

**BOSE INSTITUTE**

Research Institute funded by DST, Govt. of India

**P-1/12, C.I.T Scheme VII-M, Kolkata – 700 054**

Tender Notice # BI/T/OVR/P/Optimizer/07/2014 dated 30.07.2014.

Bose Institute, Kolkata invites sealed quotations from nationally reputed & bonafied manufacturers/authorized dealers possessing ISO 9001,14001, 18001, Greenguard certificates, OEM & BIFMA Certificates for supply of Optimizer/Compactors/Mobi-stack and setting thereof in the designated locations. For bid documents with details please visit the Bose Institute's website <http://www.boseinst.ernet.in>. Last date of submission of tender is **25.08.2014**.

Sd/-

**REGISTRAR**

**BOSE INSTITUTE**  
**Centenary Building (P-1/12, C.I.T. Scheme VII-M)**  
**Kolkata-700054**

**Tender Documents for supplying and installation of Optimizer/Compactors/Mobi-Stack as per the quantities and specifications listed in the enclosed annexure.**

|   |  |
|---|--|
| Tender No:                              | BI/T/OVR/P/Optimizer/07/2014 dt. 0.07.2014   |
| Last date and time for receipt of bids: | 25.08.2014 upto 14:30 p.m.   |
| Date and time of opening of bids:       | 25.08.2014, 15:00 hrs.   |
| Submission of bid document              | Tender box at Overseer cell (Room No. 114),<br>Centenary Building, P-1/12, CIT Scheme VII-M,<br>Kol-54 |
| Place of opening of bids:               | Adjacent hall, Annex Block, Centenary Bldg.  |
| Address for communication:              | P- 1/12, C.I.T. Scheme VII M, Kolkata – 700054   |

**1.1 INVITATION FOR BIDS**

Bose Institute, Kolkata invites sealed quotation under *two part* system- **i) Technical bid** with technical specifications, design commercial terms of reference together with an EMD in favour of **Bose Institute**, Kolkata in A/c payee demand draft of Rs.50,000/-(fifty thousand)only drawn from any Nationalized Bank payable in Kolkata from the nationally reputed & bonafied manufacturers/authorized dealers preferably possessing **ISO 9001, 14001, 18001**, Green guard(some products of the manufacturer should be green-guard certified), OEM & BIFMA Certificates for bulk supply of Office Furniture & laboratory Furniture and setting thereof in the designated locations . **ii) Financial bid:** Item wise price along-with total quoted price in a separately closed envelope. The suppliers have to supply optimizer/compactors at Bose Institute in and around Kolkata and install thereby. Responsibility of the manufactures/ Indian Agents shall be not only to ensure supply in full of the order within 60 days from the date of receipt of purchase order but also proper installation/placement within specified period after delivery of the items to this institute and also to ensure that no damage or defective supply of furniture are made. Suppliers with Kolkata based service centers will be preferred. Two separate envelopes / packets stapled together containing, Technical bid and financial bid separately, should be put in drop box on or before 14:30 hrs on 25.08.2014. The drop box will be kept at Room no. 114, Overseer Cell, P-1/12, C.I.T. Scheme VII M Kolkata – 700054. Technical Bid will be opened on 25.08.2014 at 15:00 hrs.

**1.2 ELIGIBILITY CRITERIA**

The Bidder should have supplied and completed at least two similar works of Rs 35.00 lakhs and one similar work of Rs 50.00 lakh in the last three financial years in Government Sectors. Supporting documents/ certificates in this regard should be produced with the tender documents.

Suppliers/ agencies should have average annual gross turnover of Rs 60 lakhs in respect of compactor/optimizer/mobi-stack.

Suppliers/agencies should have at least 3 years experience in similar type of work.

Suppliers/agencies should be profit making firm and should not have made loss in last two years.

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## DETAILS OF TECHNICAL SPECIFICATIONS

The Technical Specifications of the optimizer/compactor are given separately in Annexure attached with the terms and conditions of this tender

### 3. INSTRUCTION TO BIDDERS

- a. *The copy of tender documents can be collected from Bose Institute, Overseer Cell of above mentioned address after submission of a non refundable tender fees in the form of demand draft of Rs.500/- (Rupees Five hundred) only drawn from any Nationalized Bank in favour of Bose Institute, Kolkata.*
- b. Interested bidders may submit their offers on or before **14.30** hrs (IST) on **25.08.2014**. Bid documents will be opened at **15.00** hrs (IST) on the same day in presence of the bidders or their authorized representatives.
- c. In the event of date being declared as closed holiday for purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed time.
- d. The bidder shall submit Earnest Money of Rs.50,000/- (after the date of tender published) for supply of optimizer/compactor/Mobi-stack in the shape of a demand draft drawn on any nationalized bank made in favour of Bose Institute, Kolkata payable at Kolkata failing which the tender will be summarily rejected.
- e. Earnest money deposit shall be liable to be forfeited, if the successful tenderer withdraw the tender after opening. Similarly, if the bidder fails to commence the work after issue of award letter, the amount of earnest money deposited with the technical bid will also be forfeited.
- f. *The bidders shall provide detailed printed technical literature in original specification, make, model No. quoted in the tender and specification given in the offer must match the printed technical literature and technical capabilities participating in the bid.*
- g. The bidder shall clearly mention the period of warranty which is desirable for a minimum period of two years. The bidders shall also submit list of customers in India with copies of orders supplied to them.

### 4. DOCUMENTS COMPRISING THE BID

- a. A bid form and price schedule indicating the goods to be supplied, a brief description of the goods, and quantity and prices.
- b. Documentary evidence in support of the Bidder that the Bidder is eligible to bid and is qualified to perform the contract if the bid is accepted. In other words, certificates of bonafied of the tendering firms/suppliers.

- c. Documentary evidence that the goods and ancillary services to be supplied by the Bidder are the goods and services that conform to the Bidding documents.
- d. Bids security (refundable EMD) for the total supply of optimizer.
- e. Documents relating to VAT registration, PAN card and financial status of the company or the manufacturer and attested Xerox copy of valid trade license, ISO and other certifications, etc.

**BID SECURITY**

- a. Unsuccessful Bidder's bid security (refundable) will be discharged / returned as promptly as possible after proper identification/verification on receipt of application.
- b. The Successful Bidder's EMD will be release after successful completion of the work.
- c. The quoted price should be inclusive of all taxes, transportation, installation charges etc complete.

**6. WARRANTY**

- a. The bidder shall provide warranty at least for two (02) years.
- b. The supplier shall confirm that the goods supplied under this contract are new, unused of the most recent current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect arising from design materials or workmanship (except when the design and /or material is required by the purchaser's specifications) or from any act or omissions of the supplier, that may arise under normal use of the supplied goods in the conditions prevailing in the country of final destination.
- c. Security money will be released yearly on proportionate basis on compliance of each year.

**7. DEFECT LIABILITY CLAUSE**

- a. In case of any loss, breakage / damage and manufacturing defects are detected in the supply, it should be replaced / compensated by the manufacturer free of cost and without freight charges.
- b. The supplier will remain responsible for any defect arising out of defective or improper materials or workmanship in the work for a period of 2(two) years from the date of issue of final certificate and they shall be bound to make good the same at their own cost or in default the institute may cause the same to be made good by other workman/agency and deduct the expense from any sum that may be there and any time there after may become due to the supplier or from security deposit.

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**8. QUALIFYING REQUIREMENTS (TO BE SUPPORTED WITH DOCUMENTARY EVIDENCE)**

- a. Bidders should be regular manufacturers or his authorized distributors/suppliers for the type of goods offered and if the renderers' were an agent of the principal all the documents of the principal shall be submitted in support of it.
- b. The bidders should submit a list of user with full address, telephone & FAX nos. stating date of supply etc. along with the bid documents.
- c. The participating bidder should furnish details of manufacturing facilities of furniture in the workshop with ISO and other certifications.
- d. The bidders should have level of experience for implementing purchase order of similar magnitude and should have possessed the financial background and able to meet the capacity to match the delivery of very requirements.

**9. BIDDING DOCUMENTS**

- a) All bids in this prescribed tender form duly filled in must be submitted in sealed covers super-scribing Tender No. and date to the "Tender submission Box' in the drop box which will be kept at Room no. 114, Overseer Cell Bose Institute at P-1/ 12, C.IT. Scheme VII M Kolkata 700054 on or before **20.08.2014 by 14.30hrs (IST)**.
- b) The bidder is expected to examine all instructions, terms and specifications in the bidding documents. Failure to submit all information required by the bidding documents or submission of a bid nor substantially responsive to the bidding documents in every respect will be the Bidder's risk and may result in rejection of its bid.

**10. Enhancement in Rates**

The tender rates shall be taken to be firm and the supplier shall not be entitled to any price variation or escalation of materials and labour on any account whatsoever for at least 6 (six) months.

**11. PAYMENT TERMS/SECURITY DEPOSIT**

Payment of bill will be made in three phases in the following manner:-

- i. 50% on delivery/staking of requisite furniture.
- ii. 40% after successful installation at site.

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- iii. *Balance 10% of the total bill amount will be retained as security deposit which will be released after 01 year.*

**12. Completion Certificate**

- a. To ensure complete supply as per purchase order the successful bidder should submit a completion report to the purchaser.
- b. The purchaser on the other hand, shall submit verification report in support of complete supply of the lists of furniture mentioned in the purchase order and also to ensure that no defective or short supply is made in any premises of the Bose Institute.
- c. EMD will be released after submission of final bill but 10% of final bill amount will be retained as security money upto *01 year.*
- d. The successful bidder is also liable to replace the defective furniture or short supply if any found at the time of verification by the Purchaser. Failure in replacement will entail forfeiture or to deduct the price of the furniture from his bill before making final payment.

**13. Time and Damages for Non-completion of work in time**

Time is the essence of the contract and the supplier shall pay or allow the Institute to realize the sum equivalent to 1(one) per cent of the total order value per week, subject to a maximum limit of 10% of the order value as agreed compensation for delay for the period during which the set work shall remain in complete beyond the time of completion or beyond the time duly extended in writing by the Institute. The Institute may deduct such damages from any money due to the supplier. However in case of any delay from Bose Institute side, Institute will not pay any compensation to the working agency.

**14. Execution of agreement**

The successful bidder should enter into an agreement with the Institute within 7(seven) days of receipt of work order in non-judicial stamp paper (to be arranged by the supplier) and no on-account payment will be released till the agreement is executed.

- 15. The supplier will have to confirm to the provisions of all local bye- laws acts relating to work/labour and to the regulations and bye laws etc of the Govt. and local authorities and of any company with whose system the installations are proposed to be connected.
- 16. The supplier will remain bound to strictly follow the institute's security norms. Materials procured and/or to be taken in and out should positively be recorded in our security check post.
- 17. All legal disputes shall be subjected to Kolkata jurisdiction only.
- 18. Bose Institute reserves the right to accept or reject any bid in part or full without assigning any reason whatsoever. The Institute also reserves the right not to accept the lowest rates quoted by the bidder and also will not hold any responsibility for postal loss or delay of any bid.

**Technical Specification**  
**Optimizer/Compactors**

**Optimizer Mobile Storage** system of 72 body having following detail. It should be consists of storage units (381 deep)- fixed or movable – bolted to Understructures which roll onto rails.

The configurations are –

1. **Optimizer Drive type – 2 Bays TYPE-D2**

(Bay denotes side by side unit placements in a block)

Each of above configurations can have following type of blocks –

1. **Single Static (SS)**
2. **Single Last (SL)**
3. **Twin Movable (TM) – 2 bodies back to back.**

(Note: Unless otherwise specified, all dimensions mentioned hereunder are in mm & represent nominal value)

**I) Body:**

The body is of Rigid **Knock Down** construction made out of 0.8 thk. CRCA Steel conforming to IS:513 Gr.D procured from a reputed manufacturer like **SAIL, TISCO**. Each body block (SS/SL/TM) building consists of 1 Main unit & then Add-on units (0, 1 or 2 - depending on no. of bays 1, 2, or 3) . It has common side for ‘side by side’ bodies & common back for ‘back to back’ bodies. Each unit have 5 loading levels formed by 4 nos. adjustable shelves.

Each body size: 915 (Width) X 1980 (Height)

Each body Depth & Door options:

**381 deep with & without Hinged doors**

Body units are bolted to understructure.

**Body Height from ground is 2080 (1980 body + 65 understructure + 35 rail system).**

**Body Finish:**

The body including shelves is duly **powder coated** with epoxy polyester powder after doing the surface treatment. It involves an **8 step treatment** consisting of Hot water rinse, Knock of degreasing, degreasing, Cold water rinse, phosphating, cold water rinse, passivation & dry off oven treatment. Final finish consists of epoxy polyester powder coating of approved color & shade with a **Dry Film Thickness of 40 to 60 microns**. The testing of paint is done for various physical & chemical properties as per IS:101. The material may be oven baked with a controlled temperature of 180 deg.C to 200 deg.C.

**II) Understructure:**

The Understructure is a welded frame made of HR sheet 3.15 thk conforming to IS:10748 suitably fabricated to take the loads based on configuration. The understructure, after pre-treatment, is coated with final finish consisting of epoxy polyester powder coat of approved color & shade with a **Dry Film Thickness of 40 to 60 microns**

Sizes of Understructure:

**Single Static / Movable – 915 x (no. of bays) (Width) X 381 (Depth) X 65 (Height)**

**Double Movable - 915 x (no. of bays) (Width) X 762 (Depth) X 65 (Height)**

**External Load carrying capacity per understructure -**

**DRIVE TYPE (Configuration - TYPE D2 - 1200 Kg. Maximum**

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### III) Colour Options:

- **Beige** for Body / Shelf / Door & **Char Brown** for Understructure / Drive Cover
- **Milky white** for Body / Shelf / Door & **snowbell grey** for Understructure / Drive Cover

### IV) Shelf:

It is made of 0.8 thk CRCA steel conforming to IS:513 Gr.D or DD. It's max load bearing capacity is 80 Kg uniformly distributed per shelf . Shelves are mounted on support brackets & shelf level can be adjusted at approx. 25.4 pitch. There are 4 adjustable shelves per body giving 5 loading levels, if no Cradle pair is provided.

Shelf Depth for various options:

| Unit Depth | Door Options               |                   |
|------------|----------------------------|-------------------|
|            | With Hinged Door / No Door | With Sliding Door |
| 381        |                            |                   |

Box Files (our Box file size is 275 Wide X 345 High X 90 Thick) can be accommodated in 381.

#### **Allowable safe load per shelf in a given configuration:**

Safe Shelf load will be determined from the load carrying capacity of understructure and the UDL carrying capacity of the shelf. (minimum of the two). It is tabulated below for all 4 configurations.

| Configuration | Block Type  | Total no. of loading levels per Understructure | Allowable UDL per Shelf in Kg. |
|---------------|-------------|--|--------------------------------|
| D2            | SSD2 / SLD2 | 10   | 80                             |
|               | TMD2        | 20   | 60                             |

**Accessory File Cradle Pair:** For Storing **Instadex File pockets**, Cradle pair can be provided in the 381 deep unit as per the requirement of the customer. It consists of 'Z' angle 1.0 thk sheet & pipe of ½" Dia. There will be 5 pairs per body making 5 levels, if no shelf is provided.

### V) Guide Rails:

It consists of 'J' section 2 thk HR sheet & 25 square bright bar – both connected by screws. The guide rails are mounted above the levelled ground with the help of raul plug & screw.

### VI) Label Holder:

Made from 1 thk sheet & having outer dimension of 186 X 110.

### VII) MOVEMENTS of System:

Drive Type Configuration (TYPE-D2/TYPE-D3): Movement of units is achieved mechanically through a Drive wheel and 'Sprocket-Chain-Tensioner' arrangement mounted rigidly onto body side.

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The effort required is about 0.05% of the load. Each movable understructure is provided with 2 Rollers on shaft for driving, 2 antifriction ball bearings for rolling and 4 antifriction ball bearings for guiding between rails & 'J' section. Ball bearings are also provided in Drive wheel & Drive shaft supports for smooth movements. The drive arrangement is covered by a 1 thk. HR sheet Cover fixed onto the body side occupying additional space of 60 mm. The Drive wheel is rigidly fixed at suitable height on body side & projects out of cover by another 70 mm. Fixed unit also have Cover but without wheel.

Create the aisle space between the required units by moving them one by one & not together.

#### **VIII) Centralized Locking:**

A Centralized locking arrangement is provided through **Locking Stiffener** mounted onto back of last **Single Movable** unit so that it gets locked on rails when all the units are **brought together**. The handle lock is of Godrej make & placed at suitable height. This arrangement occupies a space of 100 mm.

When the **last unit** is **Twin Movable**, hinged or sliding doors are provided for the end bodies; so in this case locking stiffener is mounted onto drive unit cover.

Each **Drive type units** have **Locking Knob** near the Drive wheel for manual locking of individual units when a person is using those units. Knob shall be pressed inside when units are to be moved. After the unit is moved, before entering into aisle for accessing, this knob shall be pulled out while engaging into one of the holes provided on the disc inside. If the knob does not come out, move the unit slightly so as to bring the hole in line with locking knob for engagement.

**End stoppers** are provided at the end of rails to prevent derailment.

#### **IX) Locking / handle:**

Handle cum lock giving 3 way locking through a lever & shooting bolts. Lock should be made by Godrej/Hafele/Hettich.

#### **X) Fasteners:**

The nuts & bolts are galvanized / blackodized / Zn Plated

#### **XI) Aisle Space:**

Generally, for comfortable movements, the clear aisle space kept on the Handle / Drive Wheel side is around 915. Also, the aisle for comfortable accessing of inside of units, when rolled apart is around 915.

#### **XII) Dead Weight of the system:**

(Total external load & dead weight is spread on 2 rails placed at a distance apart)

- **Body Weights:**

| Door Option   | Body with shelf | Depth Option           |          |
|---------------|-----------------|------------------------|----------|
|               |                 | 381 (SF/SM) / 762 (DM) |          |
| Without Doors | SS/SL           | Main                   | 43-45 Kg |
|               |                 | Add-on                 | 39-42 Kg |
|               | TM              | Main                   | 72-75 Kg |
|               |                 | Add-on                 | 64-67 Kg |
|               |                 |                        |          |
|               |                 |                        |          |
|               |                 |                        |          |

- **Understructure & other fittings:**

| Type Description   | Symbol | U/S Size<br>W x D x H | Wt.,<br>Kg |
|--|--------|-----------------------|------------|
| Single Static – Drive type, 2 bay<br>(U/S+Fittings+Cover)      | SSD2   | 1830 x 381 x 65       | 21         |
| Single Last – Drive type, 2 bay<br>(U/S+fittings+Drive+Cover)  | SLD2   | 1830 x 381 x 65       | 41         |
| Twin Movable – Drive type, 2 bay<br>(U/S+Fittings+Drive+Cover) | TMD2   | 1830 x 762 x 65       | 56         |

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- **Locking Stiffener:** 7 Kg ; **Rail Pair:** 15 Kg per 3 feet.

Tenderer must have all these certifications:-

1. ISO-9001,ISO-14001,ISO-18001
2. OEM Certification, BIFMA & OHSAS
3. Some of the products of the manufacture should be green guard certified.

All the certificates should be attested by the concerned authorized person.

Authorization letter should be submitted during submission of the tender.

Institute may ask the bidders who have submitted their bid within due time, to submit a single unit of optimizer during technical evaluation of their bid.

**Abbreviation:**

SSD2- Single Static Drive Unit of two bay

SLD2- Single last drive unit.

TMD2-Twine mobile drive unit.

OEM – Original Equipment Manufacture

Test certificate of all the materials, paints must be submitted at the time delivery of materials.

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**BOSE INSTITUTE  
KOLKATA**

***Schedule for Optimizer at Centenary Building Campus, Bose Institute.***

| SL No | Description  | Qty   | Unit | Rate | Amount |
|-------|--|-------|------|------|--------|
| 1.    | 38 body 2 bay Optimizer (overall Block dimension 1830mm W x 8382mm D x 2080mm H) | 01 No | Each |      |        |
| 2.    | 34 body 2 bay Optimizer (overall Block dimension 1830mm W x 7227mm D x 2080mm H) | 01 No | Each |      |        |

***Note: All the rates should be inclusive of all taxes, installation charges, transportation etc complete.***