

**Small Farmers' Agribusiness Consortium (SFAC),**  
**Department of Agriculture & Cooperation, Government of India**  
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**REQUEST FOR PROPOSAL FOR  
SELECTION OF “TECHNOLOGY PARTNER FOR DEVELOPMENT AND  
MAINTENANCE OF TRANSACTION SOFTWARE FOR KISAN MANDI”**

Small Farmers' Agribusiness Consortium (SFAC) is a Society under the administration control of the Department of Agriculture & Cooperation, Ministry of Agriculture with a mandate to link farmers to investment, technology and markets. SFAC has promoted over 300 Farmers Producer Organisations (FPOs) across the country.

For market linkage of these FPOs, SFAC has launched a Kisan Mandi in Delhi. SFAC invites offers from competent and suitably qualified agencies to develop integrated transaction software for the Kisan Mandi to support management, price discovery, inventory management, MIS etc. Interested parties may visit website address: [www.sfacindia.com](http://www.sfacindia.com) for full details and apply.

Last date for submission of EoI is 17<sup>th</sup> November 2014.

MANAGING DIRECTOR

**REQUEST FOR PROPOSAL FOR  
SELECTION OF “TECHNOLOGY PARTNER FOR DEVELOPMENT  
AND MAINTENANCE OF TRANSACTION PLATFORM  
FOR KISAN MANDI”  
INSTRUCTIONS TO THE APPLICANT**

## **1 BACKGROUND**

Small Farmers’ Agribusiness Consortium (SFAC) is a registered Society under the administrative control of Department of Agriculture & Cooperation, Ministry of Agriculture, Government of India. Its mandate is to link farmers to investment, technology and markets.

SFAC has promoted over 300 Farmers Producer Organisations (FPOs) across the country. These bodies are members’ owned grassroots institutions, which provide collective bargaining power to small and marginal farmers. Over 5.00 lakh farmers are member of these FPOs supported by SFAC across the country.

For creating direct market linkages for these FPOs, SFAC has launched a Kisan Mandi at Delhi. The Kisan Mandi is a physical as well as online platform for transaction of fruits and vegetables. Some of the key features of the Kisan Mandi are as below:

- SFAC will operate the KM with the assistance of technical partners (for marketing, software development, back-end support etc.) and these will be selected through open bidding on the basis of previous experience and domain knowledge.
- KM will act as a facilitator for identified FPOs/Grower Associations, helping to identify produce, support quality control, logistics, price discovery, delivery and payment.
- Dry and cold storage capacity will be created to hold some stocks for retail supply, while the effort will primarily be to create direct linkages between the farmgate and bulk demand.
- Target customers: Organized retailers, hotels, restaurant and catering (HORECA), large vendors, exporters, processors, RWAs, general public.
- SFAC will facilitate FPOs/GAs to set up sorting, grading and packing facilities near the farmgate so that only sorted, graded and packed or semi-packed products are

available at KM. Training inputs will be given by KM to enable FPOs to meet quality norms.

- KM will organize promotional activities, buyer-seller meet, publicity etc. to attract buyers.
- Strong ICT backed sale platform for online sales, transparent, price discovery, logistics tracking etc will be developed.

Through this RFP, SFAC invites, offers from capable agencies to provide / develop transactional software for the Kisan Mandi to support online transaction, price discovery & negotiation, inventory management and MIS.

## **2 SCOPE OF WORK**

Scope for the Agency / Developer will be to “Develop, Maintain, Manage, Enhance and Modify the set of Applications and Modules forming the Kisan Mandi Online Platform.”

### **2.1 Functional Specifications**

Functional Specifications of Kisan Mandi Online Platform (KMOP) are described in Annexure II.

### **2.2 Platform**

KMOP is to be a Net based three tier applications and it should include a part from a set of asp.net pages, Windows Services and Multiple Web Service Interfaces. The Platform should be multiple interfaces for Bank Integration, SMS based and IVR based interfaces.

#### **2.2.1 Operations**

- To ensure that the application including its entire functionality is running and is available at all times as per the criteria below
- Business Hours – 8 am to 8 pm all days of the week, 363 days a year. Application Availability should be 99.99 %.
- Non Business Hours - 8 pm to 8 am. Application Availability should be 80%.
- Configuration and Business Rules Changes may have to be carried out from time to time. Kisan Mandi will notify technology partner about planned Configuration and Business Rules changes. Technology partner has to evaluate impact of such changes and suggest corrective actions so that operations and reports related to pre and post rule change sce-

narios are not affected. Technology partner must carry out those change on approval by Kisan Mandi of the impact of those changes.

- Technology partner needs to set-up and run performance assessment of the applications on a regular basis. Also error logs have to be monitored on a regular basis. Exceptions in performance or error logs must be submitted every week along with root cause analysis of errors and corrective actions.

### **2.2.2 Faults Handling**

- Critical Faults must be fixed within 2 hours or if that is not feasible emergency work-arounds be deployed within 2 hours. Kisan Mandi must be notified of the faults and remedy immediately. Critical Faults are those that due to which the regular operations of the business come to a standstill or are severely affected or curtailed. An incident report for each critical fault must be filed with root cause analysis of the fault, immediate remedy and permanent remedy with Kisan Mandi within 48 hours of the occurrence of the fault. All critical faults must be reported within 10 minutes of occurrence by phone, SMS and followed by email to Kisan Mandi.
- For critical faults, backend data corrections, if any required, have also to be carried out within 2 hours with due authorization from Kisan Mandi.
- Major faults must be fixed before start of next day business hours or if that is not feasible emergency work arounds be deployed before start of next day business hours irrespective of the time at which they occur. Major faults are those which affect the functionality and operations of KMOP but are not of critical nature. **An illustrative list of major faults is described in Annexure III.** All major faults must be reported within 60 minutes of occurrence by phone, SMS and followed by email to Kisan Mandi. An incident report for each fault must be filed with root cause analysis of the fault, immediate remedy and permanent remedy with Kisan Mandi within three working days of the occurrence of the fault.
- For major faults, backend data corrections, if any required, have also to be carried out before next business day with due authorization from Kisan Mandi.
- Minor Faults, occurring between Fridays and Thursdays must be fixed before start of business hours of following Monday. For example faults occurring between August 8, 2014 and August 14, 2014 must be fixed before 8 am on August 18, 2014. If a fix is not feasible emergency work arounds be deployed within the same time schedule in place of the fix.

### **2.2.3 Maintenance**

- Maintaining the complete Code Base of KMOP including all versions of the software code shall be compulsory.
- Upgrading the code base to ensure that it is compatible with OEM supported, OS, DBMS, and Firmware and Development Platform versions. Upgrading code base to ensure that it is compatible with top two desktop browsers and mobile application platforms in the market.
- Maintain System Documentation including Change Requests, Impact Analysis, Bug Tracking and Testing Reports, Incident Reports and Service Level Reports. All reports to be maintained in a third party auditable format.
- Maintain master and configuration data for each of the markets and all state wise deployments.
- Carry out historical data archiving and hand over the data for archiving to the Data Centre. Restore archived data and generate reports on archived data as per requirement.
- Prepare ad-hoc reports and data analysis where standard reports are not available.
- Maintain application deployment specifications for all instances of the KMOP application.

### **2.2.4 Data Requests**

- Authorized officials of Kisan Mandi may request raw or processed data from the system to be supplied in plain text or CSV or excel format from time to time. Technology partner has to process these data requests from time to time within a reasonable time frame.
- Technology partner should also analyse frequent data requests and pro-actively create reporting tools for such frequent data requests.

### **2.2.5 Modifications and Enhancements**

- There is no limitation on number of modifications or enhancements that would be required during the contract period. Depending on the nature and complexity of the work involved and the business priority, modifications and enhancements received during a month would be clubbed in batches and taken up in batches.
- Technology partner must carry out impact analysis of each batch of requested modifications and enhancements, study and document business and technical implications of each change request, estimate the time frame and effort for implementation of each batch of change requests.

- A pre-agreed, standard and consistent methodology such as WBS, Function Point Analysis or Use Case Point must be followed in arriving at these estimates. Kisan Mandi reserves the right to accept or reject these estimates, modify the requests to reduce the time frame and effort and arrive at mutually agreeable estimates.
- Technology partner has to carry out the modifications and enhancements within the agreed time frame and carry out system integration testing.

#### **2.2.6 Maintaining Application Performance**

The SP needs to ensure prescribed performance levels for the application as below

- Peak Capacity per market – 5000 lots per day.
- Concurrent users of Kisan Mandi - 500
- Response time on LAN – less than 2 seconds
- Batch Processes – Not more than 10 minutes for all batch processes.
- Recovery Point Objective for Local failover – no loss of completed transactions.
- Recovery Point Objective for DR fails-over – No loss of trade and settlement data.
- Recovery Time Objective for local failover - 10 minutes
- Recovery Time Objective for DR fail-over – before start of next day business hours.

Various aspects of Service Levels expected from Technology partner have also been described in Annexure IV& V.

### **2.3 Meeting and Travel Requirements**

Technology partner must make their appropriate level of personnel available for meetings with Kisan Mandi at Technology partner offices or at Kisan Mandi offices as per convenience of Kisan Mandi. Such meetings may include, Steering Committee meetings, Impact Analysis Discussions and so on. Technology partner should factor in the expenses for travel for such meetings in their costing. No separate charges would be payable to Technology partner by Kisan Mandi for this purpose.

### **3 ELIGIBILITY CRITERIA**

The following categories eligibility criteria for selection of “Technology Partner for Development and Maintenance of Transaction Software for Kisan Mandi”

- i) A Company registered under the Indian Companies Act 1956 of the Government India;
- ii) A Cooperative, Trust, Society, Partnership Firm or Limited Liability Company.
- iii) Consortium of Cooperative, Trust, Society and Company

Provided that:

- Technology partner must have completed at least two projects of 100 person-months in the preceding 24 months that are currently in production.
- Technology partner must be supporting at least two projects are currently in production having 1000 concurrent users across multiple geographies in or outside India and service window of 12x 6 at least.
- Technology partner must be servicing more than two external clients for Software Application Services.
- The technology partner must have a development team of more than 50 people.
- Technology partner must submit proof of handling assignments in Financial or Commodities Markets such as trading, clearing, risk management systems.
- A Company registered under the Indian Companies Act 1956 of the Government India; Cooperative, Trust, Society, Partnership Firm or Limited Liability Company. Provided that; The registered entity has been in existence for at least three years and has audited balance sheet for this period;
- The minimum turnover in the last financial year should be at least Rs. 500.00 lakhs;
- The entity proposed to be deployed have direct experience in the field of marketing of agriculture produce.

### **4 PRE-BID MEETING**

SFAC will organise a pre-bid meeting of the interested parties on 11<sup>th</sup> November, 2014 at SFAC Head Office. Interested bidders can participate and raise their queries, if any, during the pre-bid meeting. If considerable suggestions / changes will require to be made in the EOI

based on Pre-Bid Meeting, revised EoI document shall accommodate the same. For participation, kindly send details at [msg.fpo@sfac.in](mailto:msg.fpo@sfac.in).

## 5 SUBMISSION OF EOI

The Expression of Interest in all respect shall be submitted in separate sealed envelopes for technical cum eligibility bid in one envelope and price bid in a separate envelope superscribed as “**TECHNOLOGY PARTNER FOR DEVELOPMENT AND MAINTENANCE OF TRANSACTION PLAFORM FOR KISAN MANDI**” to SFAC by 17<sup>th</sup> November, 2014 at following address:

**Managing Director**

Small Farmers’ Agribusiness Consortium (SFAC), Department of Agriculture & Co-operation, Government of India,  
NCUI Auditorium Building,  
5<sup>th</sup> floor, 3 Siri Institutional Area,  
August Kranti Marg, HauzKhas,  
New Delhi – 110016  
Tel – 011 2656617/37  
[www.sfacindia.com](http://www.sfacindia.com)

- Price bids of only those bidders who meet the eligibility criteria for both Data Centre and Application Services will be opened.
- Price Bid is to be given as Rupees per year in figures and words.
- Potentially eligible bidders / consortiums may be asked to make presentations in case documentary submissions are found to be inadequate to indicate eligibility.
- SFAC reserves the right to reject any or all bids without asking for presentations.

## 6 BIDDING PROCEDURE

Technical bids will be examined and marked on the following criteria:

S. No.	Criteria	Marks
i.	Previous experience of applicant in software development	30
ii.	Proposed model of Kisan Mandi Transaction Platform	50
iii.	HR Profile of Bidder to support project	20
	Total	100



- Financial bid should be in the form of one time lump sum fee (exclusive of ST) and annual maintenance and development charges for providing the Kisan Mandi Platform.
- Successful bidders will be asked to provide a bank guarantee equal to 5% of the annual fee payable by SFAC.
- Financial bids will be opened only in respect of those bidders who obtain at least 70 marks in the technical evaluation.
- Final evaluation of Technical plus Financial bids will be done in the ratio of 60% weightage for technical evaluation 40% weightage for financial evaluation.
- Managing Director, SFAC reserves the rights to accept or reject any bid without providing any reasons thereof.

## **7 AUTHORIZED SIGNATORY**

The ‘Technology partner’ mentioned in the RFP document shall mean the one who has signed the Technical and Financial Proposal. The applicant should be the duly Authorized Representative, for which a certificate of authority will be submitted. All certificates and documents (including any clarifications sought and any subsequent correspondence) received hereby, shall, as far as possible, be furnished and signed by the Authorized Representative.

## **8 AMENDMENT TO RFP**

At any time prior to the last date for receipt of proposals, SFAC, may for any reason, whether at its own initiative or in response to a clarification requested by a prospective applicant, modify the RFP document by an amendment. In order to provide prospective applicants reasonable time in which to take the amendment into account in preparing their proposals, SFAC may, at its discretion, extend the last date for the receipt of proposals and/or make other changes in the requirements set out in the RFP.

## **9 REJECTION OF RFP**

The application is liable to be rejected if:

- The application is not covered in proper sealed cover with superscription as indicated above.
- Not in prescribed form and not containing all required details.
- Not properly signed.
- Received after the expiry of due date and time.
- Offer is received by fax, telegram or e-mail & not followed /supported by the prescribed documents within the stipulated date.

## **ANNEXURE I – FUNCTIONAL SPECIFICATIONS**

### **Salient Features**

- Kisan Mandi Online Platform (KMOP) applications will be centrally deployed and hosted and all participants would connect to it through Internet in the normal course.
- KMOP will have two types of interfaces – A browser based interface and a mobile SMS based interface to be used for only participating in auctions / negotiation.
- There should be multiple language specific deployments; a single deployment supports any two languages at a time.
- KMOP should support multiple price discovery models including e-Tender (undisclosed bid prices), e-Auctions (disclosed best bids lot wise in English Auction Format only) and Bilateral Trading.
- Two types of markets should be supported, Real Markets and Virtual Markets. Real Markets correspond to existing Kisan Mandi market yards and its affiliated warehouses/cold store. A virtual market is for a commodity, where price discovery happens across real markets.

## **Markets**

### **Registration, Licensing and Market Access**

- Farmer Producer Organisation (FPO) shall be registered with the Kisan Mandi whether they transact through market yard, affiliated warehouses/cold storage or Farm-Gate sales or any other sales.
- Every farmer would be mapped to its respective FPOs and a Unique ID is generated for every individual farmer for tracking purposes. There should be provision for addition and deletion of the members at real time basis.
- Buyers would be registered with the Kisan Mandi and licensed by Kisan Mandi administering real markets.
- Buyers of all categories licensed by a Kisan Mandi, would have access to all market lots.
- Buyers include all categories of licensees such as traders, exporters, processors etc.

### **Price Discovery Mechanisms and Rules**

**Available Price Discovery Mechanisms** –The following price discovery mechanism shall be available in the system

#### ***a. e-Tender***

This is a mechanism where interested buyers put in their bids during the tender period for each lot. Bids can only be modified upwards. Bids may be cancelled during tender period. Current best bid is not shown to bidders or to administrators. At the end of the tender period highest bid is declared as winner.

#### ***b. e-Auction***

This is a mechanism where interested buyers put in their bids during the tender period for each lot. Current best bid is not shown to bidders or to administrators. Bids can only be above the current best bid. Best bids cannot be cancelled. At the end of the tender period current best bid is declared as winner.

#### ***c. Fixed Price Purchase***

This mechanism would be used for Farm-Gate purchases by buyers and for procurement centre purchases by any agency. The rate is fixed for a period and may have rules associated with it to determine what should be the minimum rate. Each buyer may have a different rates based on location and quality parameters and different buyers may offer different rates.

#### ***d. Bi-Lateral Price Determination***

This mechanism fixes a price between buyer and seller through off-line negotiations.

#### **e. Price Discovery Rules**

Price discovery rules and mechanisms would be set by market administration for virtual markets and by implication for associated real markets for selected commodities. The rules would include, tender timings, fixed price determination formula etc. Price discovery rules for markets would be set by Kisan Mandi.

### **Goods Entry**

#### **a. Entry at the collection centre**

Every lot that is brought in by a FPO at the collection centre for sale must be registered as per the grade and quantity. The Grading would be done on standard quality norm set by Kisan Mandi. A unique lot number along with an optional short code is assigned to the lot and provision of an entry receipt shall be available to the FPO with number of crates/packing material, produce and approximate weight. Optional SMS alert facility shall also be available for collection centre Entry.

#### **b. Entry at the Kisan Mandi Premise**

All lots brought in to Kisan Mandi premise have to be entered as deposits and a receipt with a unique deposit number shall be issued. The produce reaching Kisan Mandi premise are to be graded and weighed and it is entered in the system. This entry would be considered as the final deposit.

#### **c. Entry at Farm-Gate or Procurement Center**

In case of procurement by any designated agency or direct loading by the FPOs, entry would be done along with rate and weightment and a purchase document with all applicable data is issued. This is a single transaction entry that is a combination of lot entry, weighing and trade.

### **Assaying of Lots**

For lots aggregated at the collection centre, assaying is mandatory. For Farm-Gate/Procurement Centre Lots, assaying is as per the option of the buyers. Assaying parameters for real markets would be produce specific and would be determined by Kisan Mandi

## **Marking Lots for Sale**

### **a. Kisan Mandi Lots**

Lots brought in at a Kisan Mandi warehouse/cold storage are by default marked for sale as per the default price discovery mechanism for that produce defined in the Kisan Mandi. In case the lot needs be held back, it has to be explicitly done by the Kisan Mandi Administration in discussion with FPOs. Lots held back can be put up for sale any time by changing their purpose.

### **b. Collection centre Lots**

Lots aggregated in the collection centre can be put up for sale in associated market through KMOP. Once put up for sale, lots can be held back by FPOs by modifying the purpose. Lots for which bidding is in progress or concluded cannot be held back but trades could be rejected within the allowed time-frame.

### **c. Procurement Center Lots**

These lots need not be put up for sale and cannot be held back as they are entered As Sold and Purchased. However, information about the transaction shall be loaded for MIS purpose.

## **Bidding**

Bidding is done for both e-Tender and e-Auction price discovery mechanisms.

### **a. Tender Time**

Kisan Mandi will set tender timings for bidding in lots in the associated markets.

### **b. Pre-Bid Margins**

Kisan Mandi administrator may specify pre-bid margin percentage. For e-Auctions, bidding margins are checked such that total margin required for winning bids does not exceed available collateral. For e-Tender, pre-bid margin availability is checked prior to tender opening. Provision for the same would be made.

### **c. Exposure Limits**

In addition to or apart from pre-bid margins, exposure limits may be set for buyers where funds settlement is handled through KMOP.

**d. Mobile Based Bidding**

Mobile browser based bidding shall be available. SMS based bidding shall also be available and could be made as a value added service.

**e. Result Declaration**

Results shall be declared immediately after tender period is over. Winner lists shall be disseminated in real time on screens and SMS alerts shall also be sent.

**f. Trade Cancellation**

On instructions from FPO the Kisan Mandi Team may reject the winning bid and cancel the trade within the cancellation time window provided.

**Bilateral Trade**

Based on the rules set by Kisan Mandi, bi-lateral trade shall be recorded in KMOP at a negotiated rate.

Kisan Mandi Team can define

- 1) Which commodities are eligible for bi-lateral trade
- 2) What is the workflow, whether both buyer and FPOs have to give confirmation
- 3) Set a minimum price produce wise for such trades

Bilateral Trades cannot be cancelled.

**Direct Sales**

Based on the rules set by Kisan Mandi, Direct Sales can be recorded in KMOP at a negotiated rate.

Kisan Mandi Team can define

- 1) Which commodities in the real market are eligible for Direct Sales
- 2) What is the workflow, whether both buyer and commission agent have to give confirmation
- 3) Set a minimum price commodity wise for such trades

Direct Sales Trades cannot be cancelled.

**Lot Weighing.**

Lot weighing is done after e-Tender or e-Auction result declaration. It is usually done in the presence of buyer and seller or their representatives.

**a. At Farm-Gate/ Procurement Center Lots**

These lots would be pre-weighed before entry.

**b. Weighing Automation**

Weighing automation is planned to be introduced such that bag wise weight for a lot can be captured by linking KMOP to electronic platform scales. This would be done at market yards, warehouses as well as farm-gate, and procurement centers.

**Accounting Computations**

KMOP provides a flexible framework for computations associated with trade fulfillment in the primary market and related document generation.

Commodity-wise, market-wise add-on charges as well allowable deductions and the rates for each are defined through a formula structure. The add-ons and deductions may include Market Cess, Weighing Charges, Handling Charges, Bag Charges, Commissions, Delayed Payment Charges, Warehouse Rental, Re-weighing Charges, and Re-Assaying Charges.

The applicability of VAT / CST and rates for the same can also be defined based on Buyer Location.

For each trade fulfillment, the computations are done automatically and shown in full detail. Appropriate Ledger Entries are made upon generation of related documents.

**Primary Sale/Purchase Bill Generation** –Provision for below mentioned bills shall be there in the system:

**a. Purchase Bill**

In case of Farm-Gate and Procurement Center lots, Purchase Bill is generated for each lot upon lot entry itself and all the computations and ledger entries are completed automatically. Purchase bill copy is handed over to FPOs. Purchase bill shows the amounts, add-on charges, deductions and discounts as applicable.

**b. Primary Sale Bill**

In case of Kisan Mandi/collection centre sale multiple lots of the same produce between same FPO and buyer could be consolidated into a single Primary Sale Bill. The records in KMOP are maintained lot wise in any case. The detailed entries get posted to appropriate ledgers upon bill generation.

All add-on charges are shown on Primary Sale Bill.

### **c. Farmer Receipt**

FPO receipt to be generated along with the primary sale bill. FPO receipt would show all the appropriate deductions.

**Collections and Payments** –provision for proper system for sales transaction recording shall be made in the system

### **a. Collections**

Kisan Mandi to define rules for collection of sales proceeds. Initially the buyers will be deposit sales proceed in Kisan Mandi account. On receipt of the same sales proceed is passed on to FPOs. Provision for online recording of intimation, approval and other activities required for closure of transaction to be made available

In case KMOP is to handle collections, it can define time frames and methodologies for collections. Future readiness for the same is also sought.

### **b. Local Market Fee Collection**

In case if cess is to be collected. Provision will be made to record such collections and reflect those in Demand and Collection Book report for Market Fee.

### **c. Farm-Gate/Procurement-Center Related Payments**

All the payments may be direct to FPOs in such cases. In case buyers are supposed to pay directly to FPOs, the Kisan Mandi can define what payment modes (cash / cheque / account transfer) are allowed buyer-wise. In case collections are handled through KMOP farmer payments would be through account transfer through KMOP.

## **Exposure Management**

KMOP enables exposure management by Kisan Mandi Team, if required. This consists of allowing bidding within margins deposited, restricting ability to bid or trade based on outstanding obligations co-related with Cash Credit Limits specified by banks and/or Collaterals offered. For exposure management and margin management, collections must be handled through KMOP.

## **Inventory Tracking**

Both buyer wise and FPOs wise inventory shall be tracked in KMOP. For accurate inventory tracking, apart from the goods entry transactions, goods exit transactions also need to be diligently entered.



## **Cess Handling**

Provision for cess handling must be integrated in the system and it should be able to generate required report as and when required.

## **Goods Exit**

Goods exit is to be recorded and Each exit transaction updates inventories appropriately.

## **Permit Generation and Tracking**

Provisions for Permits generation, in case if it is required, should be integrated in the system. It can be generated for non-local buyers. Option of verification of Permits through an open browser based interface or interactive voice response or through SMS.

## **Private and Public Data Access**

### **a. Real time price and volume data**

This could be disseminated in real time through standard interfaces and protocols either to approved subscribers or to public at large. The richness and granularity of data and dissemination delays could be different for private and public access.

### **b. Reports**

A set of reports could be made publicly available whereas a set of reports would have restricted private access.

## **Value Added Services**

Provision and integration of Services such as SMS based bidding, SMS alerts etc. can be enabled or disabled based on subscriptions.

## **Commodity inventory management**

Provision for recording of Inventory(FPO-wise, buyer wise, item wise, quality wise and other parameters at various level ,such as- Collection centre, At godown/warehouse of km, in transit material from Kisan mandi and its integration

**a. Master Data Management-**

Provision for Master Data Management for accounting purposes.

**b. Deposit of Goods**

Deposits are recorded against FPOs registration. Each deposit has to be weighed and assayed as per the parameters for that commodity. Entire deposit is treated as a single lot. Location of the deposit in the warehouse, number bags/crates, bag/crate type and other details are recorded.

**c. Deposit Splitting**

An FPO may split his deposit into multiple deposits so as to sell part of his deposit.

**d. Sale**

FPOs can put up his deposit for sale in the affiliated market and the price discovery mechanism applicable would be used to conclude the trade. If entire quantity is not being sold, deposit has to be split before sale.

**e. Trade Fulfilment Transfer**

Sale through KMOP would involve transfer of ownership from FPOs to Buyer. This would be handled through a real-time link between KMOP and inventory management system.

**f. Re-weighing**

Re-weighing may be asked for by the current owner and would be paid for by the current owner. This payment is outside KMOP

**g. Re-Assaying**

Re-assaying may be asked for by current owner and would be paid for by the current owner. This payment is outside KMOP.

**Integration with Accounting and Other Systems**

Provision shall be made for import and export of data from and to other systems / formats. There is also web service based API for integrating with other systems. Provision for integration with AgmarkNet or State Level Applications may also be built as required.

Compatibility shall be established with popular accounting software and Provision for Integration with banks should be made available for payment and collections processing.

## **ANNEXURE II – CRITICAL, MAJOR AND MINOR FAULTS**

### **a. Critical Faults**

Stoppage of any of the following transactions for more than one instance in any market for more than 5 minutes

- a. Display of Arrivals and Prices
- b. Gate Entry
- c. Lot Entry
- d. Assaying
- e. Bidding for e-Tender or e-Auction
- f. Tender Opening
- g. Winner List Printing
- h. Weighing Update
- i. Sale Bill Generation
- j. Local Market Fee Collection

### **b. Major Faults**

Stoppage of any of the following transactions for more than one instance in any market for more than 30 minutes:

- Permit Printing
- Purchase Bill Generation
- Warehouse Deposit Entry
- Warehouse Withdrawal Entry
- Pay-in Process
- Pay-out Process
- Bank Receipts
- Bank Payments
- DCB Generation
- Gate Exit
- Direct Sale Entry
- Bilateral Trade Entry

- SMS and IVR transactions
- Any report not available for more than 1 hour will be treated as major fault.

### c. Minor Faults

Any faults not listed above as Critical Faults or Major Faults shall be treated as minor faults. Some minor faults may be treated as Major Faults during the course of the contract.

## ANNEXURE III – SLA FOR DATA CENTER

The Service Levels are defined below. The credits and penalties are defined as % of fees payable monthly.

### a. Service Levels

Penalties can be set-off against credits accumulated for a quarter irrespective of SL measurement frequency. However, if Technology partner has net credits at the end of a quarter, no extra amount would be payable against such credits and the credits would lapse. Quarters for this purpose and for SLA measurement where applicable would be Jan-Mar, Apr-Jun, Jul-Sep and Oct-Dec. Credits for Data Centre Services can't be set-off against Application Services

Sr. No.	Description of Service Item	Measurement Methodology	Measurement Frequency	Target Baseline		Breach Level	
				Level	Credits	Level	Penalty
1	Availability of complete hosting infrastructure during peak hours - 8 am to 8 pm- 7 days a week	Infrastructure management tools	Monthly	>99.99 %	3	<99%	3
2	Availability of complete hosting infrastructure during non-peak hours 8 pm to 8 am - 7 days a week	Infrastructure management tools	Monthly	>90%	1	<70%	1

Sr. No .	Description of Service Item	Measurement Methodology	Measurement Frequency	Target Baseline		Breach Level	
				Level	Credits	Level	Penalty
3	Delays as per Data Back Up Schedule	Data back-up reports	Monthly	< 1 day	2	> 3 days	2
4	Local application failover to secondary server	Incident Report Tracker	Monthly	< 10 minutes	3	> 30 minutes	3
5	Replacement and/or repair of faulty equipment to ensure no single point failure	Incident Report Tracker	Quarterly	< 2 days	2	> 15 days	2
6	Delay in periodic maintenance activities as per maintenance plan	Infrastructure management tools	Quarterly	< 1 day	1	> 15 days	1
7	Application of security patches within x days of availability	Patch Reporting	Quarterly	< 30 days	1	>60 days	1
8	Replacement of End of Life Devices	Inventory Tracking Report	Quarterly	<1 month	1	> 3 months	1
9	Free disk space	Infrastructure management tools	Monthly	> 30 %	2	< 10 %	2
10	Peak Memory Utilization for more than continuous 15	Infrastructure management tools	Monthly	< 80 %	2	> 95 %	2

Sr. No.	Description of Service Item	Measurement Methodology	Measurement Frequency	Target Baseline		Breach Level	
				Level	Credits	Level	Penalty
	minutes						
11	Peak Processor Utilization for more than continuous 15 minutes	Infrastructure management tools	Monthly	< 80 %	3	> 98 %	3

#### ANNEXURE IV – SLA FOR APPLICATION

##### a. Service Levels

Sr. No.	Description of Service Item	Measurement Methodology	Measurement Frequency	Target Baseline		Breach Level	
				Level	Credits	Level	Penalty
1	Availability of application during working hours - 8 am to 8 pm	Based on incident reports and non-availability reports	Monthly	>99.9	3	<99	3
2	Availability of application during non-peak hours 8 pm to 8 am - 7 days a week	Based on incident reports and non-availability reports	Monthly	>90	1	<70	1
3	Average home page loading time over LAN	Performance measurement tools	Monthly	<10 sec	1	> 20 sec	1
4	Average transaction initiation page loading time over LAN	Performance measurement tools	Monthly	<7 sec	1	> 30 sec	1
5	Average transaction completion response time over LAN	Performance measurement tools	Monthly	< 20 sec	1	> 60 sec	1
6	Average Report Generation time	Performance measurement	Monthly	< 30 sec	1	> 120 sec	1

Sr. No.	Description of Service Item	Measurement Methodology	Measurement Frequency	Target Baseline		Breach Level	
				Level	Credits	Level	Penalty
	per 100 records in the output	tools					
7	Time period for reporting of Critical Issues	Incident report tracker	Monthly	< 2 hours	0	> 8 hours	1
8	Time period for reporting of non Critical Issues	Incident report tracker	Monthly	< 6 hours	0	> 24 hours	1
9	Workaround for Critical Issues	Incident report tracker	Monthly	< 2 hours	1	> 12 hours	1
10	Permanent Fix for Critical Issues	Incident report tracker	Monthly	< 2 days	1	> 5 days	1
11	Workaround for non-Critical Issues	Incident report tracker	Monthly	< 2 hours	1	> 12 hours	1
12	Permanent Fix for non-Critical Issues	Incident report tracker	Monthly	< 2 days	1	> 5 days	1
13	No of concurrent users per state	Application Monitor	Monthly	> 5000	2	< 3000	2
14	Average delay in deployment of CRs with respect agreed timelines - % of estimated no of days	Change Request Tracker	Quarterly	< 0	1	> 20 %	1
15	Price and volume data requests spanning less than 7 latest days	Data Request Tracker	Quarterly	< 1 day	1	> 4 days	1
16	Price and volume data requests spanning prior to latest 7 days	Data Request Tracker	Quarterly	< 3 days	1	> 10 days	1
17	Member data requests spanning less than 5 members at a time	Data Request Tracker	Quarterly	< 1 day	1	> 4 days	1
18	Miscellaneous data requests pertaining	Data Request Tracker	Quarterly	< 3 days	1	> 10 days	1

Sr. No.	Description of Service Item	Measurement Methodology	Measurement Frequency	Target Baseline		Breach Level	
				Level	Credits	Level	Penalty
	latest three month period						
18	Miscellaneous data requests pertaining to period prior to latest three months	Data Request Tracker	Quarterly	< 7 days	1	> 30 days	0
19	Impact analysis for change requests	Change Request Tracker	Quarterly	< 7 days	1	> 30 days	1
20	Document updation on deployment of change requests	Change Request Tracker	Quarterly	< 1 day	1	> 15 days	1

Penalties can be set-off against credits accumulated for a quarter irrespective of SL measurement frequency. However, if technology partner has net credits at the end of a quarter, no extra amount would be payable against such credits and the credits would lapse. Quarters for this purpose and for SLA measurement where applicable would be Jan-Mar, Apr-Jun, Jul-Sep and Oct-Dec.

Credits for Data Centre Services can't be set-off against Application Services.

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