No active data connection

1. The entitlement details for the beneficiaries mapped to the particular FPS is stored on the internal memory of the PoS
2. Using the RC number the entitlement details of the beneficiary are retrieved from the internal memory of the PoS.
3. For Beneficiaries with no Aadhaar number, entitlements would be given without any biometric data capture.
4. For beneficiaries with Aadhaar number, mechanism for buffered authentication shall be followed
5. Once the data connectivity is resumed, all the transactions are updated to MIS/Dashboard with required details, all transactions are reconciled and relevant databases and components are updated
6. Option to export the transaction data as encrypted database files from PoS, these files can be manually uploaded to FPS automation database. Global uniqueness of transactions should be maintained on manual upload of database files

Table 10: Information on entitlement details-PoS with No active data connection

Activity	Functionality
Retrieve entitlement details –Offline Mode	<ul style="list-style-type: none"> • PoS to automatically switch over to Offline mode when connectivity is not available. • The billing/sale process remains the same except for the following differences: <ul style="list-style-type: none"> ○ Rather than retrieving details from the online server, the PoS shall get details from the internal memory ○ Special flag to be marked to these transactions in both MIS/Dashboard and PoS reports • Retrieve entitlement details from information stored locally in the PoS, by matching RC number of beneficiary against the local FPS Automation database stored in the PoS memory. The database on the PoS only contains details of beneficiaries mapped to that particular FPS. • The entitlement details should be displayed within 5 seconds • The transactions and authentication details shall be buffered and sent to the respective servers as soon as connectivity is resumed. • For beneficiaries with Aadhaar number, buffered authentication process is initiated. Biometrics are captured and stored for authentication as per the guidelines of UIDAI, once the connectivity is available Buffered authentication API is triggered and results for authentication are stored • Transaction details along with the authentication status is updated to MIS/Dashboard

3.3.2 Transaction logging-Offline Mode

1. The type and quantity of grain is recorded on the PoS's working memory
2. Once the transaction is complete these details along with ration card number and FPS owner's code are transferred to the PoS's internal memory
3. When data connectivity returns the stored transaction details are transferred to the food department server, and Transaction complete messages for offline transactions are sent to beneficiaries with registered mobile numbers
4. These details are used to determine the allocation to the FPS

Table 11: Transaction logging-PoS with No active data connection

Activity	Functionality
Transaction Logging-Offline Mode	<ul style="list-style-type: none"> • Record transaction details in PoS internal memory • Encrypt and transfer details to the FPS Automation database server in batches when data connectivity returns

Activity	Functionality
	<ul style="list-style-type: none"> Transmission of details should happen at the rate of one transaction per 5 seconds
Manual Transaction Upload	<p>There would be locations where data connectivity would not be consistent or not available completely, for these FPS transaction data shall be manually exported and shared with the vendor. E-PoS and FPS automation central Application should be capable of performing below functionalities</p> <ul style="list-style-type: none"> Record transaction in PoS internal memory – Stock management, Beneficiary management, Distribution etc. Manually export the transaction as Database files for all transactions maintained on PoS Manual upload of database files to FPS automation database, maintaining the unique transactions Update all relevant interfaces and MIS/Dashboard

3.4 MIS/Dashboard for the process

Data captured under FPS automation for the MIS/Dashboard and the PoS Reports are required but not limited for the following key processes, all reports should have

1. Option to filter reports by State, Districts, Blocks, FPS and date range
2. Graphical and tabular representation for all reports
3. Option to export data to excel/csv/PDF/word format including the graphical representation of data

Table 12: PoS Reports and MIS

Process	Data collected
FPS transaction (MIS and PoS Report)	<ul style="list-style-type: none"> Ration card number Beneficiary name Date and time Beneficiary authentication details Overall Authentication status (yes or no) Aadhaar authentication status (failed or successful) Offline (Yes or No) Buffered Aadhaar authentication (yes or no) Offline Aadhaar authentication status (Failed or successful) Number of failed attempts OTP based transaction (yes or no) Commodity-wise quantity Price of each commodity

Process	Data collected
	<ul style="list-style-type: none"> FPS number at which transaction was done Original FPS to which beneficiary is mapped Proxy/Nominee transaction (Yes or No) Portability (Yes or No) Offline (Yes or No) Global Unique Transaction ID Mobile number Used for OTP Transaction ID Aadhaar Authentication code received from UIDAI
Best finger detection (MIS and PoS Report)	<ul style="list-style-type: none"> No. of best finger detection processed at each site (FPS etc.)
Stock receiving transaction (MIS and PoS Report)	<ul style="list-style-type: none"> E-acceptance number Delivery number FPS identification Commodity-wise quantity received Date and time Allocation Month Remarks Commodity-wise Allocated quantity Commodity-wise Lifted/Dispatched quantity
Mobile number updates (MIS)	<ul style="list-style-type: none"> Ration card number Beneficiary name FPS Name Date and time OTP authentication status (failed or successful) Food official approval status (done or not done) Mobile number old and new
Aadhaar number updates (MIS)	<ul style="list-style-type: none"> Ration card number Beneficiary name FPS Name Date and time Online Aadhaar authentication or buffered Authentication Authentication status (failed or successful) Food official authentication status (done or not done) Aadhaar number old and new Aadhaar Authentication code received from UIDAI
PoS Online/Offline (MIS and PoS Report)	<ul style="list-style-type: none"> FPS number Start date and time End date and time Current Status Offline duration Online duration

Process	Data collected
	<ul style="list-style-type: none"> Last Transaction Time
Contingency Reports Beneficiary Without Ration Card with Aadhaar seeding	<ul style="list-style-type: none"> Ration Card number FPS Number Name of Beneficiary Authentication Status Transaction ID
Available Stock (MIS and PoS)	<ul style="list-style-type: none"> Opening balance Incoming Stock Offtake Closing balance
Allocation Report (MIS and PoS)	<ul style="list-style-type: none"> Monthly allocations for each FPS
Device Status (MIS Report)	<ul style="list-style-type: none"> Current status of device (Offline/Online) Last transaction on Device Last Online duration
Cancel Transaction post authentication (MIS and PoS)	<ul style="list-style-type: none"> Ration card number Beneficiary name Date and time Beneficiary authentication details Overall Authentication (yes or no) Aadhaar authentication status (failed or successful) Offline Aadhaar authentication (yes or no) Number of failed attempts OTP based transaction (yes or no) Commodity-wise quantity Price of each commodity FPS number at which transaction was done Original FPS to which beneficiary is mapped Proxy/Nominee transaction (Yes or No) Portability (Yes or No) Offline (Yes or No) Global Unique Transaction ID
Ration card history (MIS Report)	<ul style="list-style-type: none"> Allocation/offtake/remaining entitlement details of ongoing month Record of all transactions for Ration card
Used/Unused Ration cards on FPS (MIS Report)	<ul style="list-style-type: none"> Summary of total cards attached to FPS, total unused card, total used card for current distribution month
Distribution summary	<ul style="list-style-type: none"> Commodity/Distributed quantity (State wide/District/Block/FPS)

Process	Data collected
Nominee/Proxy Transaction Summary	<ul style="list-style-type: none"> • Transactions done by Nominee member, with all details of transaction
Nominee/Proxy Update	<ul style="list-style-type: none"> • Nominee/Proxy Name • Ration card Number • FPS Name • Updated Aadhaar Number • Updated Mobile Number • Date of Birth • Date and Time of Update • Authentication Type – Online/Buffered • Authentication Status
Stock Notifications for each FPS	<ul style="list-style-type: none"> • Notifications/Alarms should be generated if the available stock on FPS is reduced below configured value. • Notifications/Alarms should be based on the percentage value of available stock for each commodity with respect to allocated stock to the FPS

In addition to development and maintenance MIS/Dashboard as per above requirements:

1. Vendor shall be responsible to customize and provide reports as per the requirement of FS&CW department
2. Vendor shall be responsible to integrate the MIS/Dashboard with the NIC central application
3. Vendor shall design the database architecture in accordance with the NIC central application requirements
4. Vendors shall be responsible to maintain user login based access control of the dashboard, configuration of access control should be possible via administrative login

In addition to standard reports Dashboard should present different comparison based, daily status and analytic reports from the data collated. These reports will be obtained by analyzing the data over time to determine long-term trends in operations. These are used by officials to implement improvements in the system by addressing recurring issues and streamlining certain operations. The performance of the system is tracked over time and can automatically determine the areas and stakeholders which need to be addressed and reprimanded, thus allowing the officials to easily identify and bring about improvements in the system.

Based on the analytics each user should be intimated through automated notification mechanism on dashboard as and when his/her attention/action is required, all notifications should be prioritized into different categories of type of action.

In addition to the normal reporting MIS/Dashboard should provide following functionalities

1. Option to search via Ration card number, this search should give all details pertaining to the used ration card number. Details should include but not limit to
 - a) Family member names
 - b) Attached Proxy/Nominee names
 - c) Aadhaar and Mobile number for all family and proxy members
 - d) Details of all Transaction completed on the ration card
2. Option to search via transaction ID, results should return the complete transaction details
 - a) Transaction ID
 - b) Beneficiary who initiated transaction
 - c) FPS number
 - d) Date and time of transaction
 - e) Purchased commodities during transaction along with quantity of each commodity purchased
 - f) Total Price paid for transaction
 - g) Authentication details (Type of authentications tried, status of Passed and failed authentications)
3. Stock distribution reports, showing overall status of distribution of all commodities
4. Available stock details on any given day for any FPS
5. Allocation reports, displaying monthly allocation for each FPS/Block/District/State
6. Report for ration cards not procuring ration for consecutive distribution cycles, number and months are configurable in real time
7. Reports for beneficiaries with failed Aadhaar authentication for multiple consecutive transactions, number of consecutive transactions is real time configurable

Above reporting requirements are minimum indicators for the required dashboard functionality, however additional enhancements of reports and dashboard functionality would be continuous process from the learnings through phased implementation. Vendor shall be responsible to cater and implement the requests of FS&CW department for any additional reports, functionality or enhancements

3.5 FPS Automation Backend Application and database

The bidder shall be responsible to develop and maintain FPS Automation backend application and FPS automation database, Figure 6 gives the overall representation of the components. Below are the indicative set of requirements for both the components

FPS automation Database requirement

1. FPS automation database would be managed and maintained by bidder
2. FPS automation database would synchronize with beneficiary management system database periodically
3. FPS automation database would synchronize with SCMS on real time

4. Backend Database will hold the copy of beneficiary database system, it shall be responsibility of vendor to study and identify the data fields required from the beneficiary management system and design the database accordingly. Beneficiary management system database would act as master database for beneficiary data.
5. Beneficiary management system would hold dynamic beneficiary data which would be in continuously changing, it shall be responsibility of bidder to keep the backend data updated as per the changes in beneficiary management system through periodic synchronization
6. Beneficiary records updated with details via PoS (mobile number, Aadhaar number, Proxy /Nominees) should not be updated directly to the master table of beneficiary records for FPS automation database. Separate reports are created for the updated information on MIS/Dashboard for verification by department officials. These records once verified should have option to update beneficiary management system via web service and later synchronize to FPS backend databases through periodic synchronization mechanism.
7. SCMS application would be responsible for monthly allocation for all FPS across state, these allocation would be based on the number of beneficiaries, card category and closing balance of each FPS, updated allocations would be fetched from SCMS to FPS automation database and pushed to PoS and MIS/Dashboards as required
8. SCMS application would be responsible for maintaining the real time records of grain movement within depots via challans/truck chits numbers etc., bidder shall be responsible to get dispatched grain accounts from SCMS and use them for stock management module
9. Bidder shall be responsible to get the details of allocated stock for each FPS from SCMS and use the details in stock management module of the PoS.
10. Bidder shall be responsible to maintain the details of incoming stock at all FPS via stock management module, these details would further be updated to SCMS as per the requirements of SCMS
11. There would be locations where data connectivity would not be consistent or no available completely, for these FPS transaction data shall be manually exported and shared with the vendor. FPS backend database should have capability to import these data files, maintaining the uniqueness of each transaction. All relevant reports should be updated on importing of these data files (FPS Stock, Beneficiary Entitlements etc.)

Backend FPS Automation Application

Backend FPS Automation application would hold the backbone of the entire E2E computerization, application would act as Anchor to all components to interact with FPS automation components. Application would be responsible for continuous update of FPS automation database and processing the requests from various components.

Following interfaces should be integrated and maintained by the backend application

1. FPS Automation backend database
2. MIS/Dashboard
3. PoS terminals

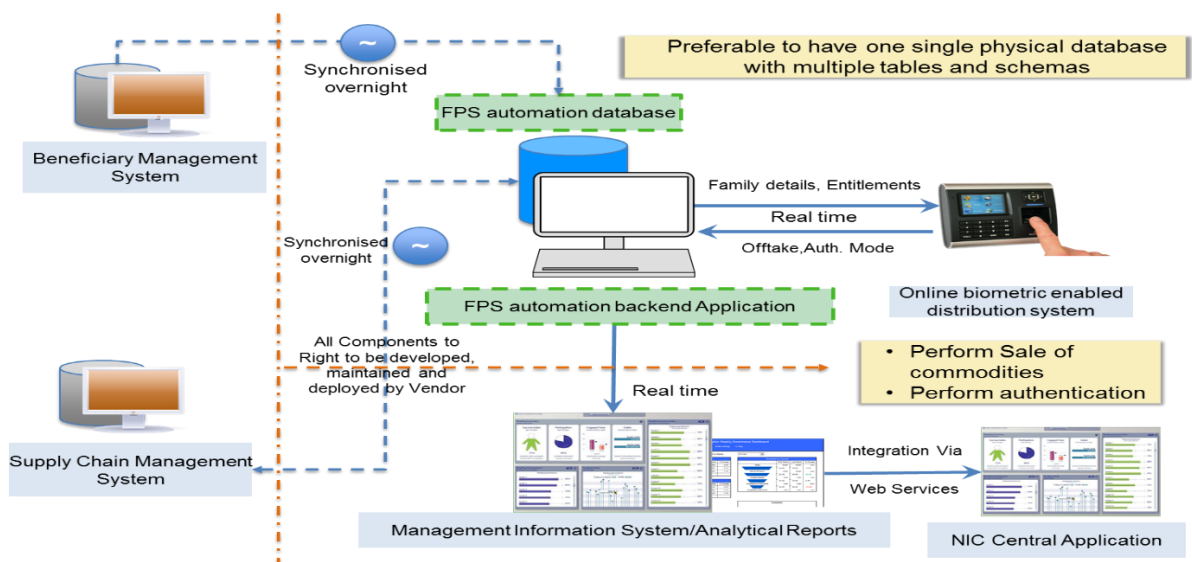
4. SMS Gateway
5. AuA/Sub AuA
6. Supply chain management system - SCMS
7. Beneficiary management system - RCMS
8. NIC central Application
9. Transparency Portal
10. Configuration of parameters

Along with maintaining the above interfaces following requirements should be met by FPS automaton application

1. Receive and process requests by various components of the E2E computerization
2. Update the FPS automation backend database as per the requirement of the system components
3. Update the MIS in real time as per the requirements
4. Create notifications for various triggers as per the requirement
5. Implement OTP authentication process
6. Implement Aadhaar authentication process
7. Collect, process and reconcile the data received from various components of the E2E computerization

3.6 Integration Support

Figure below gives an overall description of E2E computerization architecture



In continuation to support the process flow in above section, it shall be responsibility of the bidder to develop and maintain FPS Automation database, FPS Automation backend

application and MIS/Dashboard. Bidder would also be responsible to provide and integrate all the required interfaces as shown in figure 6 and with NIC central application via web services which shall be developed and integrated by the bidder. The above architecture may change and additional interfaces may be added/removed from the architecture, in all circumstances it shall be responsibility of bidder to develop web services to send/receive data from all relevant interfaces.

It shall be responsibility of the bidder to successfully synchronize and maintain the FPS automation database updated with information from all relevant components of the E2E computerization.

As part of development and maintenance of management information system/Dashboard bidder should be providing with all required reports and information as described in the various subsections of Section 3

3.7 Solution Design

The Solution Provider shall carry out a detailed systems study to refine the Functional requirements specifications and formulate the System and Software Requirements specifications documents for development, rollout and post rollout support while incorporating the functional specifications and standards.

The Solution Provider shall create and maintain all project documents that shall be passed on to the State as deliverables as per the agreed project timelines. The documents created by the Solution Provider will be reviewed and approved by the GoO officials. Please refer to the detailed list in [Annexure 8.7](#). The expected timelines for completion of activities of the Service Provider is provided in [Annexure 8.2](#)

3.8 Standardization Testing and Quality Certification (STQC)

The Solution provider will be responsible for engaging a 3rd party Quality certifying agency (STQC) to conduct the assessment / review for the application software before “Go Live” without any extra cost. The FS&CW Department shall have the right to audit and inspect all the procedures and systems relating to the provisioning of the services. If there is any change / addition in the application’s functionality then the Solution Provider will have to obtain the STQC Certification for the changes / additions. No extra cost shall be paid for this purpose.

Solution Provider shall ensure the following points are duly addressed for successful completion of STQC Certification:

- Successful completion of Application Audit. Application audit will include:
 - Functionality audit that will map the functionality delivered to the FRS agreed upon during development phase.

- Identify the nature and type of transactions being processed by the application systems.
- Determine systematic measures implemented to control and secure access to the application programs and data including password controls, user authentications, roles and responsibilities, audit trails and reporting, configuration and interface controls, etc.
- Review of database structure including:
 - i. Classification of data in terms of sensitivity & levels of access
 - ii. Security measures over database installation, password policies and user roles and privileges
 - iii. Access control on database objects – tables, views, triggers, synonyms, etc.
 - iv. Database restoration and recoverability
 - v. Audit trails configuration and monitoring process
 - vi. Network connections to database
- Review of Network and Website will include:
 - Penetration and vulnerability testing
 - Security exposures to internal and external stakeholders
- Definition and Implementation of Security Policies and Controls will include:
 - Define and implement backup process, including schedule, storage, archival and decommissioning of media.
 - Define IT Change Management process, Incident Management process – covering identification, response and escalation mechanisms.
 - Define and implement Anti-virus (malware) controls –patching, virus definition file update.

3.9 Software Testing

The Solution Provider shall be independently and exclusively responsible for all forms of testing and should follow a formal defect tracking system.

As part of the testing of the application, the responsibility of Solution Provider includes the following:

- Create and share SRS, FRS, Test Plans (Functional testing, System testing and performance testing), test strategy documents to FS&CW for formal approval
- No additional cost shall be paid to bidder to completing the test executions or for creating test bed setups for any form of testing
- Execute and create reports for all test executions
- Testing of entire application as per the approved test plans
- Create and submit test execution reports, bug status reports to FS&CW department for review on weekly basis
- Create and submit traceability matrix to FS&CW department for approval

- No more than 0 critical and 5 Major 10 minor defects should be open before start of UAT
- Solution provider shall be responsible submitting test reports and bug status report which shall be formally approved before start of UAT

Note: All documents shall be shared as Hard copy along with Soft copy in editable and non-editable formats

3.10 User Acceptance Testing

- There will be an Operational Testing Group (OTG) constituted by department comprising of technical consultants and users of all level from different stakeholder institutions to perform User Acceptance Testing (UAT). The department will be responsible for providing final acceptance sign off, after consulting the OTG, who shall represent the department in reviewing the deliverables provided by the Service Provider.
- The UAT will be initiated from the stage when the application software would be delivered by the Service Provider and would conclude till after go-live. The review will focus on completeness of the deliverables & the compliance of the deliverables to best practices and standards
- Demo should be given by the vendor on live environment while submitting the software version for UAT along with the release notes, test data may be created over and above the live data for testing purpose.
- UAT would be executed on live environment, vendor shall be responsible providing live environment for UAT
- Release notes should be updated and shared along with every new version of software submitted to the FS&CW
- No extra cost shall be paid for UAT
- Following documents should be submitted by Vendors and approved by FS&CW department before the start of UAT
 - SRS, FRS
 - Test Plans – Functional testing, System testing, Performance testing (Load and stress), Test strategy
 - Test Cases corresponding to all test plans
 - Test Execution reports for all test plans
 - Security test report
 - Bug Status report – 0 Critical, 3 Major and 10 Minor
 - Traceability Matrix
 - UAT Test cases
- Following the submission and approval of above said documents UAT would be started by the FS&CS department
- Criteria for successful UAT exit would be
 - Final versions of all above mentioned documents are approved and submitted to GoO

- No more than 0 Critical, 3 Major and 10 minor defects are present in the system

Critical Defects

These defects are extremely severe defects, which have already halted or capable of halting the operation of business system. It means the defect has stopped some business functions therefor forcing the deployment of manual workaround procedures into operation.

For the purpose of the existing RFP all defects which lead to restart manual or automatic of the application, module shall be considered as Critical defect

Major Defects

These are also severe defects, which have not halted the system, but have seriously degraded the performance of some business function. Although this is also a failure, but the business operation continues at lower rate of performance

For the purpose of the existing RFP all defects which lead failure in meeting the any of the performance criteria shall be considered as Major defect

Minor Defects

These types of defects are the ones, which can or have caused a low level disruption of the system or business operation. Such defect can result into user inefficiency. Although a software with a minor defect suffers from the failure, but it continues to operate. Such disruptions or non-availability of some functionality can be acceptable for limited period.

For the purpose of the RFP all cosmetics bugs would also be included as minor defects

Note: All submissions for review shall be shared as Hard copy along with Soft copy in editable and non-editable formats

3.11 Compatibility with other system

FPS automation is a part of a larger transformation project for PDS. As mentioned in Chapter 2, the PDS comprises of multiple value chain segments – Beneficiary Identification, Supply Chain Automation, Grievance Redressal Modification, MIS creation etc. all of which would be computerized. The system developed for FPS automation must be compatible with all these systems. The Solution Provider would be needed to co-ordinate with the other modules owners to ensure compatibility of their system, and develop web services as required for seamless exchange of data

3.12 Supply / Procurement of Infrastructure

At FPS level, the selected vendor would be responsible for supply and deployment of E-PoS device and bar code scanner. The selected vendor will be also responsible for the maintenance of e-PoS device and scanners.

In case of malfunctioning of devices or parts, decreased performance of the solution, especially the PoS device the service provider must be able to replace the device or parts. In order to ensure that there is no disruption in services due to malfunctioning of devices, the solution provider would maintain a stock of additional 10% devices in each district. The SLA would include the condition of maintaining a buffer stock of 10% of PoS and accessory devices.

The Government of Odisha will make provision for the Data Centre premises for hosting the IT-Infrastructure including SMS Gateway and AUA/Sub AUA. The solution provider will be also responsible for their maintenance. Based on the results of survey carried out by the vendor, the government will be responsible for procurement, deployment and maintenance of UPS/ Voltage stabilizer for FPSs which have been identified by GoO as lacking in required electricity service.

The selected vendor will assess the IT infrastructure requirements pertaining to this RFP and suggest any up-gradation/addition of hardware that is foreseen due to capacity, operational, performance or interoperability requirements. The selected vendor would also need to determine if additional servers would be required for the process and if required, the service provider would need to provide necessary server(s).

3.13 Installation and Commissioning of Solution Infrastructure

The Solution Provider will be responsible for preparation, installation and configuration of the entire Infrastructure set-up, including but not limited to the following:

1. All Infrastructure including PoS devices, operating systems and any other system software required for making the infrastructure operational and tuned for satisfactory performance.
2. The IT Infrastructure will be installed and configured in accordance with the IT Policies of the State of Odisha.
3. The Solution provider will ensure that the reports for monitoring of SLAs such as system uptime, performance, etc. are generated from the system.

The successful bidder has end to end responsibility for carrying out all the above steps. Along with fulfilling the software and hardware requirements the successful bidder is also accountable for the on-site implementation of these steps. Thus the bid document must include details of all additional requirements (infrastructure, manpower, training etc.) needed to perform the activities detailed in the previous sections.

3.14 Implementation Plan

After the successful completion of the User Acceptance Testing (UAT), the Solution provider shall rollout FPS Automation in areas as defined in Phase 1. This phase will be closely monitored by both the solution provider and the department so as to identify all defects in functionality, performance, consistency checks etc. Also based on the observations any

enhancements suggested by the department shall be incorporated in the solution that will be implemented in the whole state of Odisha.

The enhanced software, after approval from the FS&CW Department will then be rolled out in the entire state of Odisha in a phased manner. During the rollout the solution provider (inter alia) shall be responsible for:

- Installation of PoS and accessory devices in FPS, ensuring the PoS device software is connected and can communicate with the RCMS, SCMS, UIDAI server and other systems
- Providing training to the Food dept. officials, FPSs. Handholding and providing support to the FPSs /workers in performing the transactions through PoS device in the FPS.

SLA based rectification of defects and proposed enhancements e.g. critical defects should be fixed within 1 day.

The solution provider will be responsible for the integration of the FPS automation solution in all the FPS for the state of Odisha. The customized solution for FPS **automation** will be rolled-out in a phased manner across the state of Odisha, as follows.

Phase I: The implementation will commence in all FPS where number of attached ration cards are greater than 300 for Bhubaneswar, Cuttack, Puri and Blocks Headquarter GP in each of the 30 districts. These locations will ensure a good availability of infrastructure to begin with and provide a contrast between the impact in an urban area and a rural area.

The roll-out model will follow a cascading train-the-trainer approach. The capabilities and capacity of local officials to own the solution and subsequently ensure its implementation across the state of Odisha will be developed and strengthened. These officials will then become the leaders who go out to subsequent target locations to train and support the next round of local officials to launch operations in their area.

Phase II: After the efforts in Phase I stabilize, implementation will be launched in remaining FPS across the state where number of attached ration cards are more than 300

Below table gives an approximate division of FPS across state of Odisha as per number of ration cards attached

Range of Cards	Number of FPS Dealers
301-400	1649
401-500	1241
501 and above	5942
Total	8832

FPS automation will follow the two-phased cascading approach, as per the timelines provided in section 8.2. These sub-phases will be planned in a manner so as to integrate with the Supply Chain Management System (SCMS) operational in the department storage centres (DSC). The FPS being fed from DSCs that have SCMS shall be given priority over those that do not have the SCMS. Once this has occurred, the FPS in blocks served by these depots will be brought online.

3.15 Licenses

1. The system software licenses mentioned in the Bill of Materials shall be genuine, perpetual, full use and should provide upgrades, patches, fixes, security patches and updates directly from the OEM. All the licenses and support (updates, patches, bug fixes, etc.) should be in the name of FS&CW department.
2. The Solution Provider shall provide with a full use database license. All the licenses and support (updates, patches, bug fixes, etc.) should be in the name of FS&CW department. Solution Provider shall provide a comprehensive/Replacement warranty that covers all components after the issuance of the final acceptance by FS&CW department. The warranty should cover all materials, licenses, services, and support for both hardware and software. Solution Provider shall administer warranties with serial number and warranty period. Solution Provider shall transfer all the warranties to the FS&CW department at no additional charge at the time of termination of the project. All warranty documentation (no expiry) will be delivered to FS&CW Department.
3. The Solution provider shall review the licenses requirements with the FS&CW department. The FS&CW department shall clarify on the licenses requirements to be brought by the Solution Provider and availability at State Data Centre.
4. The licenses should be perpetual and enterprise wide for the core application and other software unless otherwise stated. The software licenses shall not be restricted based on location and the *FS&CW department* should have the flexibility to use the software licenses for other requirements, if required

3.16 Capacity Building / Training

The solution provider shall ensure that the following activities of capacity building will be undertaken:

1. Imparting training in functioning and troubleshooting of solution.
2. Such trainings and skills will be imparted to all levels of government employees and FPS owners involved in the processes pertaining to the selected services.
3. These would range from senior officers such as the State Department Secretaries up to the officials working in the districts and blocks.

4. Prepare and organize training programs to facilitate the user departments and FPS owners in the efficient usage of the new system.
5. Training, including handholding for FPS owners on usage of PoS device in transactions and the necessary steps to be undertaken in case of contingencies.
6. Training shall encompass the knowledge of basic functionalities of user application, guidelines and other backend processes.
7. Training shall also be provided for teaching the basic trouble shooting activities in case of problems.
8. The Solution Provider would be required to prepare a detailed training plan covering at least the trainings to be conducted, targeted audience, location, dates for training, duration and training content. The training plan would be submitted to the FS&CW Department as per timelines mentioned in this RFP for feedback and approval from the FS&CW Department.
9. The Solution Provider would also be required to develop user manuals, brochures and computer based tool kits, PPTs and videos both in local language (Odiya) and English to promote self-learning and assist training participants in undergoing the training.
10. The solution provider should also ensure that there is an ability to capture feedback of training programs conducted to gauge the effectiveness of instruction and make improvements

3.17 Manpower requirements

The project would require provisioning of dedicated manpower to provide support during the roll out process and setting up necessary helpdesk after implementation. The helpdesk has to be integrated with PDS Helpline. There should be adequate resources for all activities including developing software(s), testing and deployment of solution, managing on-ground implementation, troubleshooting etc. The Solution Provider is required to provide an estimate for the manpower resources they would employ for the process. The details of the manpower needed is to be captured in the format specified in [Annexure 8.6.5](#)

3.18 Business Continuity Planning

The selected Bidder is expected to develop a Business Continuity Plan (BCP) and Disaster Recovery Plan (DRP) for the operations carried out by the selected Bidder. An indicative list of activities to be performed by the selected Bidder is mentioned below:

1. Designing and implementing adequate data backup, business continuity and restoration procedures for the application data (including but not limited to the database, attachments and all other data elements created in and generated by the system and users).
2. Ensuring that there is no single point of failure and adequate level of redundancy is built in to meet the uptime and other requirements of this RFP. While building redundancies, it should be ensured that failure of a single component of communication link does not result

in failure of primary as well as secondary connectivity. Hence primary and secondary connectivity should be taken from 2 separate communication link providers and both links should not have any single point of failure. Preferably, all the redundancy will be in auto fail over mode so that if primary component fails, secondary component automatically takes over.

3. Any storage space / media required to maintain backups and other requirements of the RFP should be provisioned for by the selected Bidder in his Bid.
4. Designing and implementing data synchronization procedures for the DR Site. Periodic testing may be done to ensure that all replication and data synchronization procedures are in place all the time. Replication between Data Centre and DR Site as well as change-over during disaster should be automatic and real-time for minimal impact on user experience.

3.19 Information Security Management

The solution provider shall ensure that adequate measures are taken by the bidder to ensure confidentiality, integrity and availability of the information for both the application and the databases. Below is a list of the guidelines (but not limited) that the solution provider must adhere to while designing and implementing the solution:

1. The proposed solution should provide security including identification, authentication, authorization, access control, administration and audit and support for industry standard protocols.
2. The proposed solution should include design and implementation of a comprehensive Information Security (IS) policy in line with ISO standards to comply with the security requirements mentioned in this section. The IS Policy shall include all aspects such as physical and environmental security, human resources security, backup and recovery, access control, incident management, business continuity management etc.
3. The proposed solution should ensure that data, especially those pertaining to registration process, transaction process as well as the data that is stored at various points is appropriately secured as per minimum standard 128 Bit AES/3DES encryption.
4. The proposed solution should provide database security mechanism at core level of the database, so that the options and additions to the database confirm the security policy of the GoO without changing the application code.
5. The proposed solution should be able to ensure the integrity of the system from accidental or malicious damage to data.
6. The proposed solution should be able to check the authenticity of the data entering the system.
7. The proposed solution should be able to monitor security and intrusions into the system and take necessary preventive and corrective actions.
8. The proposed solution should store User IDs and passwords in an encrypted format. Passwords must be encrypted using MD5 hash algorithm or equivalent.
9. The proposed solution should be capable of encrypting the password / other sensitive data during data transmission

3.20 Project Management

To have an effective project management system in place, it is necessary for the Solution Provider to use a Project Management Information System (PMIS) to monitor the Project Progress. The Solution Provider shall address at the minimum the following:

1. Create an organized set of activities for the project.
2. Coordinate and collaborate with various stakeholders including the Departments concerned.
3. Establish and measure resource assignments and responsibilities.
4. Construct a project plan schedule including milestones.
5. Measure project deadlines, budget figures, and performance objectives.
6. Communicate the project plan to stakeholders with meaningful reports.
7. Provide facility for detecting problems and inconsistencies in the plan.

During the project implementation the Solution Provider shall report to FS&CW department, on the following items but not limited to:

1. Weekly status reports and statistics
2. Results accomplished during the period
3. Cumulative deviations to date from schedule of progress on milestones as specified in this RFP read with the agreed and finalized Project Plan
4. Corrective actions to be taken to return to planned schedule of progress
5. Proposed revision to planned schedule provided such revision is necessitated by reasons beyond the control of the Solution Provider
6. Other issues and outstanding problems, and actions proposed to be taken
7. Interventions which the Solution Provider expects to be made by the FS&CW Department and / or actions to be taken by the FS&CW Department before the next reporting period. Progress reports would be prepared by Solution Provider on a weekly basis. These reports would be required to be shared with either the FS&CW department or the SDC, as the case may be.
8. Scope Management to manage the scope and changes through a formal management and approval process.
9. Risk Management to identify and manage the risks that can hinder the project progress.

The Solution Provider shall work closely with the FS&CW department to update and maintain the Project Plan throughout the duration of the engagement. The updating/customisation should take into account the experience during earlier implementation phases. All changes are to be reviewed and approved by the FS&CW department or appointed representatives.

4. Overview of Post Implementation Services

An indicative list of activities and nature of support to be provided is mentioned below:

1. System Administration and Trouble Shooting

- a. Overall monitoring and management of all IT and Non-IT infrastructure deployed by the selected Bidder for the Project including Server Infrastructure at SDC, Departmental locations, networking equipment& connectivity, system software, application, database, and all other services associated with these facilities to ensure service levels, performance and availability requirements as prescribed in the RFP are met.
- b. Repair or replace infrastructure deployed for this Project, either directly or through a third party warranty provider depending on the case.
- c. Replace component due to technical, functional, manufacturing or any other problem with a component of the same make and configuration. In case the component of same make and configuration is not available, the replacement shall conform to standards
- d. Perform system administration tasks such as managing the user access, creating and managing users, taking backups etc.
- e. Performance tuning of the system to ensure adherence to SLAs and performance requirements as indicated in the RFP.

2. Database Administration and Trouble Shooting

- a. Undertake end-to-end management of database on an on-going basis to facilitate smooth functioning and optimum utilization including regular database backup and periodical testing of backup data, conducting configuration review to tune database, maintaining the necessary documentation and managing schemes to database schema, disk space, user roles, and storage.

3. Overall

- a. Undertake preventive maintenance (any maintenance activity that is required before the occurrence of an incident with an attempt to prevent any incidents) and carry out the necessary repairs and replacement of parts wherever needed to keep the performance levels of the hardware and equipment in tune with the requirements of the SLA. Such preventive maintenance shall not be attended during working hours of the GoO, State Departments, unless inevitable and approved by the GoO.

- b. Undertake reactive maintenance (any corrective action, maintenance activity that is required post the occurrence of an incident) that is intended to troubleshoot the system with sufficient teams.
- c. Escalate and co-ordinate with its OEMs for problem resolution wherever required.
- d. The selected Bidder will be required to comply with various policies relating to monitoring and management of infrastructure such as IS Policy, backup and archival policy, system software update policy etc. of the State of Odisha.

4.1 Warranty Support

As part of the warranty services Solution Provider shall provide:

1. Solution Provider shall provide a comprehensive/replacement warranty for two year from the date of Go Live for all equipment in an implementation phase (refer section 3.14) and on-site free AMC for 3 years from the date of expiry of warranty. Solution Provider shall obtain the four year product warranty and five year onsite free service warranty from OEM on all licensed software, computer hardware and peripherals, networking equipment and other equipment for providing warranty support
2. Solution Provider shall procure additional devices amounting to 10% of required no. of devices as a failsafe option. These devices would be used to replace any faulty devices in the FPS.
3. Solution Provider shall provide the comprehensive/replacement manufacturer's warranty and support in respect of proper design, quality and workmanship of all hardware, equipment, accessories etc. covered by the RFP.
4. Solution Provider must warrant all hardware, equipment, accessories, spare parts, software etc. procured and implemented as per this RFP against any manufacturing defects during the warranty period.
5. Solution Provider shall provide the performance warranty in respect of performance of the installed hardware and software to meet the performance requirements and service levels in the RFP.
6. Solution Provider is responsible for sizing and procuring the necessary hardware and software licenses as per the performance requirements provided in the RFP. During the warranty period Solution Provider shall replace or augment or procure higher-level new equipment or additional licenses at no additional cost to the FS&CW department in case the procured hardware or software is not adequate to meet the service levels.
7. Mean Time between Failures (MTBF): If during contract period, any equipment has a hardware failure on four or more occasions in a period of less than three months; it shall be replaced by equivalent or higher-level new equipment by the Solution Provider at no cost to FS&CW department.
8. During the warranty period Solution Provider shall maintain the systems and repair / replace at the installed site, at no charge to FS&CW department, all defective components that are brought to the Solution Provider's notice as per SLA

9. Warranty should not become void, if FS&CW department buys, any other supplemental hardware from a third party and installs it within these machines under intimation to the Solution Provider. However, the warranty will not apply to such supplemental hardware items installed.
10. The Solution Provider shall carry out Preventive Maintenance (PM), including cleaning of interior and exterior, of all hardware and testing for virus, if any, and should maintain proper records at each site for such PM. Failure to carry out such PM will be a breach of warranty and the warranty period will be extended by the period of delay in PM.
11. Solution Provider shall use the antivirus which is available at state. However in case there is a requirement to procure the license for anti-virus, Solution Provider shall in consultation with FS&CW department procure the anti-virus Licenses and maintain the service part.
12. Solution Provider shall monitor warranties to check adherence to preventive and repair maintenance terms and conditions.
13. The Solution Provider shall ensure that the warranty complies with the agreed Technical Standards, Security Requirements, Operating Procedures, and Recovery Procedures.
14. Any component that is reported to be down on a given date should be either fully repaired or replaced by temporary substitute (of equivalent configuration) within the time frame indicated in the Service Level Agreement (SLA).
15. The Solution Provider shall develop and maintain an inventory database to include the registered hardware warranties.

4.2 Annual Technical Support

As part of the ATS services Solution Provider shall provide:

1. Solution Provider shall maintain data regarding entitlement for software upgrades, enhancements, refreshes, replacements and maintenance.
2. If the Operating System or additional copies of Operating System are required to be installed / reinstalled / de-installed, the same should be done as part of ATS.
3. Solution Provider should carry out any requisite adjustments / changes in the configuration for implementing different versions of Application Software.
4. The Solution Provider shall provide from time to time the Updates / Upgrades / New releases /new versions / Patches / Bug fixes of the software, operating systems, etc. as required. The Solution Provider should provide free Updates / Upgrades / New releases /new versions / Patches / Bug fixes of the software and tools to SDA as and when released by OEM.
5. The Solution Provider shall provide software license management and control. Solution Provider shall maintain data regarding entitlement for software upgrades, enhancements, refreshes, replacements, and maintenance.
6. Solution Provider shall have complete manufacturer's technical support for all the licensed software problems and/or questions, technical guidance, defect and non-defect related issues. Solution Provider shall provide a single-point-of-contact for software support and provide licensed software support including but not limited to problem tracking, problem

source identification, problem impact (severity) determination, bypass and recovery support, problem resolution, and management reporting.

4.3 General Requirements

1. The selected Bidder will perform the following asset management functions with respect to the infrastructure deployed at various locations:
 - a. Review physical inventory and maintain stock registers of hardware at all locations covered under this Project. The selected Bidder would maintain stock registers as per format agreed with the FS&CW department.
 - b. Maintain documentation of the hardware assets, maintain asset Information for all Project locations, on parameters to be mutually agreed between the FS&CW department and the selected Bidder, which shall include details like :-
 - c. Product type, model number, version number
 - d. Manufacturer
 - e. Office location
 - f. Maintenance status, etc.
 - g. Update or correct the asset information following any new installations, movement, addition, or change performed by the selected Bidder.
 - h. Produce periodic reports and machine readable files in agreed upon format pertaining to some or all of the asset information.
 - i. Restrict movement of server/equipment/items in or out of SDC or any other location under the Project without prior permission from the department.
2. Warranty and Support
 - a. The selected Bidder shall warrant that the IT Infrastructure supplied to the State of Odisha for this Project shall have no defects arising from design or workmanship or any act or omission of the selected Bidder. The warranty shall remain valid for the Contract period on all the items supplied as per the Contract.
 - b. The selected Bidder shall replace any parts/ components of the IT infrastructure supplied for the Project if the components are defective and during the entire warranty period the selected Bidder shall apply latest upgrades for all the hardware components after appropriate testing. The FS&CW department will not pay any additional costs separately for warranty and the overall IT infrastructure cost quoted by the selected Bidder shall include the same.
 - c. Since the Project aims to reuse the common infrastructure created under SDC, SWAN and CSC Projects, the selected Bidder will also be required to coordinate with SDC, SWAN, CSC teams to ensure that uptime and performance requirements of the RFP are met. However, the selected Bidder shall be held solely responsible for performance and service levels of any infrastructure deployed by the selected Bidder as part of this Contract.

3. Knowledge Transfer

- a. At the end of the contract period, the selected Bidder will be required to provide necessary handholding and transition support to designated staff or any other agency that is selected for maintaining the system post the Contract with the selected Bidder. The handholding support will include but not be limited to, conducting detailed walkthrough and demonstrations for the IT Infrastructure, handing over all relevant documentation, addressing the queries/clarifications of the new agency with respect to the working / performance levels of the infrastructure, conducting training sessions etc.
- b. Knowledge Transfer is an integral part of the scope of work of the selected Bidder. This will have to be done even in case the Contract with the Bidder ends or is terminated before the planned timelines.

Please note that this is only an indicative list. Any other activity, over and above these, as may be deemed necessary by the selected Bidder to meet the service levels and requirements specified in this Contract are also required to be performed by the selected Bidder at no additional cost.

5. Overall Guidelines for Software and Hardware Requirements

5.1 Software Requirements

5.1.1 Device at FPS

Device has to be enclosed within a solid rugged casing to prevent any physical damage to the device. The casing should also ensure that there is no impact on the device or solution e.g. overheating, reduction in signal strength etc.

5.1.2 PoS at Start-up

The PoS is required to perform the following operations each time the device is switched on/re-started/Rebooted

Activity	Software Functionality
System health check	<ul style="list-style-type: none">• Perform “health” check of the device and ensure that all required configurations, peripheral devices, data connectivity and settings are available and ready to use. The PoS should be able to check all mandatory services and give result.• Send “Keep Alive” messages to check the status and performance of connection with external interfaces (servers, SMS Gateways etc.)
Registration with FPS Automation server and MIS server	<ul style="list-style-type: none">• Once the health check is successful the PoS will send its Unique Identifier with the summary of health check to the MIS/Dashboard.• The Unique identifier will also be sent to the FPS Automation server. This will allow the administrators to monitor the status of the PoS (Online or Offline)
Retrieve details of beneficiaries –Home FPS only (sync)	<ul style="list-style-type: none">• The PoS shall retrieve the details like RC number, members attached to the RC, total entitlement per grain type, total unused entitlement, Aadhaar number, registered mobile numbers, Nominee/Proxy members etc. For all the beneficiaries that are attached to this FPS. These details will be stored in the memory of the PoS

- The solution (H/W+ enhanced Software) should be created in such a way that it behaves as a “plug and play” device. There should be no requirement of configuration etc. at the site of installation (FPS)
- The system should be designed in such a way that the software upgrade/configuration changes etc. can be batch uploaded and applied in a single attempt on all online PoS.
- Authorized personnel should be able to login into the PoS via remote login mechanism like FTP, SSH etc.
- Each PoS should have a unique identifier that it will upload to the server as soon as it comes online
- The solution should have option to enable/disable error logs on PoS module, with capability of updating these logs to FPS automation server to analyze the issue
- All transactions will be stored in the memory of the PoS (this can be a cyclic buffer) and the FPS owner should be able to print a consolidated list at the end of each day or for defined duration
- PoS should take backup of its data at regular intervals
- All necessary validity/consistency checks should be incorporated e.g. PoS should allow only numbers to be entered, the quantity entered should be less than or equal to the unused entitlement etc.
- All the redundancy will be in auto fail over mode so that if primary component fails, secondary component automatically takes over.
- Client side software should conform to the minimum hardware specification mentioned in section Scope of Services. However higher configuration or different OEMs configuration may be accepted at access devices of the department.
- PoS client application should run on standard operating system Linux/Android/ ensuring integration across modules
- Client software should support all connectivity options and shall support services provided by various telecom providers (BSNL, Tata Indicom, Idea, Reliance, Airtel, Tata Docomo, Aircel, Vodafone etc.)
- Client software should be available in Odiya and English
- The turnaround time for each card holder should be less than 50 seconds
- The software will follow standard Software Development Life Cycle (SDLC) processes for development of software, conduct all related testing such as unit testing, functional testing, integration, load, performance testing etc., before proposing for User Acceptance Test (UAT)
- Client software will be updated in a batch upload triggered manually in the PoS from the Central Server based on the changes and enhancements given as per the requirements
- The PoS should retain a backup of all data and settings before booting the new software
- The PoS should have restricted access for installation or use of any other application other than applications required for FPS automation

5.1.3 Best Finger Detection (BFD)

When authenticating a resident using any single finger, the accuracy or the chances of being matched would be different due to differences in quality across all his/her fingers. This variation may also be present due to the manner in which the resident normally interacts with a typical fingerprint scanner and the different fingers may inherently have different amount of identifying information depending on the size of the finger and the commonness of the pattern it carries. We shall refer to this finger with best accuracy as the best finger. The BFD module on the PoS should do the following:

1. Capture one finger at a time.
 - a. One at a time, capture all fingers.
 - b. During the capture of fingerprints by the BFD application, all captured fingerprint images should be subjected to image check to measure NFIQ (NIST Fingerprint Measure Quality)
2. Ensure resident and operator clearly knows which finger is being scanned.
3. When scanning different finger, local match should be done to ensure resident is not placing finger that is already scanned again by mistake.
4. Also, when scanning same finger (for capturing best attempt), ensure they are matched locally to ensure same finger is being placed.
5. Up to three attempts should be carried out so that good quality images are captured for each finger. Templates extracted from best quality image of three attempts should be sent to Aadhaar server for BFD purposes.
6. Application should invoke the BFD API through AUA server (similar to authentication). Based on the response, a printed receipt should be provided to the resident indicating the ranking for each finger.
7. This information should be sent to the FPS Automation server and updated against the respective beneficiary name and Aadhaar no. and available for next transaction

5.2 Hardware Requirements (At FPS)

PoS

Specification	Minimum Requirement
Processor	Secure Processor capable of performing at least 10 transactions per minute in laboratory environment (Each Transaction consists of <ol style="list-style-type: none">1. Perform Biometric Authentication of the PDS beneficiary with UIDAI server2. Generate Encrypted pay load for maximal Sales data.3. Store Encrypted transaction data in the local storage4. Transmit the Encrypted transaction sales data to PDS server5. Remove the locally stored sales data only after getting acknowledgement from the server)

Specification	Minimum Requirement
OS	Operating system should be Linux (Latest Stable Kernel)/Android 4.0 or higher/Windows. Device operating system which supports HTML5 based web browser and CSS 3
Memory	256MB or Higher RAM and 1GB or higher Flash memory
Expansion slot	Micro SD Slot to support SD card with minimum 8 GB high speed SD Card.
Communication	Should support GSM Network with GPRS, Wi-Fi, Ethernet, PSTN (Integrated ports)
Interface	USB 2.0 or higher (full speed), the USB port should support device battery charging through any other USB charging source. Additional RS-232port may be optional. At least one free USB port shall be available after setting up the entire solution including peripheral devices
Display	2.75 inch or higher color TFT Display supporting QVGA (320 x240) or better resolution or scratch resistant multi point capacitive touch screen with minimum WSVGA resolution (1024 X 600)
Key Pad	Hard (Optional) QWERTY keypad
Battery	Swappable & Dry/Rechargeable 2600mAH or higher, Li-ion or Li Polymer battery capable of providing minimum 6 hours of operation while all function of device active
Power Adaptor	Power Adaptor with surge protection and operating range 100 to 240V, 50Hz. AC input.
SIM & SAM slot	One or more GSM SIM slot and dual SAM slots for software up-gradation in device.
Printer	2" or higher Integrated printer (Preferably Thermal Printer)
Audio	Good quality Speaker with 1W or higher output for announcements. (Optional)
Finger Print Scanner	Integrated Finger Print module shall be STQC certified
IRIS Scanner (Optional)	STQC certified IRIS scanner with possibility of USB plug and Play
Bar Code Reader	Integrated Camera barcode reader with minimum 5Mp auto focus camera or External bar code reader capable of reading 1D line barcode and QR codes
Status Indications	Status indicator provides ease of use, Indicators for connectivity (presence/absence), signal strength, battery status etc.,
Other Accessories	Durable Carry Case and user manual etc.
SDK	Appropriate SDK need to be provided along with the devices
Terminal Management	Device should be remotely manageable in secured mode
Environment, Health & Safety Durability, Humidity,	Dry heat test- Operating ($50 \pm 2^{\circ}\text{C}$ for 2 hrs.) Cold test – Operating ($0 \pm 3^{\circ}\text{C}$ for 2 hrs.) Dry heat test ($55 \pm 2^{\circ}\text{C}$ for 2 hrs.) Damp heat Cyclic (40°C for (12+12 hrs.)), No. of cycles : 2 Cold Test ($-10 \pm 3^{\circ}\text{C}$ for 2 hrs.)

Specification	Minimum Requirement
EMI/EMC Compliance	Drop/Free Fall Test, in unpacked, switched off and normal handling conditions (Height : 100mm, Total no. of falls : 2) Vibration Test should be in packed condition, switched off conditions (10-150Hz, 0.15mm/2g, 10 sweep, cycles/axes) Bump test should be in packed condition, switched off condition.(1000Bumps, 40g, in vertical position)
Add-On Antenna	May be provisioned for the PoS which will be used in remote locations and hilly areas for better signal reception and seamless transactions
Warranty	Suitable Warranty support

Please note that the Solution Provider shall procure additional devices amounting to 10% of required no. of devices as a failsafe option. These devices would be used to replace any faulty devices in the FPS and would not be billed to the department.

Server

Vendor shall be responsible for providing the minimum server specifications required for meeting the performance requirements of the solution, FS&CW department would be providing the required servers.

Technical specifications for server should ensure following requirements:

- The server processor speed is adequate to allow the hosted applications and programs to respond within the stipulated time (as mentioned in software functionality sections)
- The server is able to support the OS used in the machines across the entire PDS thus ensuring integration

5.3 General guidelines

- The Solution should adhere to the NIC guidelines and standards regarding computerization of PDS. The format of the database (including the fields of information in the database) should follow NIC directives so that the information can be seamlessly uploaded to the NIC database (using web services or other modes as specified by NIC). For further details on NIC specified formats refer to <http://www.pdsportal.nic.in/>
- The digitized database should have provision to feed updated information to the transparency portal, and other application as required in E2E computerization of PDS
- As ensuring security of data is paramount, the digitized database must adhere to security standards mentioned in [Annexure 8.3](#)
- Provision of Disaster recovery and database backup mechanism must be in place

- Client application should run on standard operating system like Linux, Windows or any other standard OS, ensuring integration across modules
- Successful bidder shall follow standard Software Development Life Cycle (SDLC) processes for development of software, conduct all related testing such as unit testing, volume testing, destructive testing etc., before proposing for User Acceptance Test (UAT)
- Once UAT is successful (at pilot locations), department will decide Go-Live date and ask the successful bidder to roll out accepted software, at all locations
- The client software along with the source code shall be handed over to the department. Department will have full ownership and IPR of the software for any future roll out/reuse/customization
- Should put in place support team; provide maintenance support for 5 years from the Go-Live date. The scope of software support services includes preventive and corrective comprehensive maintenance and cover installation, on-site diagnosis and resolution of software faults in response to reported problems. The Solution Provider will also resolve all the software problems detected during routine operational support activities and will ensure that the problems are resolved by repair or appropriate replacement as and when required.

6. Instructions to the Bidders

6.1 General Instructions

While every effort has been made to provide comprehensive and accurate background information, requirements and specifications, Bidders must form their own conclusions about the solution needed to meet the requirements. Bidders and recipients of this RFP may wish to consult their own legal advisers in relation to this RFP.

All information supplied by bidders may be treated as contractually binding on the bidders, on successful award of the assignment by the FS&CW Department, Government of Odisha on the basis of this RFP.

No commitment of any kind, contractual or otherwise shall exist unless and until a formal written contract has been executed by or on behalf of the FS&CW Department, Government of Odisha. Any notification of preferred bidder status by the FS&CW Department shall not give rise to any enforceable rights by the Bidder. The FS&CW Department may cancel this public procurement at any time prior to a formal written contract being executed by or on behalf of the FS&CW.

This RFP supersedes and replaces any previous public documentation & communications, and Bidders should place no reliance on such communications.

6.2 Compliant Proposals / Completeness of Response

- Bidders are advised to study all instructions, forms, terms, requirements and other information in the RFP documents carefully. Submission of the bid shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications.
- Failure to comply with the requirements of this paragraph may render the Proposal non-compliant and the Proposal may be rejected.
- Bidders must:
 - Include all documentation specified in this RFP
 - Follow the format of this RFP and respond to each element in the order as set out in this RFP
 - Comply with all requirements as set out within this RFP.

6.3 Pre-Bid Conference & Clarifications

6.3.1 Pre-bid Conference

- FS&CW department or OSCSC shall hold a pre-bid meeting with the prospective bidders on 3 May 2016 at 1600 hrs in OSCSC Conference Hall.
- The Bidders will have to ensure that their queries for Pre-Bid meeting should reach to
Managing Director
Odisha State Civil Supplies Corporation Ltd. (OSCSC)
Head Office
C/2 Nayapalli, Bhubaneswar - 751012
EPBX - (0674) 2395391/2394956
Fax - (0674) 2395291/2390199

By e-mail on or before 2 May 2016 1700 hrs

The queries should necessarily be submitted in the word or excel file in the following format:

Sl. No.	RFP Document Reference(s) (Section & Page Number(s))	Content of RFP requiring Clarification(s)	Points of clarification
1.			
2.			

- FS&CW department or OSCSC shall not be responsible for ensuring that the bidders' queries have been received by them. Any requests for clarifications post the indicated date and time may not be entertained by the Nodal Agency.

6.3.2 Responses to Pre-Bid Queries and Issue of Corrigendum/Addendum (if any)

- The Nodal Officer notified by the FS&CW department or OSCSC will endeavor to provide timely response to all queries. However, FS&CW/OSCSC department makes neither representation nor warranty as to the completeness or accuracy of any response made in good faith, nor does FS&CW department or OSCSC undertake to answer all the queries that have been posed by the bidders. At any time prior to the last date for receipt of bids, FS&CW department or OSCSC may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP Document by a corrigendum or addendum.

- The Corrigendum/Addendum (if any) & clarifications to the queries from all bidders will be posted on the website www.foododisha.in, www.oscsc.in, www.odisha.gov.in, www.tenders.gov.in .
- Any such corrigendum/Addendum shall be deemed to be incorporated into this RFP.
- The bidders while submitting the proposal should submit duly signed copy of corrigendum/addendum along with it.
- In order to provide prospective Bidders reasonable time for taking the corrigendum/addendum into account, FS&CW department or OSCSC may, at its discretion, extend the last date for the receipt of Proposals. Key Requirements of the Bid

6.4 Key Requirements of the Bid

6.4.1 Right to Terminate the Process

- FS&CW department or OSCSC may terminate the RFP process at any time and without assigning any reason. FS&CW/OSCSC department makes no commitments, express or implied, that this process will result in a business transaction with anyone.
- This RFP does not constitute an offer by FS&CW department or OSCSC. The bidder's participation in this process may result FS&CW department or OSCSC selecting the bidder to engage towards execution of the contract.

6.4.2 RFP Document Fees

RFP document can be downloaded from the website www.foododisha.in, www.oscsc.in, www.odisha.gov.in, www.tenders.gov.in . The bidders are required to submit the document Fee (non-refundable) of Rs.10,000/- (Rupees Ten Thousand Only) by Demand Draft in favour of “**Odisha State Civil Supplies Corporation Ltd. (OSCSC)** “ and payable at Bhubaneswar from any of the Scheduled Commercial Bank/Nationalised Bank along with the Proposal. Proposals received without or with inadequate RFP Document fees shall be rejected.

6.4.3 Earnest Money Deposit (EMD)

- Bidders shall submit, along with their Bids, EMD of Rs. 40, 00,000 (Forty Lakhs only), in the form of a Demand Draft issued by any scheduled commercial bank in favour of Odisha State Civil Supplies Corporation Ltd. (OSCSC), payable at Bhubaneswar, and should be valid for 90 days from the due date of the RFP.
- EMD of all unsuccessful bidders would be refunded by FS&CW department or OSCSC within 1 month of declaration of the successful bidder. The EMD for the amount mentioned above, of successful bidder would be returned upon submission of Performance Bank Guarantee.

- The EMD amount is interest free and will be refundable to the unsuccessful bidders without any accrued interest on it.
- The bid / proposal submitted without EMD, mentioned above, will be summarily rejected.
- The EMD may be forfeited:
 - If a bidder withdraws its bid during the period of bid validity.
 - In case of a successful bidder, if the bidder fails to sign the contract in accordance with this RFP.

6.5 Submission of Proposals

The bidders should submit their responses as per the format given in this RFP in the following manner

1. **Response to Pre-Qualification Criterion** : (1 Original + 1 Copy + 1 non editable CD) in first envelope
2. **Technical Proposal** - (1 Original + 1 Copy + 1 non editable CD) in second envelope
3. **Commercial Proposal** - (1 Original) in third envelope

Please submit a documented Technical Proposal which should contain the basic requirements:

- An outline of the approach which the firm intends to adopt for creation of the solution, including a detailed service(s) description.
- Time required to complete the task.
- A detailed statement of the way in which the work would be undertaken showing, inter alia, the scheduling of the personnel services during the period of contract
- An indication of the type of staff to be employed, their academic backgrounds, practical experience and the functions to be assigned to them
- A statement of the experience of the firm in work of this type including the year/s in which it was undertaken and the clients it is presently serving.

Note: Any financial information contained in the technical proposal will invalidate the proposal.

The proposal should be according to the format mentioned in [Annexure 8.6](#). When preparing the proposal you should keep in mind:

- Your offer should remain valid for acceptance for 180 days from the last date of submission of RFP.
- The proposals shall address all the requirement of this tender and must be submitted in the English language.
- The Response to Pre-Qualification criterion, Technical Proposal and Commercial Proposal (As mentioned in previous paragraph) should be covered in separate sealed envelopes super-scribing "Pre-Qualification Proposal", "Technical Proposal" and "Commercial

Proposal" respectively. Each copy of each bid should also be marked as "Original" OR "Copy" as the case may be.

- Please Note that Prices should not be indicated in the Pre-Qualification Proposal or Technical Proposal but should only be indicated in the Commercial Proposal.
- The three envelopes containing copies of Pre-qualification Proposal, Technical Proposal and Commercial Proposal should be put in another single sealed envelope clearly marked "Response to RFP for FPS transformation for end to end computerized PDS solution in Odisha- < RFP Reference Number > and the wordings "DO NOT OPEN BEFORE < Date and Time >"
- The outer envelope thus prepared should also indicate clearly the name, address, telephone number, E-mail ID and fax number of the bidder to enable the Bid to be returned unopened in case it is declared "Late".
- All the pages of the proposal must be sequentially numbered and must contain the list of contents with page numbers. Any deficiency in the documentation may result in the rejection of the Bid.
- The original proposal/bid shall be prepared in indelible ink. It shall contain no interlineations or overwriting, except as necessary to correct errors made by the bidder itself. Any such corrections must be initialled by the person (or persons) who sign(s) the proposals.
- All pages of the bid including the duplicate copies, shall be initialled and stamped by the person or persons who sign the bid.
- In case of any discrepancy observed by FS&CW/OSCSC Department in the contents of the submitted original paper bid documents with respective copies, the information furnished on original paper bid document will prevail over others.
- Bidder must ensure that the information furnished by him in respective CDs is identical to that submitted by him in the original paper bid document. In case of any discrepancy observed by FS&CW/OSCSC Department in the contents of the CDs and original paper bid documents, the information furnished on original paper bid document will prevail over the soft copy.

6.6 Authentication of Bids

A Proposal should be accompanied by a power-of-attorney in the name of the signatory of the Proposal.

6.7 Preparation and Submission of Proposal

6.7.1 Proposal Preparation Costs

A bidder can submit one proposal at a time. Bidder submitting more than one proposal shall be rejected. The bidder shall be responsible for all costs incurred in connection with

participation in the RFP process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any additional information required by FS&CW/OSCSC department to facilitate the evaluation process, and in negotiating a definitive contract or all such activities related to the bid process. FS&CW/OSCSC department will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

6.7.2 Language

The Proposal should be filled by the Bidder in English language only. If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the Bidders. For purposes of interpretation of the Proposal, the English translation shall govern.

6.7.3 Venue & Deadline for Submission of Proposals

Proposals, in its complete form in all respects as specified in the RFP, must be submitted to FS&CW/OSCSC department at the address specified below. All submissions must be through speed-post or courier. GoO would not be responsible for delays caused by the speed-post/courier agency.

Addressed To	Managing Director
Name	Odisha State Civil Supplies Corporation Ltd. (OSCSC)
Address	Head Office C/2 Nayapalli , Bhubaneswar - 751012
Telephone	(0674) 2395391/2394956
Fax Nos.	(0674) 2395291/2390199
Email ids	mdoscsc@gmail.com
Last Date & Time of Submission	19 May 2016, 1400 hrs

6.7.4 Late Bids

- Bids received after the due date and the specified time (including the extended period if any) for any reason whatsoever, shall not be entertained and shall be returned unopened.
- The bids submitted by telex/telegram/fax/e-mail etc. shall not be considered. No correspondence will be entertained on this matter.

- FS&CW department shall not be responsible for any postal delay or non-receipt/ non-delivery of the documents. No further correspondence on the subject will be entertained.
- FS&CW department reserves the right to modify and amend any of the above-stipulated condition/criterion depending upon project priorities vis-à-vis urgent commitments.

6.8 Evaluation Process

- FS&CW Department will constitute a Proposal Evaluation Committee to evaluate the responses of the bidders
- The Proposal Evaluation Committee constituted by the FS&CW Department will evaluate the responses to the RFP and all supporting documents / documentary evidence. Inability to submit requisite supporting documents / documentary evidence, may lead to rejection.
- The decision of the Proposal Evaluation Committee in the evaluation of responses to the RFP shall be final. No correspondence will be entertained outside the process of negotiation/ discussion with the Committee.
- The Proposal Evaluation Committee may ask for meetings with the Bidders to seek clarifications on their proposals
- The Proposal Evaluation Committee reserves the right to reject any or all proposals on the basis of any deviations.
- Each of the responses shall be evaluated as per the criteria and requirements specified in this RFP.

6.8.1 Tender Opening

- The proposals submitted up to 19 May 2016, 1400 hrs. will be opened at 1600 hrs. on 19 May 2016 by Managing Director, OSCSC Ltd. Or any other officer authorized by FS&CW/OSCSC department, in the presence of such of those Bidders or their representatives who may be present at the time of opening.
- The representatives of the bidders are advised to carry the identity card or a letter of authority from the tendering firms to identify their bona fides for attending the opening of the proposal.

6.8.2 Tender Validity

The offer submitted by the Bidders should be valid for minimum period of **180** days from the last date of submission of bid.

6.8.3 Tender Evaluation

- Initial Bid scrutiny will be held and incomplete details as given below will be treated as non-responsive, if Proposals :

- Are not submitted in as specified in the RFP document
 - Received without the Letter of Authorization (Power of Attorney)
 - Are found with suppression of details
 - Have incomplete information, subjective, conditional offers and partial offers submitted
 - Are submitted without the documents requested in the checklist
 - Have non-compliance of any of the clauses stipulated in the RFP
 - Have lesser validity period
- All responsive Bids will be considered for further processing as below.
 - First the Pre-Qualification Proposal will be evaluated and only those bidders who qualify the requirements will be eligible for next set of evaluations. Technical Proposal and Commercial Proposal of Bidders who do not meet the Pre-Qualification criteria will be returned without opening.
 - The technical score of all the bidders would be calculated as per the criteria mentioned below. All the bidders who achieve at least 80 % in the technical evaluation would be eligible for Financial Bid opening and comparison. In case number of bidders scoring 80% or above are less than 3, then top 3 scoring bidders with score not less than 60% would be considered for Financial Bid opening and comparison.
 - Lowest bid among financial bid will be awarded the contract after ascertaining that the bid covers all the services required by the GoO.
Note: The panel may ascertain the L1 after rationalizing the financial bids in case the quantities are different
 - Proposals of Companies would be evaluated as per Technical Evaluation Criteria ([Section 6.11](#)) and Commercial evaluation criteria ([Section 6.12](#)). Agencies / firms should clearly indicate, giving explicit supporting documentary evidence, with respect to the above, in absence of which their proposals will be rejected summarily at the qualification stage itself.

6.9 Site Visit (s)

The bidder may wish to visit and examine the site (s) of the project and obtain for itself, at its own responsibility and risk, all information that may be necessary for preparing the bid and entering into the contract. The cost of visiting the site (s) shall be borne by the bidder. No site visit (s) shall be scheduled after the prescribed date for submission of bids.

6.10 Prequalification Evaluation

The evaluation committee will carry out a detailed evaluation of only those bids which satisfy the pre-qualification criteria.

Sr. No.	Qualification Criteria	Details	Documents/Information to be provided in the submitted proposal
1	Legal Entity	a. Company should be registered under the Companies Act 1956 and must have been in operation for a period of at least 3 (three) years as of March 31, 2016. b. Registered with the Service Tax Authorities	a) Certificate of Incorporation/Registration Certificate b) Service Tax Registration certificate c) PAN Card d) IT return for the previous three financial year, EPF, up to date VAT In case of Consortium, each such documents as detailed for each consortium partner shall be attached with the bid.
2	Average Net Worth	The average Net Worth for the past three years of the responding firm must be not less than Rs. 50 crore	Chartered Accountant Certificate for Net worth
3	Consortiums	Companies are allowed to bid as a consortium. Outsourcing and sub-contracting will not be allowed without prior permission of the FS&CW department. The pre-bid qualification criteria would be applicable to the prime bidder of the consortium; the consortium partners of the prime bidder would need to satisfy criteria 1,5,8 and 9 (as mentioned in this table)	Notarized agreement on an Rs 500 stamp paper. <i>(All details as mentioned in this section should be provided for the individual partners in the consortium as well.)</i>

Sr. No.	Qualification Criteria	Details	Documents/Information to be provided in the submitted proposal
4	Annual Turnover in Software development and deployment (including implementation)	The firm/ company must have minimum average annual turnover of Rs. 60 (Sixty) crores over the preceding three financial years as revealed by audited accounts, as on March 31, 2016.	Extracts from the audited Balance sheet and Profit & Loss; OR Certificate from the statutory auditor
5	Tax clearance	The bidder must have cleared up-to-date VAT, Service Tax & EPF	Documents declaring VAT, Service Tax & EPF payments
6	Technical Capability	<p>The bidder must have successfully completed (including end-to-end execution) at least the following numbers of Software Systems Development, hardware deployment, Implementation and maintenance (Government/Non-government) (preferably e-Governance Projects) engagement(s) or of value specified herein :</p> <ul style="list-style-type: none"> • <u>One e-Governance project</u> not less than the amount equal to Rs. 10 crores (Rupees ten crores); <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> • <u>Two e-Governance projects, each</u> not less than the amount equal to Rs. 5 crores (Rupees five crores); 	Work Order & Work Completion Certificates from the clients (for Project Citation Format refer to Annexure 8.6.4)

Sr. No.	Qualification Criteria	Details	Documents/Information to be provided in the submitted proposal
		<p>OR</p> <ul style="list-style-type: none"> • <u>Three e-Governance projects</u>, each not less than the amount equal to Rs. 3.5 crore (Rupees three and half crore); <p>In last three (3) financial years ending March 31, 2016.</p> <p>‘E-Governance projects’ is defined as design, development, implementation and maintenance support (completed) of IT system for Government Dept. /Govt. Agency in India.</p>	
7	Manpower strength	<p>The responding firm must have at least a 100 member IT Staff of technically qualified personnel in the domain of software development and implementation on its roll with minimum qualification of B.E/ MCA or higher having 3 or more years of IT experience as on March 31, 2016 on its payroll.</p>	<p>a) Self-Certification by the authorized signatory with clear declaration of staff. (year wise, level/designation wise, qualification, experience, IT skills)</p> <p>b) PF Register showing the number of subscribers along with the deposit of challan as proof.</p>
8	Blacklisting	<p>The responding firm shall not be under a declaration of ineligibility for corrupt or fraudulent practices.</p>	<p>Court affidavit by the designated official as per the format of the responding firm or Annexure 8.6.10</p>

Sr. No.	Qualification Criteria	Details	Documents/Information to be provided in the submitted proposal
9	Performance	The bidder must not have any record of poor performance or abandoned work and should not have been blacklisted by any State government or Government of India. The applicants should be required to submit an affidavit certifying this. If this is later found to be false, the application fees and any performance guarantees should be forfeited.	Affidavit of declaration
10	Fees	The responding firm / agency a. Should have made a payment of Rs. 10000 (Rupees Ten Thousand only) for the RFP document b. Should have submitted a EMD of Rs. 40,00,000 (Rupees forty lakh only) in shape of Demand Draft from any scheduled commercial Bank	a) Demand Draft for Rs. 10000 b) Demand Draft for Rs.40,00,000
11	Certification	The bidder must possess SEI -CMMi Level – 3 and ISO 20000 Certification by the date of publication of this RFP.	Copy of Relevant Certificate which is valid on date of submission.
12	Device certification	The devices should be STQC certified before submission	Copy of relevant certification which is valid on date of submission
13	Local presence in Odisha/Bhubaneswar	The bidder company should have local presence at Bhubaneswar. In case, not, an undertaking need to be given for setting up a lisioning office within 15 days of service of Lol	

6.10.1 Consortium criteria

The consortium shall be formed under an agreement on a non-judicial stamp paper of Rupees One hundred, duly signed by all the partners. The agreement in original shall be submitted with the bid. One of the partners of the consortium will be designated as “Prime Bidder” and shall be finally responsible for implementation and provisioning of the services as per the requirements of the RFP. Agreement document should clearly state the roles and responsibilities of each partner for the successful implementation of the said project.

However, if any member is deleted or withdrawn after submission of bid, FS&CW department reserves the right to disqualify the bid or consider any change proposed by the prime bidder.

In case of consortium, the agreement shall be exclusively for this project and the prime bidder shall be responsible in case of failure by any partner.

The bidder/ each partner of the consortium shall disclose details pertaining to all contingent liabilities, claims, disputes, matters in appeal & in court and any pending litigation against the bidder or member of the Consortium.

6.11 Technical Evaluation

The proposals submitted by the bidders will be evaluated on the broad parameters as described in the table below. All the bidders who achieve at least 80 % in the technical evaluation would be eligible for Financial Bid opening and comparison. In case number of bidders scoring 80% or above are less than 3, then top 3 scoring bidders with score not less than 60% would be considered for Financial Bid opening and comparison.

The requirements of all the modules as described in the RFP should be met by the solution submitted by the vendor. The solution must also address all the possible complications that may arise during implementation.

Sl. No.	Criteria	Description	Weightage
1	Relevant Experience (for Project Citation Format refer to Annexure 8.6.4)	The bidder must provide details on past projects he has undertaken in a similar space. Different weights will be assigned to different levels of experience based on number of projects, scale of project, status of project and also the type of project	15%
2	Proposed Solution Design and Implementation Plan	The bidder must invest effort in the solution design to ensure that there are no problems with the design once it is rolled out. The bidder must also create an implementation plan that is feasible and meets the timelines set by GoO for PDS transformation project implementation.	30%
3	Proposed Implementation Team	Bid will be evaluated on the strength of the implementation team that is proposed by the bidder	15%
4	Demo of Solution as per RFP requirements and display of H/W capabilities	Bidders will be evaluated on ability to show demonstration of their existing solutions and mapping with the requirements as per the RFP	40%
	Total		100%

Detailed breakups of each of the criteria on essential components of the technical bid are provided below:

Criteria	Sl. No.	Sub-Criteria	Description	Maximum Marks
Relevant Experience	1	No. of projects in developing/ Handling/ installing biometric enabled devices/Smart Card solutions/PoS device installation.	<p>No. of projects in developing/ Handling/ installing biometric enabled devices/ PoS device installation in last 3 financial years as on March 31st 2016.</p> <p>a) 3 projects (each of contract value greater than Rs.20 crore above) or</p> <p>b) 2 Projects (each of contract value greater than Rs.25 crore above) or</p> <p>c) 1 Project (contract value above Rs.50 Crore)</p> <p>All bidders complying with any of the conditions above shall be awarded full marks, no marks to bidders not complying with any of the conditions above.</p>	15
	2	Average annual turnover from Software System Development and Implementation	<p>Average annual turnover from Software System Development and/or Implementation in last 5 financial years, as on March 31, 2016. (Turnover in Rs. Crores)</p> <p>60 Cores : 10 Marks</p> <p>Greater than Rs. 60 crores and less than 100 Crore : 15 marks</p> <p>Greater than Rs. 100 crores : 25 marks</p>	25
	3	Status of projects	<p>Evaluators will evaluate information on the status of the project and the client's report to get the previous client's perspective on the bidder's performance. A completion certificate from the client will be required to be provided for each completed project and a letter from the client on their official letterhead will required to be provided with details on the current status of implementation for ongoing projects. Client references will also be required and checked if the committee feels the need to confirm the details of letters from the bidder's clients</p>	20

Criteria	Sl. No.	Sub-Criteria	Description	Maximum Marks
	4	Project relevance and specificity	<p>Experience in e-governance projects in PDS or other social sector projects as a whole would be given preference over other e-governance projects. The work order should have been issued within the last 5 years, as on 31st March 2016.</p> <ul style="list-style-type: none"> - All bidders who have done PDS reform projects or other social sector projects (either 2 of 5 crore each or 1 of 10 crore) will be awarded 20 marks - All bidders who have done e-governance projects (either 2 of 5 crore each or 1 of 10 crore) will be awarded 15 marks -All bidders who have done PDS project/projects between 1 Crore to 2 crore will be awarded 10 marks for each project (maximum 20 marks). -All bidders who have done e-governance project/projects 1 Crore to 2 crore will be awarded 5 marks for each project (maximum 20 marks). 	20
	5	Geographical scale of the project	<p>Number of Districts of a state of India covered in one project which is successfully completed or ongoing. The work order should have been issued within the last 5 years, as on 31st March 2016.</p> <p>When the No. is:</p> <ul style="list-style-type: none"> less than 2 Districts:0 marks 2 Districts: 5 marks 4Districts: 10 marks 6Districts: 15 marks equal to or more than 10districts: 20 marks <p>OR</p> <p>All the districts of 1 state of India: 20 marks</p>	20
Total				100

Criteria	Sl. No.	Sub-Criteria	Description	Maximum Marks
Proposed Solution Design and Implementation Plan (Quantitative Analysis)	1	Innovation in solution design	<p>The evaluators will provide marks for innovative solutions that will result in appreciable improvement in one or more of the following - cost for implementation, time taken for completion of the project, effectiveness of the solution pre-empting and addressing complications during scaling up, sustainability of the implemented solution.</p> <p>The solution should be able to support flexibility and innovations based on substantial understanding of the PDS domain through learnings from deployments, Field trails and pilots.</p>	50
	2	System design and implementation plan	<ul style="list-style-type: none"> • Timeline for phased implementation • Contingency measures proposed • Training plan and schedule • Hardware and software support structure • Understanding of the challenges in PDS <p>If a bidder's estimated time for completion of activities is less than 75% of internally estimated timelines, in the absence of significant innovation, it will be penalized during the scoring for this component.</p>	50
Total				100
Proposed Implementation Team	1	Number of members in the team	In the absence of any significant innovations, the bidder must provide at least the internal manpower estimate for each position.	15
	2	Qualifications of key personnel	The project manager and the technical expert are key personnel of the team. The qualifications of the people proposed for these positions and the percentage of their time that they will commit to the project will be closely evaluated. The basis of evaluation will include past experience in similar projects – both software development and large scale implementations, past experience in a similar position, past experience	60

Criteria	Sl. No.	Sub-Criteria	Description	Maximum Marks
			of working with the government, track record and educational qualifications.	
	3	Team structure	The bidder will also be evaluated on the team structure. It is recommended that the project manager and technical expert are assisted by functional managers in overseeing the implementation. Each manager should control a team which is overlooking the on-ground activities on a daily basis. In case a consortium of solution providers has filed an application together, the consortium dynamics outlining roles and responsibilities for each bidder should be clearly described. Any change in Project Manager and the Technical Expert will have to be approved by the FS&CW department. The marks would be awarded on their competence for the assignment with respect to the education, experience of the candidate in the specific sector, field and subject directly relevant to the assignment and the proposed solution.	25
				100
Demo of Solution as Per RFP requirements (Quantitative Analysis)	1	POS Functionality, Backend Application (server side)	The bidder shall demonstrate the POS front end and backend application as per the RFP requirements, marks would be allocated based on available functionality as per RFP on Technical evaluation day. Demo of the existing POS solution to be provided during technical evaluation	35
	2	Proposed PoS device solution	Evaluation would be done based on the proposed integrated form factor for deployment: <ul style="list-style-type: none"> Compliance with Hardware specifications: 10 Marks (Max) Single compact solution with inbuilt Barcode scanner, Biometric scanner, Thermal printer in single casing: 10 Marks, no marks for any other combination 	30

Criteria	Sl. No.	Sub-Criteria	Description	Maximum Marks
			<ul style="list-style-type: none"> Screen size greater than 5 Inch : 10 Marks, no marks for lower screen size 	
	3	MIS Support and reports available	MIS requirements as per RFP, marks would allocated based on available reports matching to RFP requirements on Technical evaluation day. Demo of MIS/Dashboard to be provided during technical evaluation	30
	4	Innovation	Vendor is expected to come up with innovative solution to improve functionalities and mitigate the foreseen risks	5
				100

6.12 Financial evaluation

All bid prices should be inclusive of all taxes and levies. The benchmark for the commercial evaluation will be a "minimum commercially feasible bid". This minimum commercially feasible bid will be calculated on the basis of the submitted bids and internal cost estimates for the project (Minimum commercially feasible bid is the lower of the internal cost estimate and the median of all the bids that meet the criteria for opening of commercial bids outlined in the technical bid section). Any bid below this minimum bid will be disqualified. This process is in place to encourage the bidders to submit realistic bids as otherwise there will remain a risk of the bid being awarded to a bidder who is then unable/ uninterested in completing the work due to inadequate financial incentives.

The commercial bids submitted as per [Annexure 8.6.7](#) will be checked against following:

- Quotation should be made for 8,850 devices, GoO would be placing orders in batches, where quantity would be specified as per the requirement, costing for all ordered devices would be based on quotation as per the financial bid of this RFP
- GoO may place an additional order of 10,000 devices within 12 months of duration after successful rollout in first phase as defined in section 3.14 of this RFP, these devices should be available at the same quotation of this RFP
- Only fixed price financial bids indicating total price for all the deliverables and services specified in the RFP will be considered
- The payment shall be done based on the prevalent tax rates at time of payment & TDS shall be deducted at appropriate percentages as per IT Act.
- Any conditional bid will not be accepted & No advance payment shall be paid
- Lowest bid among financial bid will win the bid.
- In case of a tie the bidder with higher technical score will be awarded the contract.

6.13 Award of contract

6.13.1 Right to Accept Any Proposal and To Reject Any or All Proposal(s)

GoO reserves the right to accept or reject any proposal, and to annul the tendering process / public procurement process and reject all proposals at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for GoO action.

6.13.2 Notification of Award

GoO will notify the successful bidder within 180 days of receiving proposals in writing or by fax or email. In case the tendering process / public procurement process has not been completed within the stipulated period, GoO, may request the bidders to extend the validity period of the bid beyond 180 days.

The notification of award will constitute the formation of the contract. Upon the successful bidder's furnishing of Performance Bank Guarantee (Refer to 6.13.4), GoO will notify each unsuccessful bidder and return their EMD.

6.13.3 Contract Finalization and Award

GoO shall reserve the right to negotiate with the bidder(s) whose proposal has been most responsive. On this basis the draft contract agreement would be finalized for award & signing.

GoO may also reduce or increase the quantity of any item in the Scope of Work defined in the RFP. Accordingly total contract value may be changed on the basis of the rates defined in the financial proposal.

6.13.4 Performance Bank Guarantee

The selected bidder would be needed to provide a Performance Bank Guarantee (PBG), within 15 days from the Notification of award, for a value equivalent to 10% of the bid-value. The PBG should be valid for a period of 60 days beyond the period of contractual obligations (including warranty period). The selected bidder shall be responsible for extending the validity date of the Performance Guarantee as and when it is due on account of non-completion of the project and warranty period. In case the selected bidder fails to submit performance guarantee within the time stipulated, the GoO at its discretion may cancel the order placed on the selected bidder without giving any notice. GoO shall invoke the performance guarantee in case the selected vendor fails to discharge their contractual obligations during the period or GoO incurs any loss due to vendor's negligence in carrying out the project implementation as per the agreed terms & conditions.

6.13.5 Signing of Contract

After GoO notifies the successful bidder that its proposal has been accepted, the two parties shall enter into a contract, incorporating all clauses, pre-bid clarifications and the proposal of the bidder between GoO and the successful bidder.

6.13.6 Failure to Agree with the Terms and Conditions of the RFP

Failure of the successful Bidder to agree with the Terms and Conditions of the RFP shall constitute sufficient grounds for the annulment of the award, in which event GoO may award the contract to the next best value bidder or call for new bids.

6.14 Dispute Resolution Mechanism

The Bidder and OSCSC shall endeavour their best to amicably settle all disputes arising out of or in connection with the Contract in the following manner:

- The Party raising a dispute shall address to the other Party a notice requesting an amicable settlement of the dispute within **seven (7) days** of receipt of the notice.
- The matter will be referred for negotiation between OSCSC and the Authorized Official of the Bidder. The matter shall then be resolved between them and the agreed course of action documented within a further period of **15 days**.
- In case it is not resolved between OSCSC and the bidder, it will be referred to Commissioner-cum-Secretary – FS&CW for negotiation and his decision will be final and binding for both the parties.
- In case any dispute between the Parties, does not settle by negotiation in the manner as mentioned above, the same may be resolved exclusively by arbitration and such dispute may be submitted by either party for arbitration within **20 days** of the failure of negotiations. Arbitration shall be held in **Bhubaneswar** and conducted in accordance with the provisions of Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof. Each Party to the dispute shall appoint one arbitrator each and the two arbitrators shall jointly appoint the third or the presiding arbitrator.
- The “Arbitration Notice” should accurately set out the disputes between the parties, the intention of the aggrieved party to refer such disputes to arbitration as provided herein, the name of the person it seeks to appoint as an arbitrator with a request to the other party to appoint its arbitrator within **45 days** from receipt of the notice. All notices by one party to the other in connection with the arbitration shall be in writing and be made as provided in this tender document.

Each Party shall bear the cost of preparing and presenting its case, and the cost of arbitration, including fees and expenses of the arbitrators, shall be shared equally by the Parties unless the award otherwise provides. The Bidder shall not be entitled to suspend the Service/s or the completion of the job, pending resolution of any dispute between the Parties and shall continue to render the Service/s in accordance with the provisions of the Contract/Agreement notwithstanding the existence of any dispute between the Parties or the subsistence of any arbitration or other proceedings.

6.15 Notices

Notice or other communications given or required to be given under the contract shall be in writing and shall be faxed/e-mailed/hand-delivery with acknowledgement thereof, or transmitted by pre-paid registered post or courier.

6.16 Force Majeure

Force Majeure is herein defined as any cause, which is beyond the control of the selected bidder or OSCSC as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:

- Natural phenomenon, including but not limited to floods, droughts, earthquakes and epidemics
- Acts of any government, including but not limited to war, declared or undeclared priorities, quarantines and embargos, terrorist attack, public unrest in work area provided either party shall within **10 days** from occurrence of such a cause, notifies the other in writing of such causes. The bidder or OSCSC shall not be liable for delay in performing his/her obligations resulting from any force majeure cause as referred to and/or defined above. Any delay beyond 30 days shall lead to termination of contract by parties and all obligations expressed quantitatively shall be calculated as on date of termination. Notwithstanding this, provisions relating to indemnity, confidentiality survive termination of the contract.

6.17 Exit Plan

The Selected vendor will provide systematic exit plan and conduct proper knowledge transfer process to handover operations to FS&CW before project closure. IT resource persons of FS&CW will work closely with resource persons of selected vendor. The Selected vendor will ensure capacity building of the IT resource persons of FS&CW on maintenance of software. The Selected vendor will ensure the all source codes of previous and latest builds with the requisite SDK are handed over to the FS&CW/OSCSC department upon exit

6.18 Transit Insurance

- The H/W to be supplied under the Contract shall be fully insured against any loss during transit from OEM site to client site. The insurance charges will be borne by the supplier and OSCSC will not pay such charges.
- The bidder has to submit the certificate of insurance covering all the risks mentioned above.

6.19 Fraud and Corrupt Practices

- The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Selection Process. Notwithstanding anything to the contrary contained in this RFP, OSCSC shall reject a Proposal without being liable in any manner whatsoever to the Bidder, if it determines that the Bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice (collectively the “Prohibited Practices”) in the Selection Process. In such an event, OSCSC shall, without prejudice to its any other rights or remedies, forfeit and appropriate the Bid Security or Performance Security, as the case may be, as mutually agreed genuine pre-estimated compensation and damages payable to the Authority for, inter alia, time, cost and effort of the Authority, in regard to the RFP, including consideration and evaluation of such Bidder s Proposal.
- Without prejudice to the rights of OSCSC under Clause above and the rights and remedies which OSCSC may have under the LOI or the Agreement, if a Bidder is found by OSCSC to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Selection Process, or after the issue of the Work Order or the execution of the Agreement, such Bidder shall not be eligible to participate in any tender or RFP issued by OSCSC/ Any Department of State Govt. during a period of 2 (two) years from the date of such Bid.
- For the purposes of this Section, the following terms shall have the meaning hereinafter respectively assigned to them:
 - “corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any person connected with the Selection Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of OSCSC who is or has been associated in any manner, directly or indirectly with the Selection Process.
 - “fraudulent practice” means a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process;
 - “coercive practice” means impairing or harming or threatening to impair or harm, directly or indirectly, any persons or property to influence any person s participation or action in the Selection Process;
 - “undesirable practice” means (i) establishing contact with any person connected with or employed or engaged by OSCSC with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or (ii) having a Conflict of Interest; and
 - “restrictive practice” means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Selection Process

6.20 Change request

The following would constitute a Change request

- a) Enhancements in the solution post steady state is attained
- b) Bid Process Management in case of re-tendering is to be done for reasons for which the consultants are not responsible
- c) Any delay in the project timelines beyond the calendar time mentioned in the tender document for which Bidder is not directly responsible

The following would not constitute a Change request

- a) Bug fixes and corrections
- b) MIS Reports/formats and enhancements
- c) Performance enhancements
- d) Database clean-up activities
- e) Changes in Web services to accommodate integration with other components would not be considered as change request
- f) Any work which has not been specifically mentioned in the scope of work till attainment of steady state.
- g) Any changes in functionality post approval of SRS/FRS due to learnings from the field
- h) Any changes in the deliverables post approval by the client till steady state is attained

In such a case, the additional effort estimated by the bidder and its costs would be discussed and finalized in discussions with the Bidder. The basis of this cost would be the commercial bid submitted by the bidder.

7. Payment Schedule

Payment will be made to the primary bidder only as per the schedule given below subject to acceptance certificates of respective service by the FS&CW Department, payments would also take into account the imposed penalties as per SLA defined in section 8.1. Payment shall be made on quarterly basis with reference to the number of devices deployed and operationalized against target. It is expected to have 1000 FPS automated during July-Sept 2016 and remaining 7850 between October 2015 and March 2017.

Category	Item	% of Cost	Payment schedule
Solution development/ Deployment	Final Approved of Project plan	50%	Will be paid after the Project Plan has been approved by the evaluation committee of the GoO
	UAT of the complete solution		Will be paid on the successful completion of the UAT
	CERT-IN certification		Will be paid once the Copy of CERT-IN certification has been obtained and submitted to the GoO
	Solution deployment including device and software		Cost of solution along with applicable taxes will be paid after three month of successful and error free functioning of devices and solution in completed phase; Evaluation duration of 3 months would start after complete implementation of each phase, i.e. all FPS under the phase should have functional error free POS devices running for 3 months. Refer section 3.13 Implementation Plan, for phase details.
	Solution deployment including device and software	40%	will be paid on quarterly basis in 20 instalments. As per agreed upon rates and adherence to SLA/conditions included in the proposal. These will be subject to the receipt and approval of monthly reports by the FS&CW Department.
	Successful Exit Management	10%	Remaining 10% of the cost of solution along with applicable taxes will be paid after Successful Exit Management

Category	Item	% of Cost	Payment schedule
	Total	100%	
Training & operations cost	Completion of all project related activities like user manuals, technical trainings, performance tuning etc.	30%	30% of the cost will be paid all the necessary activities like creating user manuals, performance tuning etc. have been completed.
	Completion of training (handholding) to users of each FPS on handling PoS device	70%	70% of project training will be as per number of FPS covered through training program, including handholding
	Operation and Maintenance	Actuals	Cost of maintenance and support will be paid on quarterly basis On actual as per agreed upon rates and adherence to SLA/conditions included in the proposal. These will be subject to the receipt and approval of monthly reports by the FS&CW Department.
	Total	100%	

8. Annexure

8.1 Service Level Agreements

8.1.1 Implementation

Compensation for Termination of Contract

If the bidder fails to carry out the award / work order in terms of this document within the stipulated period or any extension thereof, as may be allowed by FS&CW Department/ OSCSC, without any valid reasons acceptable to FS&CW Department/ OSCSC, FS&CW Department/ OSCSC may terminate the contract after giving 1 months' notice, and the decision of FS&CW Department/ OSCSC on the matter shall be final and binding on the bidder. Upon termination of the contract, FS&CW Department/ OSCSC shall be at liberty to get the work done at the risk and expense of the bidder through any other agency, and to recover from the bidder compensation or damages.

Liquidated Damages

In the event of delay in execution of work, specified in this Contract / furnishing of deliverables, the bidder shall be liable to a penalty at 5% of the value of work order in respective phases, for delay of every two-week up to a maximum of 20%, after which FS&CW Department/ OSCSC shall be at liberty to cancel the award. For the purpose of this clause, part of a month shall be considered to be a full month.

Training

Quality and Effectiveness of the training sessions (CBT based) conducted by selected vendor for staff members & stakeholders are to be verified by third party to be engaged by the FS&CW Department/ OSCSC. The third party will conduct a survey, collect feedbacks from the participants and submit a report on quality and effectiveness of the training provided by the selected vendor.

Security Audit of the Software

It is the responsibility of the service provider to make the application software audited by CERT-In empaneled agency authorized for providing security and controls certificates. Solution provider has to produce the certificate within 1 month from the date of UAT sign off and this must be before going live. Costs for security audit and all certifications are to be borne by the Solution provider.

Quality of the Software

FS&CW Department/ OSCSC will engage a third party quality certification agency for quality certification of the software application. It is the responsibility of the selected vendor to make the application software certified by the quality certification agency selected by FS&CW Department/ OSCSC. The Selected vendor should complete the quality certification process within 1month of delivery of software. The entire cost for quality certification has to be borne by the selected vendor. (See annexure 8.6.3).

8.1.2 Operations

System Uptime & Performance

- The service provider will ensure that average application up time between various defined operating locations is not less than 99.5% per week always except in any planned software/hardware/network outage approved by FS&CW department in advance. The service provider will ensure that average page loading time for application & reports is not more than 10 seconds. The service level dependency in this case is functioning of communication link via Telephone Exchange Line or any other means, uncovered power outage by the State Data Centre, breakdown of the hardware and networking equipment of the servers, scheduled down time for upgrade & patches for application and system software, planned maintenance. The selected Solution Provider will plan scheduled downtime outside primary business hours (office hours) with prior permission from FS&CW department. In exceptional circumstances FS&CW department may allow the Solution Provider to plan scheduled down time during primary business hours (office hours). For every 1% drop in average application uptime per week during maintenance & hand holding support for software, the bidder shall be liable to a penalty at 5% of the value of work order, up to a maximum of 25 %, after which FS&CW department shall be at liberty to cancel the contract. For the purpose of this clause, part of week shall be considered to be a full week.
- The service provider will ensure that average hardware up time at various defined operating locations is not less than 99.5% per week always except in any planned software/hardware/network outage approved by FS&CW department in advance. The service level dependency in this case is functioning of communication link via Telephone Exchange Line or any other means, uncovered power outage by the State Data Centre, breakdown of the hardware and networking equipment of the servers, scheduled down time for upgrade & patches for application and system software, planned maintenance. The selected Solution Provider will plan scheduled downtime outside primary business hours (office hours) with prior permission from FS&CW department. In exceptional circumstances FS&CW department may allow the Solution Provider to plan scheduled down time during primary business hours (office hours). For every 1% drop in average hardware uptime per week during maintenance & hand holding support for hardware, the bidder shall be liable to a penalty at 5% of the value of work order, up to a maximum of 25%, after which FS&CW department shall be at liberty to cancel the contract. For the purpose of this clause, part of week shall be considered to be a full week

- In order to ensure that there is no disruption in services due to malfunctioning of devices, the solution provider would maintain a stock of additional 10% devices in each District. The SLA would include the condition of maintaining a buffer stock of 10% of PoS and accessory devices.
- The services provider should also fulfil the following service levels with respect to the e-PoS operations
 - After submission of biometrics, the authentication should happen within 5 seconds
 - OTP receive time should reach the beneficiary within 15 seconds
 - After Aadhaar authentication/successful matching of OTP/ scanning of ration cards (in case of absence of Aadhaar or mobile or failure of authentication) the entitlement details should be displayed within 5 seconds.
 - In Online mode, post-transaction the transaction update should complete within 10 seconds.
 - Entitlement display time post authentication success/failure should be within 5 seconds
 - Successful Aadhaar authentication should be performed and ration receipt should be print within 40 seconds.
 - Offline transaction upload to automation server on transition from offline to online – Immediate (time as per the number of iterations to be synchronized)

The bidder shall comply with the following Service Level Agreements (SLAs) as indicated in the table below during the project

Sl. No	Service	Specification	Time Frame	Penalty
1.	Hardware Functionality	The e-POS device has to be installed at the various locations and must be fully operational, facilitating smooth functioning of the project. If any non-functionality is reported in any part of the device seriously affecting the business transaction, then the component/ device has to be replaced with the spare device for continuity of the business transaction	Within 24 hours of reporting at the centralized call centre, for replacing the component /device and making it functional	Rs. 1,000/- per device, for every hour over & above the prescribed time frame
		Any other hardware functionality partially / marginally affecting the business transactions would be termed Level 2 issues	Repair/replacement of component/device within 48 hours for Level 2 issues	Rs. 1,000/- per device, for every hour over & above the prescribed time frame
2.	Software Functionality	Dysfunction in the software seriously affecting the business	They have to be resolved within 3	On mere occurrence of such an issue, a

		transactions would be termed as Level I Software Issues	hours from the time of reporting the issue in the Call Centre	penalty of Rs. 25,000/- would be imposed; If the issue is not resolved within the prescribed time frame, a further penalty of Rs.5,000/- would be imposed for every additional hour
		Dysfunction in the software affecting marginally/ partially the business transactions would be termed as Level II Software Issues	They have to be resolved within 24 hours from the time of reporting the issue in the Call Centre	Rs. 5,000/- for every additional day after the expiry of the prescribed time frame
3.	Security Management	Security incidents such as virus attack, denial of service attack, data theft etc. must be guarded against. Such threats affecting seriously the business transactions would be termed as Level I security issues	In case of such an occurrence, immediate steps have to be taken to control the damage and to secure the system within 3 hours of reporting the issue at the Call Centre	Every occurrence of Level I security issues, would attract a penalty of Rs. 25,000/- If the issue is not resolved within the prescribed time frame, a further penalty of Rs.5,000/- would be imposed for every additional hour
		Security breaches not seriously affecting the business transactions would be termed as Level II Security Issues	Level II Security Issues have to be sorted out within 6 hours of reporting at the Call Centre	A fine of Rs. 5,000/- for every hour over and above the prescribed time frame, if the issue remains unresolved

8.2 Expected timelines for activities to be performed by the Solution Provider

Sl. No	ACTIVITY	PLAN Start	PLAN Duration	PERIODS						
				01	02	03	04	05	06	07
1	Create project plan : Identify servers, OS and other H/W S/W requirements	1	1	■						
2	STQC certification of the system used for FPS automation	1	1	■						
3	UAT for the system used for FPS automation	1	2	■	■					
4	Training of FPS owners and Officials for Phase 1	2	1		■					
5	Creation of technical support & service centre and integration of technical assistance with TPDS helpline	2	1		■					
6	Connectivity survey and Installation of the PoS devices and peripheral devices in For Phase 1	1	1	■						
7	Installation of PoS device and other peripheral devices in all FPSs for Phase 1	3	3			■	■	■		
8	Monitor performance of FPS automation in phase 1; making necessary modifications to project plan, rollout plan etc	3	3			■	■	■	■	
9	Modification, bug fixing and feature enhancement (if required) of PoS module or FPS transaction processes	3	3			■	■	■	■	
10	Installation of PoS device and other peripheral devices in all FPSs for Phase 2	5	2					■	■	■
11	Maintenance services :Warranty support: 2 years from the date of Go live AMC: 3 years from the date of expiry of warranty support									

FPS automation will follow the phased cascading approach described above.

8.3 Security standards for data transfer

The applications must ensure the following to meet security standards:

- i. Secure Device Configuration
- ii. Continuous Vulnerability Assessment and Remediation
- iii. Malware Defences
- iv. Application Software Security
- v. Wireless Device Control
- vi. Privacy and Security Training
- vii. Separation of System Resources
- viii. Controlled Use of Administrative Privileges
- ix. Boundary Defence
- x. Audit Logging
- xi. Controlled Access Based on the Need to Know
- xii. Account Monitoring and Management
- xiii. Data Loss Prevention
- xiv. Incident Response Capability

8.4 Bidder's Profile

Particulars	Details	Page number (in case of attachment)
Name of the firm Telephone number Fax number Email		
Registered office address		
Correspondence address (if different from the above address)		
Details of the Contact Person (name, designation, address) Telephone number Fax number e-mail		
Is the firm registered under Indian Companies Act 1956/ Liability Partnerships (LLP Act, 2008)? Year and Place of the establishment of the Company.		
Service Tax Registration details		

Particulars	Details	Page number (in case of attachment)
Bidder should have SEI -CMMi Level – 3 and ISO 20000 Certification by the date of publication of this RFP.		

8.5 Checklist for Pre-qualification Bid

1. Response to pre-qualification criteria (refer section 6.10)
2. Response to technical proposal with relevant documents (refer section 6.11)
3. Documents to support technical capability of the bidder- certification of completion of projects, document(s) on status of ongoing project(s) etc. (refer section 6.10 & 6.11)
4. Affidavit declaring eligibility to bid
5. RFP document fees (refer section 6.4.2)
6. Earnest Money Deposit (refer section 6.4.3)
7. Letter of acceptance (refer section 6.4.4)
8. The bidder has to submit signed copy of the detail information on Pre-Qualification check list in the Table format mentioning all requisite documents as per the list given Clause-6.10 with Page No Reference as attached at the Bid document

8.6 Submission formats

8.6.1 Technical Bid Checklist

Activity	Subsection
Covering Letter for Technical Proposal	Letter of Proposal (Section 8.6.2)
Relevant Experience	<ol style="list-style-type: none"> 1. Project completion certificates for projects involving <ul style="list-style-type: none"> ○ Handling biometric enabled devices ○ Handling of PoS device installation 2. Evaluation documents for annual turnover <ul style="list-style-type: none"> ○ From Software System Development and/or Implementation 3. Completion certificates from clients, including the customer satisfaction forms 4. Completion certificates for projects involving <ul style="list-style-type: none"> ○ Experience in e-governance projects in PDS / social sector projects / e-governance projects 5. Self-declaration and client satisfaction certificate for Geographical scale of the project

Activity	Subsection
Proposed solution design and Implementation plan	<p>Proposed technical solution in form of presentation, presentation should include</p> <ul style="list-style-type: none"> ○ Architecture proposed ○ E2E work flow ○ foreseen risks and mitigation proposed ○ Proposed MIS/Dashboard reports ○ Any additional features ○ Selected HW/OS for solution implementation and rationale for selecting particular HW/SW ○ Implementation and training plans with proposed timelines for submission of solution, UAT completion, phased deployment etc.
Proposed Implementation Team	<p>Details of team structure, number of team members, qualifications, roles and responsibilities (Section 8.6.5) Hardware and software support team structure, location and qualification</p>
Demon of Solution as Per RFP Requirements	<ol style="list-style-type: none"> 1. Working demo using the live PoS machine with integrated MIS/Dashboard 2. Traceability matrix representing the supported requirements in demo solution 3. Hardware compliance updated in format as in section 8.6.3 4. Presentation for screen proposed designs for PoS and MIS/Dashboard sample graphs

8.6.2 Letter of Proposal

<Location, Date>

To:

Managing Director
Odisha State Civil Supplies Corporation Ltd. (OSCSC)
Head Office
C/2 Nayapalli, Bhubaneswar - 751012
EPBX - (0674) 2395391/2394956
Fax - (0674) 2395291/2390199

Subject: Submission of the Technical bid for *<Name of the assignment>*

Dear Sir/Madam,

We, the undersigned, offer to provide solutions to the OSCSC on <Name of the engagement> with your Request for Proposal dated <insert date> and our Proposal. We are hereby submitting our Proposal, which includes this Technical bid and the Financial Bid sealed in a separate envelope.

We hereby declare that all the information and statements made in this Technical bid are true and accept that any misinterpretation contained in it may lead to our disqualification.

We undertake, if our Proposal is accepted, to initiate the Implementation services related to the assignment not later than the date indicated in Fact Sheet.

We agree to abide by all the terms and conditions of the RFP document. We would hold the terms of our bid valid for 180 days as stipulated in the RFP document.

We hereby declare that we are not insolvent, in receivership, bankrupt or being wound up, our affairs are not being administered by a court or a judicial officer, our business activities have not been suspended and we are not the subject of legal proceedings for any of the foregoing.

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,
Authorized Signature [*In full and initials*]:
Name and Title of Signatory:
Name of Firm:
Address:
Location:

Particulars of the Bidder

Sl. No.	Information Sought	Details to be Furnished
A	Name ,address and URL of the bidding Company	
B	Incorporation status of the firm (public limited / private limited, etc.)	
C	Year of Establishment	
D	Date of registration	
E	ROC Reference No.	
F	Details of company registration	
G	Details of registration with appropriate authorities for service tax	
H	Name, Address, e-mail ID, Phone nos. and Mobile Number of Contact Person	

8.6.3 Undertaking on Support to Third Party Solution acceptance and certification

Date:

To:

Managing Director
Odisha State Civil Supplies Corporation Ltd. (OSCSC)
Head Office
C/2 Nayapalli, Bhubaneswar - 751012
EPBX - (0674) 2395391/2394956
Fax - (0674) 2395291/2390199

Dear Sir,

Sub: Undertaking on Support to Third Party Solution Acceptance and Certification

1. I/We understand that the System (including the application and the associated IT systems) may be assessed and certified by a 3rd party agency (to be identified by OSCSC) before the system is commissioned.
2. I/We understand that the certification expenses will be borne by the selected vendor and the responsibility to ensure successful acceptance and certification lies with the selected vendor.
3. I/We hereby undertake that we shall do all that is required of the Selected vendor to ensure that system will meet all the conditions required for successful acceptance and certification.

Yours faithfully,

(Signature of the Authorized signatory of the Bidding Organization)

Name:

Designation:

Date:

Time:

Seal:

Business Address:

8.6.4 Project Citation Format

Relevant project experience		
General Information	Details	Page No. Ref from Technical Proposal
Name of the project		
Client for which the project was executed		
Name and contact details of the client		
Project Details		
Description of the project		
Scope of services		
Service levels being offered/ Quality of service (QOS)		
Technologies used		
Outcomes of the project		
Other Details		
Total cost of the project		
Total cost of the services provided by the respondent		
Duration of the project (no. of months, start date, completion date, current status)		
Other Relevant Information		
Letter from the client to indicate the successful completion of the projects		
Copy of Work Order		

8.6.5 Template for Proposed Manpower and Team structure

Sl. No.	Name of Staff with qualification and experience	Area of Expertise	Position Assigned	Task Assigned	Time committed for the engagement
1					
2					

8.6.6 FINANCIAL BID COVERING LETTER

(To be printed on letterhead and to be included in Financial Proposal Envelope)

Bid No. -----

Date:

To,

Managing Director
Odisha State Civil Supplies Corporation Ltd. (OSCSC),

Sub/ Ref: Submission of Bid for <title> the Odisha State Civil Supplies Corporation Ltd.
(OSCSC)

Having examined the Bid Document, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to implement the project Solution for <title>for the Department of Odisha State Civil Supplies Corporation Ltd. (OSCSC), Govt. Odisha. To meet such requirements and to provide services as set out in the Bid document following is our quotation summarizing our commercial proposal.

Sl No	Description	No of Units	Unit Cost	Total Cost exclusive of Tax	CST/ VAT	Service Tax (If Any)	Total Cost Inclusive of Tax
1	Hardware (Cost of Pos Device + Scanner+ Modem +Installation						
2	Software (Cost of Software+ Antivirus_+ Installation+ Commissioning)						
3	Operation & Maintenance (Handholding Cost & Warrantee support for both Hardware & software items includes 2year warrantee+ 3Year Onsite AMC)						
4	Training & Awareness Cost						

Sl No	Description	No of Units	Unit Cost	Total Cost exclusive of Tax	CST/ VAT	Service Tax (If Any)	Total Cost Inclusive of Tax
5	Other Cost (If Any specify like cost of establishing Help Desk etc.)						
6	Manpower						
	Total Cost						

We attach hereto the detailed commercial proposal breakup as required by the Bid document, which constitutes our proposal. We undertake, if our proposal is accepted, we will obtain a performance security issued by a nationalized bank in India, acceptable to Odisha State Civil Supplies Corporation Ltd. (OSCSC), for a sum equivalent to make it 10% of the total price as quoted in our commercial proposal of the Bid document for the due performance of the contract.

We agree for unconditional acceptance of all the terms and conditions in the Bid document and also agree to abide by this Bid response for a period of 180 days from the date fixed for Bid opening and it shall remain binding upon us, until within this period a formal contract is prepared and executed, this Bid response, together with your written acceptance thereof in your notification of award, shall constitute a binding contract between us.

We confirm that the information contained in this proposal or any part thereof, including its exhibits, schedules, and other documents and instruments delivered or to be delivered to the Odisha State Civil Supplies Corporation Ltd. (OSCSC), is true, accurate, and complete. This proposal includes all information necessary to ensure that the statements therein do not in whole or in part mislead the Odisha State Civil Supplies Corporation Ltd. (OSCSC), as to any material fact.

We agree that you are not bound to accept the lowest or any Bid response you may receive. We also agree that you reserve the right in absolute sense to reject all or any if the products/ service specified in the Bid response without assigning any reason whatsoever.

It is hereby confirmed that I/We are entitled to act on behalf of our corporation/company/firm/organization and empowered to sign this document as well as such other documents, which may be required in this connection.



(Signature)

(In the capacity of).....

Duly authorized to sign the Bid Response for and on behalf of :(Name and Address of Company)

Seal/Stamp of bidder

CERTIFICATE AS TO AUTHORISED SIGNATORIES

I, certify that I am of the, and that who signed the above Bid is authorized to bind the corporation by authority of its governing body.

Date:

Place:

Name and Designation with Seal

8.6.7 Commercial Bid Checklist

Detailed costs to be provided in the formats mentioned below. These costs are exclusive of manpower. The manpower cost should be added only in the manpower section. The bidders should give details of the type of applicable taxes with appropriate percentages separately.

The following tables should be used to submit the detailed costs breakup of the above mentioned cost heads:

Hardware

Sr. No	Item	Unit Price (Rs.)	Quantity	Total Cost
1	POS device			
2	Bar-coded scanner			
4	Modem or other accessories required for data connectivity			
5	Any other			
	Total			

Software procurement, development/ connectivity

Sr. No	Item	Unit Price (Rs.)	Total One Time Cost
1	Connectivity survey (if any)		
2	Software license (if Any)		
3	Software application development cost with certification		
4	System integration		
5	Miscellaneous (accessories, domains etc.)		
6	Deployment, Project Planning and Implementation support		
7	Anti-virus		
8	Any Other		
	Total		

Training/Workshop/ Awareness

Sr. No	Item	Unit Price (Rs.)	No. of Days of training/No. of Manuals	Total Cost
1	Onsite training of FPS owner			
2	Training of government officials			
2	Materials/ manuals for training			
3	Materials/ manuals for awareness			
4	Printed pamphlets			
5	Onsite awareness campaign			
6	Any other			
	Total			

Operation and Maintenance Cost: AMC for a Period of 3 years at 12 equal installments after 2 years of warranty from the date of Go-Live

Sr. No	Item	Unit Price (Rs.)	No. of Devices	Total cost
1	Installation, maintenance and servicing of POS device			
2	Installation, maintenance and servicing of other equipment			
3	Preparing requirement, maintenance and servicing of centralized servers and other infrastructure at SDC			
4	Application maintenance			
5	Handholding cost			
6	Any other			
	Total			

Manpower: Vendor shall update the below table as per the proposed team structure with defined roles and responsibilities.

Sr. No	Role and activity	Unit Price (Rs.)	Total Manpower required	Months of Deployment	Total T&M Cost
1					

NOTES

- Fees mentioned above shall be exclusive of all taxes in India and Country of Consultants but excluding Service Tax if any applicable in India and subject to deduction of Income Tax and other taxes if any in India.
- The quoted fee shall be exclusive of Service Tax as applicable which shall be reimbursed as per actual on production of original deposit and as per notified rate.
- Fees quoted will be firm and no escalation will be applicable.
- The bidder shall pay all other taxes, duty and like Government impositions arising from this Contract and indemnifies Director Odisha State Civil Supplies Corporation Ltd. (OSCSC).

Date

Signature

Place:

Name and Designation with Seal

8.6.8 Form for Undertaking on Total Responsibility

Date:

To:

Managing Director
Odisha State Civil Supplies Corporation Ltd. (OSCSC)
Head Office
C/2 Nayapalli, Bhubaneswar - 751012
EPBX - (0674) 2395391/2394956
Fax - (0674) 2395291/2390199

Dear Sir,

Sub: Self-certificate regarding Total Responsibility

This is to certify that we undertake total responsibility for the successful and defect free operation of the proposed Project solution, as per the requirements of the RFP <Name of the assignment> for the state of Odisha.

Thanking you,

Yours faithfully

(Signature of the Authorized signatory of the Bidding Organization)

Name:

Designation:

Date:

Time:

Seal:

Business Address:

8.6.9 Form for self-declaration of not been Blacklisted

(To be submitted in the form of court affidavit)

{Place}

{Date}

To,

Managing Director

Odisha State Civil Supplies Corporation Limited (OSCSC),

<<Address >>

Fax +91 -674-

Phone +91-674-

Email: <<email id>>

Ref: RFP Notification no <xxxx>dated <dd/mm/yy>

Subject: Declaration of not been blacklisted in response to the RFP for Selection of Selected vendor for PDS transformation Processes.

Dear Sir,

We confirm that our company, _____, is not blacklisted in any manner whatsoever by any of the State/UT and/or central government in India on any ground including but not limited to indulgence in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.

Place:

Date:

Bidder's Company Seal:

Authorized Signatory's Signature:

Authorized Signatory's Name and Designation:

Note: The Bidder shall necessarily provide a copy of 'Power of Attorney' authorizing the signatory for signing the Bid on behalf of the Bidder in its Pre-Qualification Bid.

8.6.10 Performance Bank Guarantee

PERFORMANCE SECURITY:

<Name>
<Designation>
<Address>
<Phone Nos.>
<Fax Nos.>
<Email id>

Whereas, <name of the supplier and address> (hereinafter called “the bidder”) has undertaken, in pursuance of contract no. <Insert Contract No.> dated. <Date> to provide Implementation services for <name of the assignment> to OSCSC (hereinafter called “the beneficiary”)

And whereas it has been stipulated by in the said contract that the bidder shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, **<Name of Bank>** a banking company incorporated and having its head /registered office at <Address of Registered Office> and having one of its office at <Address of Local Office> have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of **Rs.<Insert Value> (Rupees <Insert Value in Words> only)** and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of Rs. **<Insert Value> (Rupees <Insert Value in Words> only)** as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the bidder before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between

you and the Bidder shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This Guarantee shall be valid until *<Insert Date>*)

Notwithstanding anything contained herein:

I. Our liability under this bank guarantee shall not exceed **Rs. <Insert Value> (Rupees <Insert Value in Words> only).**

II. This bank guarantee shall be valid up to *<Insert Expiry Date>*)

III. It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this bank guarantee that we receive a valid written claim or demand for payment under this bank guarantee on or before *<Insert Expiry Date>*) failing which our liability under the guarantee will automatically cease.

8.6.11 POWER OF ATTORNEY FOR SIGNING OF PROPOSAL

Know all men by these presents, We, _____ (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorize Mr. /Ms _____ (Name), son/daughter/wife of _____ and presently residing at _____, who is [presently employed with us/ and holding the position of _____], as our true and lawful attorney

(hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our proposal for selection of agency for online Transparency portal for End-to-End Computerization of the Public Distribution System in Odisha but not limited to signing and submission of all applications, Proposal and other documents and writings, participate in bidders' and other conferences and providing information / responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts including the Service Agreement and undertakings consequent to acceptance of our Bid, and generally dealing with the Authority in all matters in connection with or relating to or arising out of our proposal for the said Project and/or upon award thereof to us and/or till the entering into of the Service Agreement with the Authority.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, _____, THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS _____ DAY OF _____, 2016.

8.6.12 Hardware compliance format

As per the selection of Hardware below Performa should be updated and submitter along with the technical proposal, any non-compliance of minimum requirement or higher configuration support should be updated in remark column

PoS (One integrated robust solution)

Specification	Minimum Requirement	Compliance (Complete/Partial)	Remarks
Processor	Secure Processor capable of performing at least 10 transactions per minute in laboratory environment (Each Transaction consists of 1. Perform Biometric Authentication of the PDS beneficiary with UIDAI server 2. Generate Encrypted pay load for maximal Sales data. 3. Store Encrypted transaction data in the local storage 4. Transmit the Encrypted transaction sales data to PDS server 5. Remove the locally stored sales data only after getting acknowledgement from the server)		
OS	Operating system should be Linux (Latest Stable Kernel)/Android 4.0 or higher/Windows. Device operating system which supports HTML5 based web browser and CSS 3		
Memory	256MB or Higher RAM and 1GB or higher Flash memory		
Expansion slot	Micro SD Slot to support SD card with minimum 8 GB high speed SD Card.		
Communication	Should support GSM Network with GPRS, 3G,Wi-Fi, Ethernet (optional), PSTN (Integrated ports) (optional)		
Interface	USB 2.0 or higher (full speed), the USB port should support device battery charging through any other USB charging source. Additional RS-232port may be optional. At		

Specification	Minimum Requirement	Compliance (Complete/Partial)	Remarks
	least one free USB port shall be available after setting up the entire solution including peripheral devices		
Display	2.75 inch or higher color TFT Display supporting QVGA (320 x240) or better resolution or scratch resistant multi point capacitive touch screen with minimum WSVGA resolution (1024 X 600)		
Key Pad	Hard (Optional) QWERTY keypad		
Battery	Swappable & Dry/Rechargeable 2600mAH or higher, Li-ion or Li Polymer battery capable of providing minimum 6 hours of operation while all function of device active		
Power Adaptor	Power Adaptor with surge protection and operating range 100 to 240V, 50Hz. AC input.		
SIM & SAM slot	One or more GSM SIM slot and dual SAM slots for software up-gradation in device.		
Printer	2" or higher Integrated printer (Preferably Thermal Printer)		
Audio	Good quality Speaker with 1W or higher output for announcements. (Optional)		
Finger Print Scanner	Integrated Finger Print module shall be STQC certified		
IRIS Scanner (Optional)	STQC certified IRIS scanner with possibility of USB plug and Play		
Bar Code Reader	Integrated Camera barcode reader with minimum 5Mp auto focus camera or External bar code reader capable of reading 1D line barcode and QR codes		
Status Indications	Status indicator provides ease of use, Indicators for connectivity (presence/absence), signal strength, battery status etc.,		
Other Accessories	Durable Carry Case and user manual etc.		
SDK	Appropriate SDK need to be provided along with the devices		
Terminal Management	Device should be remotely manageable in secured mode		

Specification	Minimum Requirement	Compliance (Complete/Partial)	Remarks
Environment, Health& Safety Durability, Humidity, EMI/EMC Compliance	Dry heat test- Operating ($50 \pm 2^{\circ}\text{C}$ for 2 hrs.) Cold test – Operating ($0 \pm 3^{\circ}\text{C}$ for 2 hrs.) Dry heat test ($55 \pm 2^{\circ}\text{C}$ for 2 hrs.) Damp heat Cyclic (40°C for (12+12 hrs.)), No. of cycles : 2 Cold Test ($-10 \pm 3^{\circ}\text{C}$ for 2 hrs.) Drop/Free Fall Test, in unpacked, switched off and normal handling conditions (Height : 100mm, Total no. of falls : 2) Vibration Test should be in packed condition, switched off conditions (10-150Hz, 0.15mm/2g, 10 sweep, cycles/axes) Bump test should be in packed condition, switched off condition.(1000Bumps, 40g, in vertical position)		
Add-On Antenna	May be provisioned for the PoS which will be used in remote locations and hilly areas for better signal reception and seamless transactions		
Warranty	2 year comprehensive OEM replacement Warranty support		

8.7 List of Project related documents

These documents have to be provided by the vendor in the due course of the project implementation. These have to be signed and approved by the Steering committee before they can be implemented.

1. Detailed Project Plan
2. Detailed System Study Report
3. HLD documents
4. Dependencies Document listing the dependencies (H/W, S/W, connectivity and procedural) on external servers like RC DB server, SCMS, SMS Gateways etc.)
5. List of services, Service Definitions, Service Levels
6. Updated/vetted SRS and FRS
7. Test Plans – Functional testing, System testing and Performance testing (Including load and stress testing)
8. Test Cases corresponding to all test plans
9. Test execution reports for all test plans
10. Security Audit reports
11. UAT Test cases
12. Traceability matrix
13. Defect Status report
14. Application architecture documents
15. Logical and physical database design
16. Data dictionary and data definitions
17. User Manuals