

TENDER NOTICE

Date _____ Tender Ref No: _____

FOR

**SUPPLY AND INSTALLATION OF
Integrated weight and information system solution for mandis AXLE WEIGH BRIDGE TO BE
INSTALLED AT e-NAM MANDI (s) ENTRY AND EXIT POINTS IN STATE OF
, HIMACHAL PRADESH
HP STATE AGRICULTURAL MARKETING BOARD**

DUE ON: _____

Head Office:
HP State Agriculture Marketing Board,
Vipanan Bhawan,
Khalini, Shimla-171002,
Himachal Pradesh
Tel: 0177-2622252
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**HP STATE AGRICULTURE MARKETING BOARD,
HIMACHAL PRADESH, SHIMLA-171002
Ref No. _____**

Tender Notice

In continuation to EOI published in The Tribune Indian Express and Amarujala dated 1.3.2017 the sealed Tenders are invited for Supply, Installation and commissioning of Axle Weigh Bridge System(Weigh-in-Motion) at e-Nam Mandis of the HP State Agricultural Marketing Board, Himachal Pradesh from the reputed firms/Manufacturers having minimum five years experience.

| | |
|--|---|
| Tender No & Date | |
| Description of equipment/ material | INTEGRATED AXLE WEIGHING AND RFID BASED SYSTEM WITH MANDI SOFTWARE |
| Operational obligation | Maintenance and Operation to ensure uptime of the Integrated system. |
| Date of Publishing of tender notice | 09.05.2017 |
| Date or opening of Technical bid | 30.05.2017 (11.00 A.M) |
| Submission and Opening venue of Tender | 30.05.2017 |
| Last date of submission | 29.05.2017 |

Tender documents will be available on Board's website <http://hpsamb.nic.in/> from 8th May, 2017 which can be downloaded on or before 29.5.2017 till the last date of submission of tender. However, to participate in the bidding process, bidders are required to pay a non-refundable fee of Rs. 1000/- (Demand Draft) towards the cost of tender document in favour of "**Managing Director HP State Agricultural Marketing Board**". Tender will not be considered unless this amount is paid to HP State Agriculture Marketing Board.

Managing Director
HP State Agriculture Marketing Board,
Vipanan Bhawan

| Name of Work | EMD / Bid Security | Document fee | Warranty period | Contract period |
|---|--------------------|-------------------------------------|-----------------|--|
| Design,manufacture, supplyinstallation, commissioning and User training with 1 years onsite operation and maintenance of Integrated Axle Weighbridge in Motion RFID based vehicle information mandi solution systems on the Entry and Exit Point of mandi Boards. (Mandis detail attached) | 2.50 lac | 1000/ INR (onethousand only) | 01years | AMC as per standard rates subject to negotiation. |

1. Instruction to Bidders

- 1.1 The complete Bid Document can be viewed / downloaded from the portal <http://hpsamb.nic.in/>
- 1.2 All the bidders are advised to study the bid documents thoroughly. Submission of a bid shall be deemed to have been done after examination of the documents with full understanding of the implications thereof. These conditions and specifications shall be deemed to have been accepted.
- 1.3 The rates quoted by the bidder against various items contained in Bill of Quantities of this bid document, shall be inclusive of all central/state/local taxes/duties (sales/octroi/etc.) as also of costs relating to the loading, unloading, lifting, stacking and re-handling charges including transportation to the worksite of all materials. The various items of installation, testing, commissioning and maintenance shall be inclusive of all costs such as assembly, fabrication works, tax/other statutory taxes/duties/levies as applicable in the state.

1.4 The bidders may have a survey including a site visit before furnishing the quotations but the expenses, in connection with the visit and surveys etc. shall be borne by the bidders themselves.

No Gratification Clause: The bidders will give an undertaking that they will not try to gratify any person or use any other unfair means involved in the purchase of the quoted equipment. This will also debar the company for participating in other tenders floated or to be floated in by the purchaser and suitable action will be initiated against such defaulters.

1.5 Agency agreement from foreign suppliers for their Indian agents: Based on Ministry of Finance vide circular dated 31/01/1989 the following are compulsory:
Local Registration of Indian agents of foreign Suppliers.

Precise relationship between foreign suppliers and their Indian agents and their mutual interest in the business, should be clearly spelt out.

Any payment, which the agent receives in India or abroad, from the foreign supplier, whether as a commission or as a general retainer fee, also needs to be brought on record and made explicit so as to ensure compliance to tax laws and to prevent leakage of foreign exchange.

All services to be rendered by the agent, whether of general nature or in relation to the particular contract, must be clearly stated by the foreign supplier and the Indian agent.

The amount of agency commission agreed to between the foreign principal and the Indian agent should be specifically disclosed and the agency commission will be part in the Indian rupees only.

2. Bid Security/Earnest Money

2.1 Bid Security/EMD amounting to Rs. 2.50 lac(rs. Two lac fifty thousand) only should be enclosed along with the technical bid in the shape of FDR duly pledged in the name of "**Managing Director State Agricultural Marketing Board**", failing which the tenders will be outrightly rejected. The NSIC certificate issued for the particular product shall also be accepted towards the exemption of submission of cost EMD provided that the Bidder is registered with NSIC scheme 6 months prior to submission of the BID

2.2 The "Bid Security/Earnest Money ", in case of unsuccessful Bidders, shall be retained by the Purchaser, up-to a maximum period of 60 days from the date of opening of the Bids or till the finalization of the tender, whichever is earlier. The Bid security shall be refunded to the unsuccessful tenderers on their written request. No interest will be payable by the Purchaser on the Bid Security/EMD.

2.3 The Bid Security/Earnest Money shall be forfeited;

- a) If a Bidder withdraws his bid during the period of bid validity specified by the Bidder in the Bid; or
- b) In the case of the finally selected Bidder, if the Bidder fails;
 - i) to sign the Contract in accordance with Clause 20; or
 - ii) to furnish Performance Guarantee in accordance with Clause 13 or
 - iii) if, at any stage, any of the information/declaration is found false.

2.4 Bid security/Earnest Money in respect of the finally selected Bidder(s) will be discharged upon the Bidder(s) executing the Contract, and furnishing the Performance Guarantee, pursuant to Clause no 13.

3.PREPARATION OF PROPOSAL

3.1 Bidders are requested to submit the proposal in Three Parts in 3 separate envelopes / packages and put together in one single outer envelope/package. The three parts shall be:

Part 1: Firms Credentials, - certificates / financial information/manuals (Form-1,2 ,3)

Part 2: Technical Proposal - Technology its components, software, equipment specifications, functionality and certifications& Bill of quantity(Form-4 & 5)

Part 3: Financial Proposal. – Commercial proposal with break up and relevant documents (Form-6)

- All Proposals need to be submitted in hard Binded copies. Loose sheets / papers will not be considered

Bidders are expected to examine all terms and conditions included in the documents. Failure to provide all requested information will be at bidders own risk and may result in rejection of the Bid/ bidder proposal.

- Any submission without EMD would be liable to rejection
Bids will be valid for a period of 90 days from submission

3.2 PROPOSAL EVALUATION

A three -stage procedure shall be adopted in evaluating all the proposals: The evaluation would be on % point system for past experience and technical score. The minimum score will be 50% to qualify technical bid.

- (i) Firms Credentials, firms securing the qualifying marks mentioned in Clause will be eligible for Technical and Financial evaluation
- (ii) Technical Evaluation, firms securing the qualifying marks mentioned in Clause will be eligible for Financial evaluation and

(iii) Financial Evaluation.

The date of opening of financial bids will be communicated separately to the bidder who qualify the stage-I.

3.3 Qualification required for:

- a) Experience of Bidder in similar contracts with Govt, high ways, Check posts, entry points mandis.
- b) Approvals, design documents and certifications by relevant Govt. Authorities.
- c) Proof of stamping and verification of systems by Weights and Measures department (India)
- d) Experience of minimum 50 systems in operation for over 5 years. With experience certificates
- e) Weight age would be given to manufacturers who have executed weight in motion systems on hilly terrains with a proven certification of completion of at least 1 weight based automation project which comprises of Weigh in Motion, software, camera or RFID integrated together.

NOTE: Eligibility- Firm(s) Credentials, Technical & Financial capability of Bidder (s) & Bill of quantity: Form- 1, 2, 3, 4 & 5.

Preparation of Bids

4.1 The bid prepared by the bidder and all documents related to the bid shall be written in English.

4.2 The bid should be submitted on the prescribed format appended with tender document to the Managing Director, HP State Agricultural Marketing Board, Vipnan Bhawan, Khalini, and Shimla-171002. The Technical and Financial Bid shall be signed by the authorized signatory of the bidder.

This part should indicate the following; -

- a) Tenders should contain complete scope of supply with all technical details, specifications, working and methodology.
- b) Point wise confirmation for the Technical Specification enclosed is to be provided. If there are any deviations, the same should be clearly specified. Tenders received without confirmation to the specification will be rejected.
- c) Relevant technical datasheet with product write up and all its component specifications to be attached.
- d) Manuals

- Stamping certificates from Weights and measures dept. minimum 50 to be submitted for at least 50 Equipment's in operation within 5 years.
- Department reserves the right to verify the above information provided by vendor. In case the information provided is found to be false/ incorrect, the offer shall be rejected.

5. Financial Bid

5.1 The prices may be quoted in INR only. All prices mentioned should be FOR destination at installation site.(List of Mandis enclosed Annexure-I). The bidders are required to quote the following prices:

- Cost of complete turnkey work which includes supply, installation commissioning, stamping verification user training.
- Cost should be inclusive of all taxes applicable.

5.2 The price comparison shall be made on the basis of cost of equipment and services as a turnkey assignment and total cost along with its accessories.

5.3 The bidder shall indicate the prices on prescribed PRICE BID PROFORMA Form-6 of the tender document. The Proforma should be duly signed & sealed by their authorized signatory/(s). Financial Bids not given in Proforma will be rejected out rightly.

5.4 The prices of equipment quoted by the Bidder and accepted by the HPSAMB shall hold good till the completion of the works or satisfactory installation of equipment and no additional claims will be admissible on account of any price variation or fluctuation in market rates.

5.5 Payments made consequent to any notified change in sales tax and other statutory levies (both increase and decrease) shall be to the Purchaser's account. For such claims of variation, the Bidder shall produce the Government notification as documentary evidence. Price variation due to any other cause shall be on Bidder's account.

6.1 Integrated Axle SLOW SPEED Weigh inMotion :

Axle Slow speed weigh-in-motion (SSWIM) system should be capable of determining the axle weights either statically or dynamically up to a speed of 15 KMPH. WIM system should consist of a Platform Structure permanently installed into pavement of concrete lane at approach and exit of the Mandis. The system should have axle and tire detection sensors, Vehicle separator & inductive loops along with accurate automatic vehicle separation, differentiation & weight load classification. The WIM system should have signal control, configurable alarm outputs and user friendly operator control unit. The equipment proposed shall mandatorily have Model Approval necessary to operate Weighing equipment's in India from Weights & Measures department, Government of India. The Indicator would be sealed by the W&M department after calibration which shall be the overall responsibility of the equipment supplier to calibrate all the WIM equipment's at a maximum yearly along with certificate renewal from the concerned authority as & when required copies of same duly submitted to HP mandi board for records

6.2 The WIM system shall have compatible software and be connected to an industrial grade PC for data management and Site storage. It should be capable of weighing in both modes of operation Static & Dynamic & generate printing and information display for local use. There should be facilities for data back-up, and archive functions to facilitate saving daily operations on Department Server duly connected. The SSWIM Scales shall be located at the approach of the Booth to comfortably accommodate the longest trailer. The equipment supplier shall ensure that an image & Video clip for each vehicle shall be archived post transaction. The location of camera and type of camera should be such that the characteristics of the vehicle are clearly captured. This video imagery shall be required to be linked to the Transaction

Date and Time, Lane Id, Vehicle Count

- Type of Vehicle
- Number of Axles passing over the scale
- per axle Weight
- Gross Vehicle Weight
- Vehicle Speed
- Commodity of Vehicle
- Farmer registration match

7. Technical Specifications:

7.1 Technical Specifications for AXLE WEIGH BRIDGE System

| | |
|--|--|
| Platform size dimension | Normal Lane: 3000 mm x 700 mm |
| Capacity of the Platform | 40 Ton/Axle |
| Structure | Plate - MS I-Beam; Duly certified for Structural Analysis and Design (STAAD)-III complying BIS 2062 |
| Number of Load cells | 4 |
| Stationary Accuracy | +/- 0.05% FSR |
| In Motion Accuracy | +/- 1% FSR up to speed 5 Km/Hr and +/- 2% FSR up to speed 10 Km/Hr and +/- 3% FSR up to speed 15 Km/Hr |
| Maximum passing speed | : 15 Km/ h |
| Overload capacity of the platform | 150% of rated capacity |
| Protection Class for the Load Cell and Controller/ Indicator | IP 68 Operational Temp: -10 to 65 Degrees |
| Vehicle separator | <ul style="list-style-type: none"> • IR Based curtain with minimum 24 sensors –housed in Stainless steel pillars with proper sealing • Axle counting |
| Size of IR Curtain | 440 mm x 1500 mm |

| | |
|---|---|
| Range of IR Sensors | 7 meter |
| Controller Housing | Water/ weather proof with anti-rust coating; IP65 rated |
| Compliant | Legal Metrology Act 2009 (1 of 2010) & Rules framed there under from time to time, duly stamped & sealed by W&M |
| Approval/ Certification | Type/ Model/ Third party approval for accuracy level by Government approved Test Laboratory/ Model approval / IIT / NPL/CRRRI |
| Re-calibration/ Stamping & Verification | Yearly basis |
| Downtime allowed for Periodic Maintenance | Maximum 2 days in a Month |

Technical Specifications of WIM – Indicator:

- LED display housed in IP55 or better rated enclosure.
- Front Panel calibration
- 6 digits > decimal point
- W&M approved model, duly sealed on site
- Least count verification 20 Kgs +/- on Full Scale Output – upto 120Tonnes
- Self-diagnostic load cell check function
- Should be able to count single transaction up to 10 axle vehicles.
- Should have inbuilt memory of transaction records and capability to integrate with Mandi software.

- Technical Specifications Integrated Slow Speed Vehicle Weighing in Motion Systems
- Detail of Weigh In Motion :
- Capacity 40 M Ton/Axle
- Structure, Size and dimension Mild steel in acc Bis 2062 0 .7 m x 3 m
- Accuracy of weighing upto 2 % of full scale weight
- Type of In-Motion Scale Loadcells based
- Type of Installation Pit Type flushed in ground
- Speed of weighing 1 to 15 Kmph
- Indicator front panel calibration as per W&M
(govt. of India) sealed to avoid any manipulation
- Load_cell Strain_gauge based beam type on corners.

7.2 Components of the Integrated Weigh_in Motion SystemPlatform

Consists of single sub frames with four load cells fixed in the scale. The scale can be directly grouted in a compacted small pit and does not require any large foundations. The platform is flushed to the ground and also can be easily serviced by removing the top frame. The platform size 0.7 x 3m with overloading capacity up to 20 Tones / axle. Platform design would be self contained universal and reloadable in pits. The structure should be certified.

| | | |
|--------------------------|--------------------------------------|----------------------|
| Material of construction | Mild steel as per BIS 2062 standards | SAIL equivalent MAKE |
| Main Beams | Mild steel as per BIS 2062 standards | SAIL equivalent MAKE |
| Cross beams and traverse | Mild steel as per BIS 2062 | SAIL equivalent MAKE |
| Platform design | As per STRAAD III Design | Certified |

7.3 Load Sensors

The typical Load Cell WIM systems consist of four load cell placed across the traffic lane. Off-scale detectors are integrated into the scale assembly to sense any vehicles off the weighing surface. Load cells shall be of beam type which has in – built surge protection, hermetically sealed having IP 68 Approval

- i. Type : Beam type
- ii. Material : Stainless Alloy Steel rust proof
- iii. Filling : Strain Gauge
- iv. Capacity : 20 Tones each
- v. Stationery Accuracy : +/- 0.05% FSR
- vi. In-Motion Accuracy : <+/-3%
- vii. Safe load limit : 150%
- viii. Ultimate Overload : 300%
- ix. Operating Temp Range : -25 degree to + 70-degree C
- x. Cable Dia : 6 x 35 meters

7.4 Loop Sensors To detect the vehicle entry, exit

- i) No. of Loop Sensors : 02
- ii) Type of Loop Sensors : Inductive type
- iii) Input /Output type: four channel

7.5 Vehicle Separators cum differentiators: prevents tail gating and identifying type of vehicle. The Optical light Curtain is used to separate two different vehicles travelling with a minimum headway. Further in conjunction with the information from the vehicle detector loop the direction of travel like reverse entry or vehicle rolling back from lane, is also recorded

7.6 User Fare Display

UFD shall convey Weight, overweight and charges applicable. No. of Axles. When vehicle crosses over the WIM the scoreboard display the class, charges of vehicle. It should be placed in such a manner that it should be visible to Truck Driver. The User Fare Display shall display alphanumeric messages, as commanded by the Toll Lane Controller to indicate the amount of toll due, the status of user accounts and other information to users. The UFD shall be able to display alphanumeric characters (A to Z and 0 to 9), special characters (e.g. >, *, <, W, etc).

All messages shall be able to display flashing messages.

The characters displayed shall have a 7x5 pixel resolution.

The operating voltage of the modules shall be 230VAC, 50 Hz.

The communication interface shall be a standard RS232 or RS422 port

7.7 Incident Capture Camera

Incident capture camera as part of Integrated System shall be deployed and positioned to record vehicle number and passage video clip With front view image. Video clips images of all vehicles shall be stored in DB. An event triggered video clip shall be prepared for every vehicle moving over the WIM Platform. It should record vehicle information for all or unusual transactions types to identify for audit purposes.

The camera shall be day and night infrared capable 2 megapixels and shall be designed for use at low light levels and shall have a wide dynamic range with minimal blooming and transfer smear characteristics.

- The camera shall have auto white balance.
- Weather-proof IP66-rated Housing
- The power source of the camera shall be 12 DC or 24 VAC.
- The camera should be immune to all outdoor weather conditions
- The lens shall be designed to prevent bright light "flare" caused by indirect sunlight outside the angle of view of the lens affecting the viewed scene.

7.8 Lane Receipt Printer

The Receipt Printer will be placed on the counter within each booth and use to dispense receipts of payments to Truck drivers. The receipt printer shall be a compact thermal printer able to print, as a minimum payment receipts (text and graphics), barcodes and system status information. The receipt printer enclosure shall be IP54 rated so that it is sealed to protect against splashed liquids, dirt and dust. The printer shall be able to operate within temperature ranges from -5oC to +50oC. A reputed OEM WIPRO / EPSON or similar

- High-speed printing of up to 200 mm/ sec.
- Parallel/Serial/USB interfaces available
- Ease-of-use features including drop-in paper loading, long-lasting auto cutter and Auto Status Back messages
- Auto Cutter Life 1,500,000 Cuts
- Printer Life 15,000,000 lines

7.9 Traffic Light The traffic lights referred to in this specification as a transaction signal and shall display a red or green light to the truck driver indicating the status of their transaction and indicating either to stop or proceed. Traffic shall be mounted on a pole downstream of booth in order to provide an adequate viewing angle and distance to the Driver.

- a) One (1) red and one (1) green impact resistant colored polycarbonate lens.
- b) LED display technology.
- c) An injection molded impact resistant polycarbonate housing and hood.
- d) The signal shall be clearly visible from a distance of up to 20m from the Traffic light,
- e) Under ambient lighting conditions ranging from direct sunlight to complete darkness.

The lens shall be enclosed and protected by an air-cored gasket providing a weather proof and dust proof seal between lens, door and reflector assembly. The LEDs utilized in the signal heads shall be aluminum indium gallium phosphorus (AlInGaP). The Traffic Light Enclosure should be IP66 rated. The housing and the lens shall be resistant to moisture, fog, direct and indirect sunlight, aging

- IP 65 Rating
- Synchronize with Lan Computer (LC)
- Supply Voltage 230 VAC
- Power Consumption 25 Watt
- Technology LED Base

7.10 UPS - On Line Uninterrupted Power Supply System (UPS) with Maintenance free Batteries The on line UPS system shall be such that the system shall guard critical application from every possible power disturbance, like lightning surge, voltage sags, harmonics and power outages etc. and shall ensure that the power supply to critical load will be maintained even during UPS overload or fault conditions. The system shall be provided, complete with maintenance free batteries suitable for given back up time and suitable sized stand and rack for UPS system and batteries. Single phase 1 KVA Isolation Transformer of reputed make with Output 230 VAC +/- 5%, Input 160

VAC to 280 VAC shall be provided to minimize the sharp fluctuations in input voltage/current & provided with protection against lightning with spike guard of 1 KVA capacity. Make Reputed: -Emerson / APC / TVSE / Tritronicsorequivalent.

7.11RFID reader:

| Sno | Parameter | Particular |
|-----|-----------------------|--|
| 1 | Frequency | UHF 865 MHZ to 867 MHZ * High Performance readers that comply with ETSI (Europe) and FCC (USA) standards, ISO/IEC 15962, ISO/IEC 15963 |
| 2 | Communication | Ethernet/ Serial communication (EIA standard RS 232 C / RS 485) |
| 3 | RF Power maximum | 1 W – transmitted & 4 W – EIRP (Equivalent Isotropically Radiated Power) * |
| 4 | Reading distance | The Trans receiver mounted at 6 meters above ground on a gantry. the coverage distance range should sense up to 4 meters |
| 5 | Operating Temperature | -40°C to +55°C (-40°F to 131°F) |
| 6 | IP Rating | IP 67 |

7.12RFID SMART CARDS READER:

It is used to read smart cards for validation of smart card transactions.

- USB 2.0 Full Speed Interface
- Read/write speed up to 424 kbps
- Built-in anti-collision feature (only 1 tag is accessed at any time)
- Interface USB Full Speed
- Operating Distance Up to 50 mm (depends on the tag type)
- Operating Frequency 13.56 MHz

7.13RFID TAG:

| | |
|-----------|---|
| Power | Tags are Passive |
| Frequency | UHF 860 MHZ to 960 MHZ as per EPC Gen 2 standards |

| | |
|---|--|
| Data Transfer Rate | At least 512 kbps under ideal conditions & 64 to 512 kbps under field conditions |
| Protocol | EPC Gen 2, ISO 18000-6C |
| Dimensions (including the substrate/ backing) | Maximum area occupied on the windshield shall be 50 Sq. cm. |
| Material | Plastic substrate with printed antenna |
| Tamper Proof RFID Label | The tags should be RFID Tamper Proof Label specially designed for tagging directly to a surface, such as Glass (windshield) of an automobile. Any attempt to rip or tamper the label (tag) should result in disabling the functionality of the tags to ensure a unique one to one relationship between the tag and the vehicle thereby preventing unauthorized tag removal and transfers. Such features of the RFID label should result in following actions: - <ol style="list-style-type: none"> 1. Destroy or Damage the Antenna 2. Break the chip-antenna connection. |

7.14 Server Specification:

| Technical Specification | |
|-------------------------|---|
| CPU | Intel Xeon (Quad Core) Processor |
| Clock Speed | 2.20Ghz |
| RAM | 16 GB |
| Hard disk | 1X300GB,3.5 " Hot Swap SAS 10K RPM + 4 x 300 GB SAS 10K RPM 2.5 |
| Redundant Power Supply | Yes |
| Raid Support | Server RAID M1100 Series Zero Cache/RAID 5 Upgrade for IBM System |
| DVD+RW | YES |
| Monitor | 18.5" TFT |

| | |
|-------------------------|--------------------------|
| Operating Voltage | 240 Volt |
| Operating Temperature | 10-35 |
| Operating Humidity (RH) | 10-90 |
| Operating System | Windows server 2012 Std. |
| Database | SQL Server 2012 Std. |

7.15 Integrated Software Solution overview

Software should be designed in a way so that it will be easier for operator to use it. It should be highly optimized with respect to hardware integration, data synchronization and MIS. Software should have interface for easy WIM integration. All hardware should be integrated in a way so that they can be easily configured based on a need basis. Database should be RDBMS and highly secured to ensure no data loses and maintain a high performance. It should maintain a proper error log which should easily accessible in reporting form.

Local data should be synchronized with central Mandi server on a real-time basis for their review and auditing purposes.

Below are some of the consideration point

- All Vehicles will be equipped with RFID TAG or Smart RFID Card
- Easy weighing and quick vehicle processing with RFID technology
- Each Vehicle will be recorded and monitored at Entry & Exit Gate
- Each Vehicle will be weighted along with carrying goods information
- Incoming and Outgoing Goods consolidated data can be generated and analyzed based on Daily, Weekly, Monthly and Yearly basis.
- Every passing Vehicle/Goods/Farmer information can be provided to centralized Mandi server on real time basis
- Data can be used to cross audit the Actual Collection vs Predicted Collection
- A reasonable farmer's related data can be gathered like "Name, Phone number, Address, Products dealing with, Yearly product capacity"
- Powerful MIS Reporting and Data Analytic Tool

7.16 Solution covering Key Point

- One time Master Data Setup for all Vehicle entering into mandi
- Issue RFID Tag or RFID Smart Card to the Farmers based on the Need Basis
- Whenever any Vehicle enters to the Entry Gate, information will be retrieved based on the RFID tag/card
- Automatic Weight will be captured and displayed along with other retrieved details
- Vehicle front picture along with Registration Number Plate will be captured

- Operator will enter the Product information along with other required information and save the transaction
- Data will be stored locally and same will get pass over to the remote centralized server for real time monitoring of Mandi
- Barrier will open and Vehicle will proceed for it's destination
- Same Process will be repeated at the time of Vehicle Exit

7.17. The software should accommodate additional weight of the commodities from the weigh machine platform output and capable to generate separate print.

7.18 Integrated Weigh in Motion vehicle information Software Requirement

WIM should be capable of handling/supporting below requirements

Vehicle details such as Registration Number, "Number of Axles, Per Axle weight, Gross Weight, Per Axle Speed, Average Speed", farmer ID and commodity should be captured for all transaction

Application should be capable to store/communicate information in Database, Text File OR direct transfer to Serial Port.

Maintain the Vehicle data sequence queue while storing information using unique Id and date time stamp

In/Out serial port and storage location should be configurable

7.19 Software REPORTS GENERATION

should have various required reports for audit as well as data storage purposes.

- (a) Vehicle Transaction Report for All or specific Lane with date range criteria having detail like "Lane No, Number of Axles, Gross Weight, Transaction Date Time etc."
- (b) Vehicle summary report based upon farmer, vehicle Weight, Count, typethis report should also include graphical representation of data as well.

8. Providing Services of Axle Weigh Bridge(WIM):

8.1 The Service Provider shall provide Axle Weigh Bridge system, along with all accessories/ software.

8.2 Service provider has to install Axle Weigh Bridge system at location as designated by HP State Agricultural Marketing Board.

8.3 After Installation & Commissioning, Service Provider shall have to provide the Comprehensive Maintenance Service after warranty period.

8.4 Axle Weigh Bridge shall be able to work as a standalone system and store the Weight

data for each vehicle, in standalone Controller& Lane PC, for further auditing and analysis.

9. Approach Roads

9.1 The approach aprons to 3 meters on each side of the axle weigh in motion to be provided shall not be in the scope of the bidders. The relevant OIML standards would be followed. The Bidder would be however required to supervise the construction, leveling of the approach roads without any costs to avoid any technical difficulty for installation of system.

10. Civil foundation complete civil Pit work & electrical work:

10.1 The HPSAMB shall undertake all Pit civil work /electrical works required for provision of the said services as per model and drawings supplied by the bidder.

10.2 Proper earthing individual type for each WIM shall be constructed as per drawings of the supplier. Lighting fixtures and accessories cabling accessories, cable trays etc. Supply of cables, cabling and terminations at various electrical panels/ equipment's of the facility for power supply distribution to the system.

11. Site Acceptance Test

11.1 The SAT tests will be done at least 15 days before operation of the systems for Public usage post trial runs. The Site tests shall be conducted by representatives of the HP mandi Board committee on site after installation The Equipment supplier shall provide a comprehensive test documentation along with tender submission for evaluation Document review shall be part of the technical evaluation criteria the all equipment. The equipment working functionality should be as per the documentation overview submitted for technical evaluation.

12. Payment Terms:

12.1 Payments will be made in Indian Rupees only.

- 10% of advance against advance bank guarantee at the time of letter of Intent.
- 40% of Original Contract Value after receiving the materials on site duly attested by the Site Authorities.
- 50%, commissioning and Stamping by the Weights and Measures department (Govt. of India/H.P)

12.2 Downtime penalty Clause

12.1 If the service provider fails to provide up time guarantee of 95% of 365 days (24hrs. basis), the penalty of Rs.5,00/- per day shall be imposed in case the machine is found not to be working for reasons other than those attributable to Department / operational or force majeure conditions, no discount will be given on account of public holidays/ Sundays. The bidder to cover the losses, if any, due to force majeure conditions, should do the insurance. Natural calamities such as lightning, floods, surges , or similar act s of nature of accidents shall not be the obligation of the supplier.

12.2 During the warranty and comprehensive maintenance period, the equipment shall be repaired/made operational within 48 hours of the complaint lodged failing which penalty of Rs.1000/- per day shall be charged. In case of a major mechanical failure the same shall be duly signed by the Mandi Board Representative jointly however will be resolved in maximum 4 working days failing which penalty of 1000/per day will be charged.

10.3 If accessories/other attachment of the system are procured from the third party, in such case the responsibility to keep the items / equipment's in working condition shall be the sole responsibility of the bidder itself will have to sign the CMC with the department if required.

13. Performance security:

13.1 The finally selected Bidder(s) will be required to furnish the advance bank Security equal to 10% of the Contract Price, on award of Contract, in the shape of Bank Guarantee from any scheduled Indian Bank or FDR duly pledged in favour of the Managing Director, HP State Agriculture Marketing Board which shall be valid till warranty period. Failure to furnish security for the performance of contract, in time, would also entail forfeiture of EMD.

14 Spare Parts

14.1 The Bidder will undertake that supplies of necessary maintenance equipment and spare parts will be made available for all items/equipment and for the complete system for at least ten years on a continuing basis. An undertaking in this regard should be made available from the original manufacturer.

14.2 However, this does not relieve the supplier of any warranty obligations under the Contract. The Bidder shall include in his tender, the details of essential spares, and their quantity and unit prices as per schedule of requirements.

15. Force Majeure clause

16.1 If at any time during the continuance of the contract the performance in whole or in part by either party of any obligations under the contract is prevented or delayed by reason, of any war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine, restrictions or acts of GOD (hereinafter referred to as events) and notice of happening of any such events is given by either party to other within twenty one days from the date of occurrence there of then neither party shall by reason of such events be entitled to terminate the contract. If the performance in whole or part of any obligation under this contract is prevented or delayed by reason of occurrence of such events, then claims for extension of time shall be granted for period considered reasonable by the purchaser subject to prompt notification by the seller to the purchaser the particulars of the events, if required with supporting evidence. Any waiver of time in respect of partial installment shall not be deemed to be a waiver of time in respect of remaining deliveries.

16. Period of Validity of Bids

Bids shall remain valid for One year from its submission unless otherwise prescribed in other terms and conditions of this tender document. The Purchaser may reject a bid valid for a shorter period.

17. Purchaser's Right to accept any Bid and to reject any or all bids.

The Purchaser reserves the right to accept any bid and to annul the tender process and reject all bids at any time, without assigning any reason, 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 the Purchaser's action.

18. Purchaser's Right to Vary Quantities at the time of Award.

The Purchaser reserves the right to vary the quantities and/or services.

19. Signing of Contract

At the same time as the Purchaser notifies the finally selected Bidder(s) that its bid has been accepted, the finally selected Bidder(s) shall collect the supply order, agreement/ Contract Performa from the office of the Managing Director, HP State Agriculture Marketing Board.

(a) Without prejudice to any legal remedy, failure of the finally selected Bidder(s) to comply with the requirement of Clause 2.3 (a) or Clause 2.3

(b) Shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD, in which event the Purchaser may make the award to the next lowest evaluated Bidder or call for fresh bids.

20 Other Terms and Conditions of Tendering Firms

Printed terms and conditions to the Bidder will not be considered as forming part of their Bids. In case terms and conditions of the contract applicable to this invitation of tender are not acceptable to any Bidder, he should clearly specify deviation in his Bid.

21. Liquidated damages

a) LD for delay in 'Supply' and/or 'E&C' will be applicable to the delays attributed to vendor. LD will be considered separately for 'Delivery' and 'E&C'. The rate of LD for delayed Supply shall be @ 0.5% per week of delay of total PO value (Supply + E&C) in supply subject to a maximum of 5% of total PO value (Supply + E&C). For the purpose of levying LD, the date of shipment (LWB date) will be considered

22. Property Rights

The Supplier shall indemnify the Purchaser against all third party claims of infringement

of patent, copyright, trademark, license of industrial design rights, software piracy arising from use of the store/goods or any part thereof in the Purchaser's country.

23. Arbitration

In case of any dispute the same shall be adjudicated in accordance with the Arbitration and reconciliation Act, 1996.

25. Termination for default

The purchaser may without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, terminate the contract in whole or in part.

If the supplier fails to deliver or install system within the time period(s) specified in the contract, OR

If the supplier fails to perform any other obligation(s) under the contract.

**Managing Director
HP State Agriculture Marketing Board.**

FORM-1

FORMAT FOR BIDDER'S DETAILS

| | | |
|---|--|--|
| 1 | Name of the Firm | |
| 2 | Registered Office Address | |
| | Contact Number | |
| | Fax Number | |
| | E-mail | |
| 3 | Correspondence/Contact address | |
| | Name & Designation of Contact person | |
| | Address | |
| | Contact Number | |
| | Fax Number | |
| | E-mail | |
| 4 | <p>Is the firm</p> <ul style="list-style-type: none"> • A registered company • A Government/Public Sector Undertaking • A propriety firm • A partnership firm (if yes, give partnership deed) • A limited company or limited corporation; <p>If yes ,submit documentary proof</p> | |
| 5 | <p>Is the firm registered with Sales Tax department? If yes, submit valid VAT Registration certificate.</p> | |
| 6 | <p>Is the firm registered for Service Tax with Central Excise Department (Service Tax Cell)? If yes, submit valid Service Tax registration certificate.</p> | |
| 7 | <p>How many years has your organization been in business under your present name?</p> | |
| 8 | <p>List the major clients with whom your organization has been/ is currently associated.</p> | |
| 9 | <p>Have you in any capacity failed any work awarded to you?(If so, give the name of project and reason for not completing the work)</p> | |

Form – 2
Format for Eligibility and
Technical capability of
bidder

| Sr. no | Criteria | Documents to be submitted | Document Submitted (Yes/No) | Remarks |
|--------|--|--|-----------------------------|----------------------------------|
| 1 | The manufacturer/dealers shall be a registered firm in India and should have been in the business for a period of last five years. | Certificate of incorporation/ Registration | | qualifying |
| 2 | The bidder should have valid VAT Registration Certificate, Service Tax Registration Certificate, PAN card & Trade License, EPF Number. Bidder shall have to submit photo copy of the same. | Photocopy of documents(self attested) | | -do- |
| 3 | The bidder shall not have been black listed by any State/ Central Government or | Declaration on Letter Head | | -do- |
| 4 | Experience in Weigh In Motion. Clause 3.3(a) &(d) | Citations show casing experience as bidder for WIM in other states in India. The citations should be given Project location, state Start Date End Date/Status Brief description of project & scope of work (implementation, operation & maintenance) Approx . value of the project Contact details of the Customer | | Evaluation marks (Max.10) |
| 5 | Experience in Weigh In Motion (Value of Projects executed) | Citations showing experience as bidder for WIM | | Evaluation marks |

| | | | | | |
|-----------|--|--|--|--|--|
| | | with project value in lacs(INR)for each state. | | (Max.20) | |
| 6 | Stamping Certificates. Clause 3.3(b & c) | Minimum 50 Stamping certificates in Operations | | Evaluation marks (Max.15) | |
| 7 | Experience of Deploying WIM system in Hilly terrain. Clause 3.3 (e) | Document Proof required | | Evaluation marks (Max.15) | |
| 8. | (i) Manufacturing license certificate stating manufacturing capacity of bidder/MAF (ii) Model approval from Weights and Measures department (India) | | | Evaluation marks (Max.5) Evaluation marks (Max.5) | |
| 9 | Should confirm to the BIS 9281 Specifications ISO, CE and EX approvals. | Copy of proof | | Evaluation marks (Max.5) | |
| 10 | Should have executed axle Weigh in motion systems as part of an integrated systems on process oriented projects / continuous weighing cycles for minimum 10 projects documentary evidence of systems in 5 years of operations with performance certificate from the Clients. Check posts/Mandis/Toll Plaza etc.) | | | Evaluation marks (Max.5) | |
| 13 | Approval/Satisfactory Report Of Equipment's from CRRI / IIT / NPL | | | Evaluation marks | |

| | | | | | | |
|------------|--|--|--|-------------------|--|--|
| | /RRSL institutions on confirming accuracy / test reports. | | | (Max.5) | | |
| 14 | Operational Manual | | | qualifying | | |
| 15. | Maintenance Manual | | | qualifying | | |
| 17 | Factory Quality Assurance Plan manual | | | qualifying | | |
| 18 | Software operational manual | | | qualifying | | |
| 19 | Axle Weigh in Motion general drawings | | | qualifying | | |
| 20. | Integrated hardware and Software functional overview (Check list required) | | | 5 | | |

Authorized Signatory(Signature In full):

Name and title of Signatory:

Company Rubber Stamp:

|

**FORM – 3
FINANCIAL INFORMATION**

Name of the Bidder:

| Sl. | Description | Annual Net Worth(Rs./ Cr.) | | |
|------------|---|-----------------------------------|----------------|----------------|
| | | 2013-14 | 2014-15 | 2016-17 |
| 1 | Net Worth | | | |
| 2. | Turnover (Average turnover should not be less then Rs.7.00 cr.) | | | |
| | Chartered Accountants Certificate | | | |

Authorized Signatory(Signature In full):

Name and title of Signatory:

Company Rubber Stamp:

FORM-5

To be enclosed with Technical Bid

PROFORMA FOR AUTHORITY FROM MANUFACTURERS

No.....Dated.....

To,

Dear Sir,

Sub: Tender No.....

We.....an established and reputed manufacturers of
.....having factories at.....and office at
M/s.....

(Name and Address of the Authorized representative) here by authorize to represent us, to tender, negotiate and conclude the contract on our behalf with you against Tender no.....

No company/ firm or individual other than M/s.....is authorized to represent us in regard to this business against this specific tender.

Yours faithfully,

Signature and seal
Name.....F
or &on behalf of M/s
.....
(Name of Manufacturers)

Note: This letter of authority should be on the letter head of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacture

- **The Bill of Quantity)Form-4**

| Description of Goods | make / OEM | Quantity (No.) |
|---|------------|----------------|
| Axle weighing in motion System loadcell based axle load 30T each capacity in platform size 0.7m x 3m should be able to accommodate the longest trailer combination as p with maximum speed restricted to max 15kmph | | 1 |
| Design and Supply of Retrofit All Steel Deck Size 0.7m x 3m, | | 1 |
| Model / BRAND / SERIES | | |
| Approved Civil Foundation Drawings – certified structural Engineer / consultant | | 1 sets |
| Approved Mechanical drawings – IIT / NPL or similar institution | | 1Sets |
| Load Cells Beam Type Stainless Steel with OIML IP 68 approval 20 Ton capacity each. Steel cable gland for rodent protection and water ingress material -17~4ph material | | 4 nos |
| Steel mountings (base) of Load Cells Zinc and cadmium plated | | 4 sets |
| Buffer Pad Plates foundation | | 8 sets |
| Digital Summation/Junction Box | | 1 Nos |
| In motion, high speed Indicator with RS 232 in IP housing approved by W&M department | | 1 Nos |
| Optical vehicle separator in stainless steel housing 24 arrays each | | 1 set |
| Electromagnetic Loop detectors | | 1 sets |
| User fare display stainless steel Housing showing Gross weight and amount chargeable 4 /5 “suitable for sunlight outdoor viewing | | 01 nos |
| vehicle sensors Infrared / Laser or better immune to water ingress and other weather conditions | | 01 nos |
| Wim cum vehicle integrated information Operating Software | | 01 nos |
| traffic Light with Pole housing in Green and RED displays | | 01 nos |

| | | |
|---|--|----------|
| Overhead lane gantry display Unit variable message sign to guide vehicles for passage / diversion | | 01 nos |
| Industrial Grade PC of repute OEM HP / IBM equivalent | | 01 nos |
| Mandi Level independent storage server | | 01 nos |
| Lane receipt printer of Epson or equivalent | | 01 nos |
| Outdoor Incident Capture day and Night IR based IP Camera with | | 01 nos |
| necessary connectors, wires, Junction boxes | | 01 sets |
| Online UPS industrial grade reputed APC / LIEBERT equivalent OEM with reputed batteries | | 01 nos |
| UHF RFID reader with distance range of up to 6 meters or above | | 1 nos |
| RFID Hand held reader for card validation | | 1 nos |
| Wiring Work and Networking Equipment | | 1 nos |
| RFID Tag | | 2000 nos |
| RFID Smart Card | | 1000 nos |
| Weight processing Software | | |
| Image processing software | | |
| Integrated vehicle information software | | |
| Licensed software with Antivirus license | | |

PRICEBIDPROFORMA

| Sno | Name of the Equipment | Qty | Unit Rate(Rs.) | Total Amount (Rs.) |
|-----|--|-------------|----------------|--------------------|
| 1 | Axle weighing in motion System load cell based axle load 30 T each capacity in platform size 0.7m x 3m should be able to accommodate the longest trailer combination as per IRC 6 with maximum speed restricted to max 15 kmph | 2 | | |
| 2 | Design and Supply of Retrofit All Steel Deck Size 0.7m x 3m,(Model/Brand/Series | 2 | | |
| 3 | Load Cells Beam Type Stainless Steel with OIML IP 68 approval 20 Ton capacity each. Steel cable gland for rodent protection and water ingress material -17~4ph material | 8 Nos | | |
| 4 | Steel mountings (base) of Load Cells Zinc and cadmium plated | 8 sets | | |
| 5 | Buffer Pad Plates foundation | 8 sets | | |
| 6 | Digital Summation/Junction Box | 2 Nos | | |
| 7 | In motion, high speed Indicator with RS 232 in IP housing approved by W&M department | 2 Nos | | |
| 8 | Optical vehicle separator in stainless steel housing 24 arrays each | 2 Sets | | |
| 9 | Electromagnetic Loop detectors | 2 Sets | | |
| 11 | User fare display stainless steel Housing showing Gross weight and amount chargeable 4 /5 "suitable for sunlight outdoor viewing | 2 Nos | | |
| 12 | vehicle sensors Infrared / Laser or better immune to water ingress and other weather conditions | 1 nos | | |
| 13 | Wim cum vehicle integrated information Operating Software | 1 nos 2 Nos | | |
| 14 | Traffic Light with Pole housing in Green and RED displays | 2 Nos | | |
| 16 | Industrial Grade PC of repute OEM HP / IBM equivalent | 2 Nos | | |
| 17 | Mandi Level independent storage server | 1 Nos | | |
| 18 | Lane receipt printer of Epson or equivalent | 2 Nos | | |
| 19 | Outdoor Incident Capture day and Night IR based IP Camera with | 2 Nos | | |
| 21 | Necessary connectors, wires, Junction boxes | 1 Set | | |
| 22 | Online UPS industrial grade reputed APC / | 1 Nos | | |

| | | | | |
|----|--|----------|--|--|
| | LIEBERT equivalent OEM with reputed batteries | | | |
| 24 | UHF RFID reader with distance range of up to 6 meters or above | 1 Nos | | |
| 25 | RFID Hand held reader for card validation | 1 Nos | | |
| 27 | Smart Cards | 100 Nos | | |
| 28 | RFID Tags | 1000 Nos | | |
| 29 | Wiring Work and Networking Equipment | 2 Nos | | |
| 30 | Weight processing Software | 2 nos | | |
| 31 | Mandi Centralized Server | 1 Nos | | |
| 32 | Software Licenses | 2 nos | | |
| 31 | Image processing software | 2 nos | | |
| 34 | Licensed software with Antivirus license | 2 nos | | |
| 35 | Net Price | | | |

It is certified that the cost of equipment, turnkey job and 1 year warranty shown above, has included all taxes/duties etc .and nothing above shall be charged over and above this cost.

Authorized Signatory:

Name of the firm/bidder:

LIST OF DOCUMENTS SUBMITTED

| Sl. | Name of Documents | Enclosed (Y/N) | PageNo. |
|-----|--|----------------|---------|
| 1. | Bidder's Details (Form-1) | | |
| 2. | Eligibility & Technical capability (Form -2) along with all relevant documents | | |
| 3. | Financial Information of bidder (Form-3) | | |
| 4. | Bill of quantity (Form-4) | | |
| 5. | Authority from Manufacturer (Form-5) | | |
| 6. | Price Bid (Form-6) | | |

Note: The bidders are expected to respond to the RFP using the forms given in this section.

Authorized Signatory (Signature In full):

Name and title of Signatory:

Company Rubberstamp