

**KOLKATA METRO RAIL Corporation Limited**

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**PRE-QUALIFICATION TENDER NOTIFICATION**

**INVITATION TO APPLICANTS**

**KMRCL/TENDER NO. 6 - PQ-UG/EL – PSD**

Date: **04<sup>th</sup> July 2011**

- 1 Kolkata Metro Rail Corporation Limited (KMRCL) intends to shortlist Full Height Platform Screen Doors (PSD) / Half Height Semi-outdoor type Platform Screen Gates Equipment (PSG) & System Design / Manufacturing Companies, through a pre-Qualification process, for the Detailed Design, Detailed Engineering, Manufacture, Supply, Delivery and Storage at site, Laying, Installation, Testing, Commissioning and Demonstration of the performance of the system and equipment and Training of Personnel as detailed under the scope of work of this tender document for Underground and Elevated System of Kolkata Metro East-West Rail Project. Joint Venture, Consortium and Sole Bidder (Indian and International companies) complying with the requirements of the Document can apply. The KOLKATA Metro Rail Corporation Limited's (KMRCL) East-West Line system is on 750 volts DC third rail over a length of 14.7 Km (Approx). It is partly Elevated (5.77 K.M) and partly Underground (8.9 K.M.) construction. General Consultants (GC) are appointed by KMRCL who will work as Engineers for this project and assist KMRCL in evaluating the tenders.

The project is financed partly through equity participation by GOI and GOWB and partly through ODA Loan from Japan International Cooperation Agency, hereinafter referred to as the JICA, in the amount of **INR 29,839 Million** equivalent in Yen toward the part cost of East West Metro Corridor, Kolkata, the date of signing the Loan Agreement is 10/03/2008 & 31/03/2010, and intends to apply a portion of the proceeds of this loan to payments under some of the contract<s>. However this tender Invitation for Prequalification issued, is outside the purview of disbursement of the ODA Loan by JICA.

- 1.1 Indian and International companies, either by themselves or as a joint venture/consortium, interested in appointment through International Competitive Bidding (ICB) as the Detailed Design and Build contractor of Tender No. 6, UG/EL – PSD may complete the Pre-Qualification Enquiry Document in pro-forma format. Applicants are required to have a good financial standing and performance record, requisite experience and capacity in the fields described above.
- 1.2 Copies of the Enquiry Document may be collected from the office of the KMRCL, 4<sup>th</sup> & 5<sup>th</sup>

Floor, HRBC Bhaban, Munshi Premchand Sarani, KOLKATA-700 021, INDIA. The Pre-Qualification Documents will be available on payment of a non-refundable fee of Rs 25,000 (US\$ 500) in the form of a crossed demand draft from a Scheduled Commercial Bank in India in favour of Kolkata Metro Rail Corporation Limited, payable at Kolkata, on all working days between **11.00hrs and 17.00hrs (IST)** from **04<sup>TH</sup> July 2011** till **14<sup>th</sup> July 2011**. In case enquiry document is downloaded from web site, cost of the document will be submitted along with the submission of tender otherwise the tender will be rejected.

- 1.3 Clarifications, if any, asked in writing only will be entertained by KMRCL. Pre-bid meeting may be held on **29<sup>th</sup> July 2011 at 14.30 hrs**. Last date for seeking clarifications is **9<sup>th</sup> August 2011** and this will be replied by **19<sup>th</sup> August 2011**.
- 1.4 The documents, duly completed, shall be returned in sealed envelopes, which must be delivered by hand or by registered mail, so as to reach KMRCL office on or before **15.00 hrs (IST)** on **19<sup>th</sup> September 2011**. Late or delayed submittals will not be accepted. *The tender offers will be opened at 15.30 hrs (IST) on the same day in the presence of applicants who desire to be present.* Postal or courier delay is the sole responsibility of the Applicant.
- 1.5 KMRCL reserves the right to accept or reject any or all proposals without assigning any reason what so ever. No Bidder shall have any cause of action or claim against KMRCL for rejection of his proposal. Canvassing in any form will result in summary rejection of the tender.
- 1.6 Joint venture/ Consortium must comply with the following requirement
  - a) The lead partner shall meet not less than 40% of the financial standing and criteria, Each of the other partners shall meet individually not less than 25% of all financial criteria, However in totality JV/Consortium (all the partners) put together should meet 100% of financial standing criteria at all times.
  - b) Joint venture suitably, collectively must meet other criteria like technical organisational and manufacturer capability.
  - c) The formation of joint venture after pre qualification and any change in a pre qualified joint venture will be subject to the written approval of the employer prior to the deadline for submission of bid. Such approval may be denied if (i) partner withdraw from joint venture and the remaining partners do not meet the qualifying requirement (ii) new partner to a joint venture are not qualified, individually or as another joint venture, or (iii) in the opinion of the employer, a substantial reduction in competition may result.
  - d) Any bid shall be signed so as to legally bind all partners jointly and severally and any bid shall be submitted with a copy of joint venture agreement as in application Form **(2a)** and Form **(2b)** providing the joint and several liabilities with respect of the contract. For details please visit our web site: [www.kmrc.in](http://www.kmrc.in)

Managing Director,  
Kolkata Metro Rail Corporation Limited



**PRE-QUALIFICATION FOR THE DETAILED DESIGN, DETAIL ENGINEERING,  
MANUFACTURE, SUPPLY, DELIVERY AND STORAGE AT SITE, LAYING,  
INSTALLATION, TESTING AND COMMISSIONING, TRAINING OF PERSONNEL,  
DEMONSTRATION OF PERFORMANCE OF SYSTEM / EQUIPMENT OF  
PLATFORM SCREEN DOOR SYSTEM (PSD) OF UNDERGROUND STATIONS  
AND PLATFORM SCREEN GATE SYSTEM OF ELEVATED STATIONS OF  
KOLKATA METRO EAST-WEST LINE PROJECT  
(TENDER NO. 6 PQ-UG/EL - PSD)  
(Revision 0)**

**PRE-QUALIFICATION ENQUIRY DOCUMENT**

**JULY 2011**

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**PRE-QUALIFICATION FOR THE DETAILED DESIGN, DETAIL ENGINEERING, MANUFACTURE, SUPPLY, DELIVERY AND STORAGE AT SITE, LAYING, INSTALLATION, TESTING AND COMMISSIONING, TRAINING OF PERSONNEL, DEMONSTRATION OF PERFORMANCE OF SYSTEM / EQUIPMENT OF PLATFORM SCREEN DOOR SYSTEM (PSD) OF UNDERGROUND STATIONS AND PLATFORM SCREEN GATE SYSTEM OF ELEVATED STATIONS OF KOLKATA METRO EAST-WEST LINE PROJECT  
(TENDER NO. 6 PQ-UG/EL - PSD)  
(Revision 0)**

**2.0 INSTRUCTIONS TO APPLICANTS - SCOPE OF WORK**

The KOLKATA Metro Rail Corporation Limited's (KMRCL) East-West Line system is on 750 volts DC third rail over a length of 14.7 Km (Approx). It is partly Elevated (5.77 K.M) and partly Underground (8.9 K.M.) construction-

The project is financed partly through equity participation by GOI and GOWB and partly through loan from Japan International Cooperation Agency (JICA). This work is funded by two Governments. The execution of this tender **does not** require JICA concurrence at any time.

The Kolkata Metro Railway will be carried out in two phases. Phase - I work will be between Subash Sarovar and Salt Lake Sector-V station. Phase - II work will be between Subash Sarovar and Howrah Maidan Station

KOLKATA Metro Rail Corporation Limited (KMRCL) intends to shortlist Design and Built JV / Consortium / Sole Bidders through a pre-qualification process for the Detailed Design, Detailed Engineering, Manufacture, supply, Delivery and Storage at Site, installation, testing, commissioning and Demonstration of the Performance of the System and Equipment of the following:

**PHASE-I – Between Subash Sarovar and Salt Lake Sector-V station (Elevated Section)**

**Phase - I** work will be between Subash Sarovar and Salt Lake Sector-V station and will include Six (6) Elevated Stations (Salt Lake Stadium, Bengal Chemical, City Centre, Central Park, Karunamoyee and Salt Lake Sector-V), 33 kV intake RSS substation at Bengal Chemical Building and Auxiliary substation at Central Park depot and the entire length of Via duct between Subash Sarovar and Salt Lake Sector-V.

**PHASE-II– Between Subash Sarovar and Howrah Maidan station (Underground Section)**

**Phase - II** work will be between Howrah Maidan and Subash Sarovar and will include Six (6) Underground Stations (Phool Bagan, Sealdah, Central, Mahakaran, Howrah and Howrah Maidan), Intermediate Ventilation Shafts including Fan rooms and Emergency Egress route and Auxiliary Substation at Scissor cross over between Sealdah- Phool Bagan; Intermediate Ventilation Shafts including Fan rooms and Emergency Egress route and Auxiliary Substation and Main Receiving Sub Station Intake Switch Room at Strand Road; Entire length of Tunnels from Howrah Maidan to Subash Sarovar.

## 2.1 Scope of Work – Guidelines

*(The information given below is Guideline only for understanding the scope of work, the details of which shall be indicated in the Main Tender Document)*

Detailed Design based on Preliminary Design provided by the Definitive Design Consultants of Underground stations UG-1 and UG-2 Contracts, Elevated Stations, which would be made available to the short listed Platform Screen Door (PSD) / Platform Screen Gate (PSG) System Contractors during Main Tender Stage as a part of tender document. The Detailed Scope of Work is as follows:

:

- Design, Manufacture, verification, Supply, Delivery to site, Storage at Site, Laying, Installation, Testing & Commissioning (including integrated testing and commissioning), Trial runs, Demonstration of Performance Guarantee of the equipment and System, Submission of O & M Manuals, Maintenance, Supply of Contract Spares, Training of Staff and co-ordination with Designated Contractors for a complete system necessary to deliver the requirements of the contract.
- Preparation of final detailed Construction drawings and layouts to achieve the desired performance characteristics, submit the same to GC and obtain Approval,
- Equipment and Installation shall comply with all relevant Codes, Standards and Regulations specified in the Tender document.
- Include all civil works associated with Platform Screen Door System works at underground stations & Platform Screen Gate System works at Elevated Stations respectively and making and painting the civil works thus carried out as required.
- Maintenance of the area during Construction and Implementation stage.
- De-mobilisation, clearing of all temporary works and facilities after completion of job.
- Various interfacing works for other Contracts e.g. Signalling and Telecommunication, Traction Power & Power Distribution, Track work, Automatic Fare Collection, Lifts and Escalators at Underground and Elevated stations respectively, Rolling Stock etc. shall be but not limited to as described below:
  - Earthing and bonding protection wherever required.
- Interface and coordination with UG-1 and UG-2 Contracts for Civil and Plumbing & Drainage works; Tunnel Ventilation System Contract; Environmental Control System Contract and E & M Contract (including Fire Protection System).

- Interface with all other Elevated Station Civil and Artificial finishes Contracts and Elevated E & M Contract (including Fire Protection System). .
- Preparation of Operation and Maintenance Manual Training of maintenance / Operation personnel.
- Preparation of working drawings and “As Built” drawings
- Obtaining the clearance of Environmental Dept of Govt. of West Bengal and other statutory authorities as applicable.
- Obtaining the clearance certificate from Electrical Inspector and other relevant statutory authorities as applicable
- Obtaining the Fire clearance certificate from Fire authorities and other statutory authorities as applicable.
- Warranty Obligations during 2 years Defect Liability Period.
- 3 years Comprehensive Maintenance / Maintenance without spares coverage of the entire system under the Scope of this tender beyond Defects Liability period
- Detail engineering, equipment sizing and selection based on Sustainable Design, Energy efficiency and obtaining highest level of LEED Accreditation.
- Providing all the required civil works details/inputs including foundations, inserts, openings and other structural works required for the erection of Equipment, system and sub-system to the Civil Contractor (UG-1 & UG2) and Elevated Station Contractor in time for casting.
- Unless otherwise stated herein, the design, installation, testing and commissioning of all works associated with Full Height Platform Screen Doors ( for U/G Stations) and Half Height semi-outdoor Platform Screen Doors (for Elevated Stations) shall generally comply with the latest edition of all applicable standards issued by the Bureau of Indian Standards and other relevant local regulations applicable.
  - EN50126 ; EN50128 and EN50129 - Safe and reliable operation as well as maximum availability of the system -
  - EN12650 - 1 - Withstand external influences such as storms, gusts of wind and acts of vandalism
  - EN50155 and CJ/T 236-2006 - Absorbing in the design of High rated currents of the Metro Power Cars which induce extremely high over-voltages and compensation currents
  - EN55022-93 - The functionality and compliance with the system requirements have been verified by various tests
  - EN50126 - RAMS Analysis
  - EN12453 and prEN14752 - Mechanical load tests
  - EMV Tests - EN50121-5 ; EN61000-4-2-95 ; EN61000-4-3-97; EN61000-4-4-95; EN61000-4-5-95 ; EN61000-4-6-96 ; EN61000-4-8-93; EN61000-4-11-94
  - Climatic tests - EN60068-2-1; EN50125-3
  - Vibration tests - EN50125-3; EN60068-2-27; EN61373
  - SW Module test - MISRA2004
  - Compatibility - EN50128
  - System integration test - Depending on customer requirements
  - Quality approval to ISO 9001:2000, and environmental standard ISO 14001

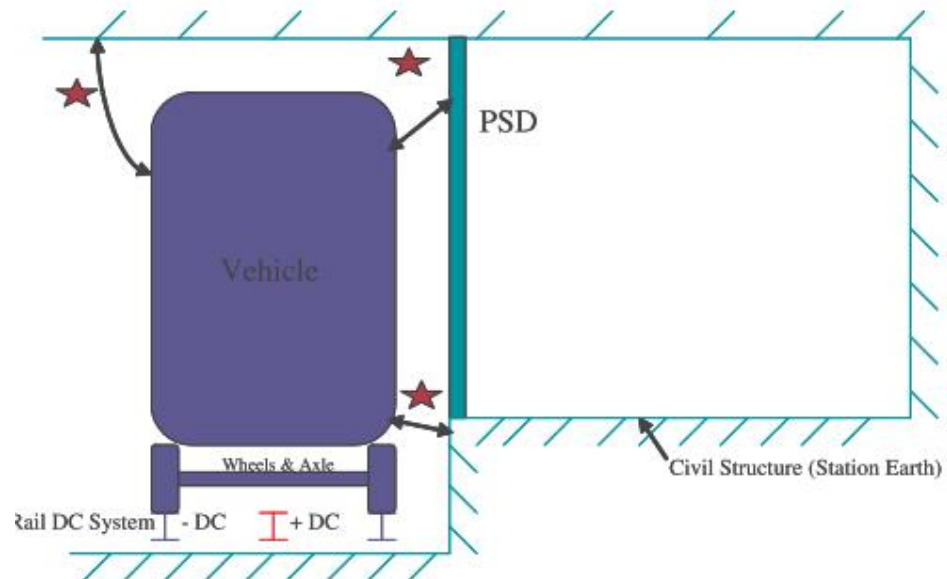
- Protection class IP code (EN60529): IP20
  - BS7671 (IEE wiring regulations).
  - BS7211 or BS6724 - Power cables will be Low Smoke Zero Halogen (LSZH)
  - NFPA 130 :Fixed Guideway Transit System
  - EN ISO 12100-1:2003, Safety of machinery — Basic concepts, general principles for design — Part 1: Basic
  - Terminology, methodology (ISO 12100-1:2003)
  - BS 6206 - Impact performance requirements for flat safety glass and safety plastics for use in buildings.
  - EN 1461 – Welded Steel Construction Hot dipped Galvanized (70 microns minimum) corrosion protection for Structural Steel Works.
  - The glazing shall conform to Class A as stated in Clause 4 of BS 6206 when subjected to the tests described in the standard.
  - The Contractor shall conduct the impact tests in accordance with the relevant clauses of BS 6206, but the size of the test sample for all thicknesses shall be taken as the largest pane of glass in the system.
- Additional requirements imposed by statutory or government authorities not listed above shall be complied with.
- The Contractor shall also comply with the “Guidelines and space standard for Barrier free Built Environment for Disabled and Elderly Persons” published by C.P.W.D. (Central Public Works Department). India.
- The contractor shall make available at site all relevant Indian standard Codes of practice, CPWD and MOST Specifications and IRS & IRC Codes as applicable and other relevant British/German/American Standard. Wherever Indian Standards do not cover some particular aspects of design/construction, relevant British/German/American Standards will be referred to.
- In case of discrepancy among Standard Codes of Practice viz. IS, IRS, CPWD, IRC, IEC, BS, UL, DIN, MOST, the decision of Engineer will be final and binding.
- The levels, measurements and other information concerning the existing site that shall be shown on the Tender drawings are believed to be correct, but the contractor should verify them for himself.
- Works to be performed shall also include all general works preparatory to the above mentioned works of any kind necessary for the due and satisfactory execution, completion and maintenance of the works to the intent and meaning of the drawings adopted and technical specifications, to best Engineering standards and orders that may be issued by the Engineer from time to time, compliance by the agency with all Conditions of Contract, supply of all materials, apparatus, plants, equipment, tools, fuel, water, transport, offices, stores, workshop, staff, labour and the provision of proper and sufficient protective works, diversion, temporary fencing, lighting and watching required for the safety of the public and protection of works on adjoining land; first-aid equipment, sanitary accommodation for the staff and workmen, effecting and maintenance of all insurances, the payment of all wages, salaries, provident fund, fees, royalties, duties or the other charges arising out of the erection of works and the regular clearance of rubbish, clearing up, leaving the site perfect and tidy on

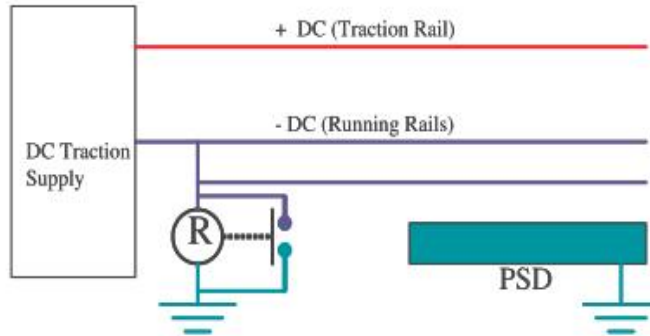
completion.

- Any other item of work as may be required to be carried out for completing the work under this Contract in all respects in accordance with the provisions of the Contract and/or to ensure the safety of installation during and after execution.
- The proposed capacities, sizes, of sub-systems/equipment in Full Height Platform Screen Doors and Half Height semi-outdoor Platform Screen Doors system, as a result of the design development shall be demonstrated by a proper design and testing / simulation study and subject to review by the “Engineer”.
- The Contractor shall use the platform nomenclature in accordance with the Table below and design the PSG/PSD Systems with due regard to the specific details of the straight and curved platforms.
- The Contractor shall be fully responsible for obtaining relevant safety certificate or any other approval required from statutory authorities for installation, commissioning and operating the PSG/PSD System before Revenue Service.
- The Contractor shall submit the relevant safety certificates and approvals obtained for each PSG/PSD to the Employer as soon as they are received.
- The Contractor shall provide adequate signage and graphics on the PSG/PSD System to comply with statutory requirements, for the safe and proper use of equipment, and for user’s convenience.
- It is a maintenance requirement that plant and equipment can be delivered via the platforms onto Works Trains and vice versa during non-traffic hour.. To meet this objective, the PSG/PSD installation shall be designed such that removal and restoration of doors and fixed screens shall be accomplished during non-traffic hour without disruption to the operation of the railway operation in the following day.
- The Contractor shall note the arrangement of expansion/movement joints in various stations. The Contractor shall coordinate with the Detail Design Consultants and the Employer’s Representative and ensure the PSG/PSD System is designed to cater for all anticipated structural movements in various stations.
- Incoming Power supply at 415 V, 3 phase, 50 Hz to the Full Height Platform Screen Doors and Half Height semi-outdoor Platform Screen Doors will be provided by the E & M Contractor up to an Isolator at a location inside PSG Room in Elevated Stations / PSD Room in U/G Station/Station Control Room. The PSG/PSD Contractor is required to provide suitable connection from these Isolators to their respective Control panels which includes cables, cable containment and termination at both ends.
- To ensure there is no touch voltage hazard between the PSG/PSD and the station structure the PSD /PSG structure will be bonded directly to the station earth.

- All conductive parts of the door module including the threshold, posts, fixed panels, emergency doors and covers will be bonded to the header. Carbon brushes will ensure the metal framework of the sliding doors is in electrical contact with the doorway header
- The Ohmic value from any point on the PSD /PSG structure to the station earth terminal will not exceed  $0.1\Omega$  providing the station earth terminal is 25m of the PSD.
- The PSG/PSD is bonded to the station earth and there will be no Touch Voltage /Static Electricity hazard from track side between the station structure and the PSD / PSG. See below the typical bonding arrangement for a PSD. PSG will also be provided with a similar arrangement.

PSD Bonding Strategy- PSD Bonded to Station Earth System





**NOTES:**

R = Monitors running rail voltage with respect to earth, and if the running rail voltage rises above a set level (in accordance with EN 50122-1) it operates an earthing contactor to eliminate the voltage rise.

★ = Potential Touch Voltage Hazard.

#No touch potential hazard from PSD to Platform & Station Structure.

#Touch voltage hazard from Vehicle to PSD (when stationary), but "R" is designed to eliminate voltage rises.

#Touch voltage hazard from Vehicle to Platform & Station Structure (when stationary), but "R" is designed to eliminate voltage rises.

Green = Station Supply Earth Potential.

Blue = Traction Supply -DC Potential.

Red = Traction Supply + DC Potential.

- It is possible that a potential difference may exist between the PSD and the vehicle. If a potential difference does exist it is the responsibility of the customer to ensure that this is maintained at a safe level and does not cause a touch voltage hazard between the PSD and the vehicle. This is illustrated below

## 2.2 Rolling Stock Details

The train consist will be a 6-cars train with 6 passenger cars. Each passenger train car will have 4 passenger doors per side. PSGs at Elevated Stations and PSDs at Underground Stations shall be installed corresponding to serve each passengers car doors respectively.

## 2.3.A Platforms on Half-Height Semi-Outdoor Type Platform Screen Gates (PSG) Station Sites and Associated Details:

Station	No. of Platforms	PSG Length	Straight or Curved Platform	Effective Length of PSG in mm	No. of PSGs	No. of Emergency Exit Gates (EEGs)	Height of PSG Structure in mm	Doorway Opening width in mm	Doorway Opening Height in mm
Salt Lake Stadium	2 platforms (Side Platform type)	Up track and down track - full platform length with PSG	Straight	To be confirmed	2 sets with 24 Doors + 2 side maintenance doors each (one number at either end)	Exact location and Quantity shall be confirmed in the Tender document. It shall be generally adjacent to the panel locating the PSG drives	1500-1700 (Exact dimensions will be indicated in the Tender document)	1900 +300 (Exact dimension will be indicated in the tender document . Clearway opening including nosing rubbers (Train door + Stopping Tolerance)	Not Applicable
Bengal Chemical	2 platforms (Side Platform type)	Up track and down track - full platform length with PSG	Straight	To be confirmed	2 sets with 24 Doors + 2 side maintenance doors each (one number at either end)				
City Center	2 platforms (Side Platform type)	Up track and down track - full platform length with PSG	Straight	To be confirmed	2 sets with 24 Doors + 2 side maintenance doors each (one number at either end)				
Central Park	2 platforms (Side Platform type)	Up track and down track - full platform length with PSG	Straight	To be confirmed	2 sets with 24 Doors + 2 side maintenance doors each (one number at either end)				
Karunamoyee	2 platforms (Side Platform type)	Up track and down track - full platform length with PSG	Straight	To be confirmed	2 sets with 24 Doors + 2 side maintenance doors each (one number at either end)				
Salt Lake Sector V	2 platforms (Side Platform type)	Up track and down track - full platform length with PSG	Straight	To be confirmed	2 sets with 24 Doors + 2 side maintenance doors each (one number at either end)				

**(NOTE:** However the Data indicated in the table above are tentative and Final dimensions will be provided in the Main Tender Document.)

## 2.3 B Platforms on which Full Height Platform Screen Doors Station and Associated Details:

Station	No. of Platforms	PSD Length	Straight or Curved Platform	Effective Length of PSD in mm	No. of PSDs	No. of EEDs	Height of PSD Structure in mm	Doorway Opening width in mm	Doorway Opening Height in mm
<b>Howrah Maidan</b>	2 platforms (Island Platform type)	Up track and down track - full platform length with PSD	Straight	To be confirmed	2 sets with 24 Doors + 2 side maintenance doors each (one number at either end)	Exact location and Quantity shall be indicated in the Tender document.  It shall be generally adjacent to the panel locating the PSD drives	2550 (Exact Dimension shall be indicated in the Tender document)	1900 + 300 (Exact Dimension shall be indicated in the Tender document)	2050 (Exact Dimension shall be indicated in the Tender document)
<b>Howrah *</b>	2 platforms (Island type) + 2 platforms (Side Platform type)	Up track and down track - full platform length with PSD	Straight	To be confirmed	4 sets with 24 Doors + 2 side maintenance doors each (one number at either end)				
<b>Mahakaran</b>	2 platforms (Island Platform type)	Up track and down track - full platform length with PSD	Straight	To be confirmed	2 sets with 24 Doors + 2 side maintenance doors each (one number at either end)				
<b>Central</b>	2 platforms (Island Platform type)	Up track and down track - full platform length with PSD	Straight	To be confirmed	2 sets with 24 Doors + 2 side maintenance doors each (one number at either end)				
<b>Sealdah</b>	2 platforms (Island type) + 2 platforms (Side Platform type)	Up track and down track - full platform length with PSD	Straight	To be confirmed	4 sets with 24 Doors + 2 side maintenance doors each (one number at either end)				
<b>Phool Bagan</b>	2 platforms (Island Platform type)	Up track and down track - full platform length with PSD	Curved (Approximately 1000m radius passing through the station)	To be confirmed	2 sets with 24 Doors + 2 side maintenance doors each (one number at either end)				

**(NOTE:** However the Data indicated in the table above are tentative and Final dimensions will be provided in the Main Tender Document.)

#### 2.4. Half Height semi-outdoor Platform Screen Gates (PSG) for Elevated Stations and Full Height Platform Screen Doors (PSD) at Underground Stations

The scope of work under this contract shall include the PSG/PSD Installation works comprising of but not limited to the following:

- All powered Platform Screen Doors located at the platform edge at each train car passenger door location.
- Complete door systems drives, control and monitoring systems, door control units for all PSGs / PSDs and associated lights, local door facilities, cabling and cable containment.
- All end-of-platform manual doors providing access from the platform onto the trackside.
- All fixed screens associated with the PSG / PSD System are termed "Fixed Screen" (FP).
- Emergency Exit Gates (EEG) / Emergency Escape Door (EED) shall be located opposite the normal leading and trailing passenger car stopping positions, except where fixed screens are required adjacent to MSDs. Alternatively these doors shall be located to the adjacent panel housing the drives of the PSGs / PSDs. The final location and quantity shall be indicated in the Main Tender Specification. These doors are manual, pivoting hinge swing out escape doors with monitoring and local door facilities, locking devices and emergency manual release mechanism.
- Each EEG / EED shall be equipped with push bar type manual release at trackside and staff key operation at platform side. The door shall be designed to swing open and be held at an open position of 90°. The door shall be self closing to the closed and locked position safely upon the opening position less than 90°, without need for staff intervention. The panic bar shall be designed such that it is not possible for a person's fingers to prevent the push bar from moving through its full travel.
- Platform Screen Doors Central Interface Panel (PSC) is located in the PSG Room in Elevated Stations / PSD Room in U/G Station and this unit comprises the "control cabinet" into which the Signalling System - PSD interface is connected and from which control signals are marshalled and transmitted to and from the PSG / PSD Header Box and the PSGs, PSDs, and PSL. In addition this unit provides the marshalling and onward transmission facilities of monitoring signals to the Integrated Station Management System (ISMS). In general, one PSC shall be provided for each two-island

platform PSD installation. However two individual PSCs shall be provided for Elevated Stations where there are side platforms.

- Platform Screen Doors Local Control Panel (PSL) - Generally two PSLs shall be provided on each platform one located at the headwall and one at the tail wall. In all circumstances the PSL shall be visible to the Train Operator (TO) from within the train cab when stopped within the specified stopping tolerance. The PSL shall provide limited local control and monitoring facilities, and an interlock override function.
- Door Control Units (DCU) - These units shall be located above (and adjacent to) each PSG/PSD doorset (in the PSG/PSD Header Box) and shall be dedicated to one door set only. The unit shall act as the local facility to:
  - Receive and manipulate incoming control signals and provide local control to the door set actuation and drive equipment.
  - Receive and manipulate incoming monitoring signals from door set local monitoring and sensor equipment.
  - Provide outgoing condition, status and alarm signals to the operational monitoring hardwired link and the Secondary (- Level 2) monitoring serial link.
- Actuator type shall be electric. The actuator shall be controlled by the associated DCU and include facilities to control position and speed of driven doors.
- The actuators shall be precision built, brushless, high reliability permanent magnet motor type or an equivalent ac motor type. Motors coupled with low friction reduction gearbox drives will be acceptable.
- Maintenance free low speed brushless motors, with over 15 years of operating experience and type tested to a minimum of 3,000,000 operating cycles, shall be submitted for Approval.
- The actuator shall operate the two door leaves via the door drive mechanism, interfacing with the door trolley assemblies.
- The door drive mechanism shall be a heavy duty, positively engaged drive arrangement, achieving synchronised smooth movement of the door leaves compliant with the performance requirements.
- Reinforced toothed belts and driving screws shall be acceptable drive mechanism types. Chain transmission will not be acceptable.
- The PSG/PSD shall be actuated by electromechanical means. All electrical conditioning equipment shall be provided by the PSD Contractor.

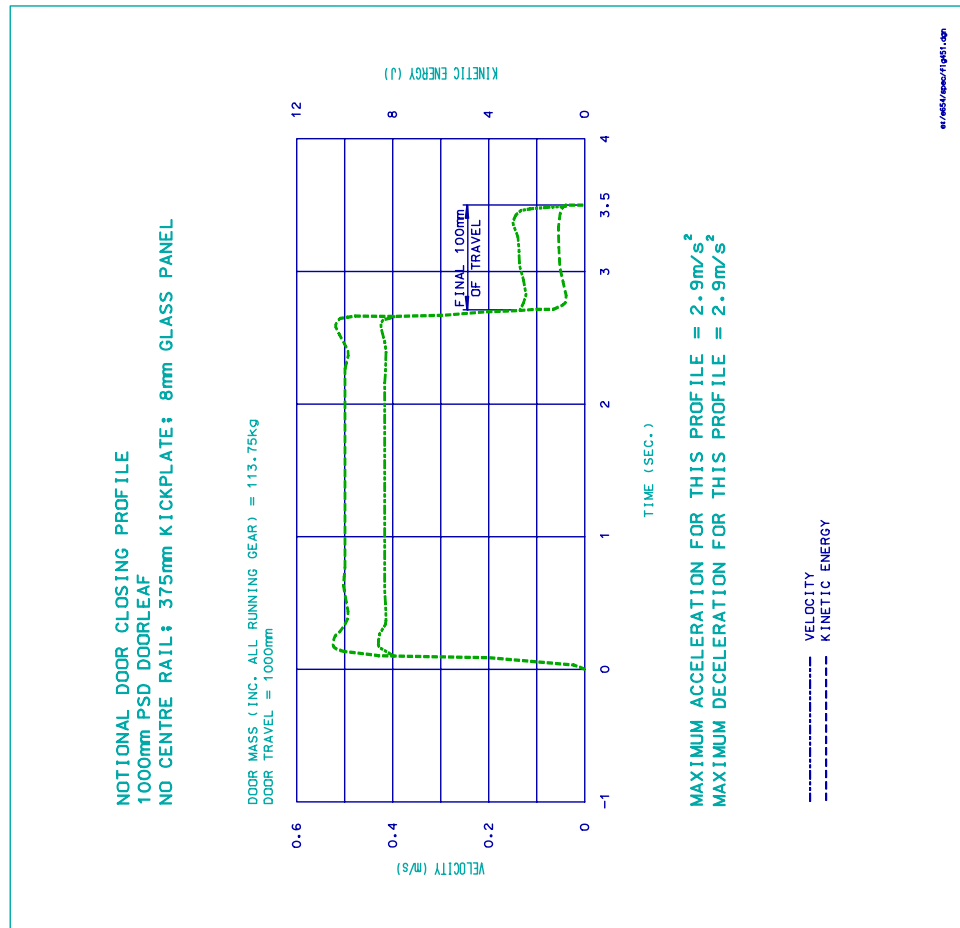
- The time taken to start opening/closing of the PSG/PSD after receipt of the DOORS OPEN/DOORS CLOSE command signals from the Signalling Link shall be less than 0.3 second.
- The time taken to open the PSG/PSD fully shall be 2.5 to 3.0 seconds and to close the doors fully shall be 3.0 to 3.5 seconds. The average velocities and the panel mass shall be limited by dynamic safety considerations.
- Whenever closing door movement is obstructed, the door operation mechanism shall sense the obstruction and temporarily release the closing force. Automatic re-opening shall not be provided but manual opening to release the obstacle shall be possible for a short time before the closing force is restored. Restoration of the closing force shall not result in a slamming action of the doors.
- The train will stop within  $\pm 500$ mm limits in order to enable automatic opening of PSG/PSD. In the rare event of a train stopping position outside the  $\pm 500$ mm, the train may be driven under operator control to reposition it and allow normal operation of the PSG/PSD when correctly positioned.
- Each PSG/PSD shall be equipped, on the trackside, with an easily accessible manual release device such that passengers leaving the train can disengage the automatic drive and open the door manually in the event that a door does not open automatically, for example due to a power supply failure or control failure or local failure of a door operating mechanism.
- Any door which has been manually released from track or platform side shall then be subjected to a gentle re-closing force, against which it can be pushed or held open, which shall ensure that the door returns safely to the closed and locked position afterwards, without need for staff intervention. For powered doors, the time delay for reclosing shall be adjustable between 0 to 120 seconds.
- Each manual door panel (EEG/EED/MSD) shall be equipped, on the trackside, with a manual release device such that passengers leaving the train can open the doors in the event of an emergency evacuation.
- In addition the manual release on each door panel (PSG/PSD/EEG/EED/MSD) shall be easily accessible from the platform side by use of a staff key. The platform side manual release shall be a concealed device for ease of operation by authorised station staff. The staff keys shall be of a common design and can operate the manual release of each door panel. The Contractor shall provide the staff keys with the following quantities:-

<u>Door Type</u>	<u>For All Stations</u>
MSD	150 keys
PSG/PSD/EEG/EED	104 keys

(The exact quantity shall be indicated in the Main Tender Document)

- All mechanisms and sub-systems within the PSG/PSD installations shall be designed according to failsafe principles so that no component failure nor combination of two component failures shall result in a door being powered open except in response to a valid "open" command. Positive means (physical sensors) for door close and open position shall be provided by the Contractor.
- No component failure shall inhibit manual opening of any individual door when the release mechanism is operated.
- The design of the equipment shall be such that replacement of parts shall not become necessary due to normal wear and tear for a period of five years from the end of the Defects Liability Period. The minimum operating life of the PSG/PSD System as a whole shall be at least 35 years.

• DOOR CLOSING PROFILE



- All components, sub assemblies, or major assemblies which may require removal from the PSG/PSD System for the purposes of replacement of worn components or the rectification of faults shall be accessible entirely from the platform side and shall be capable of being maintained or completely replaced within three hours or less during non

traffic hours.

- The Contractor shall design, test and install the PSG/PSD System such that no deleterious effects shall result from exposure to the station (platform side) and tunnel (trackside) conditions as stated. In addition it shall be noted that the tunnel conditions given only pertain to trackside at below ground platforms.
- Particular attention shall also be paid by the Contractor to preclude condensation formation in a manner detrimental to the durability or operability of any part of the PSD / PSG installations under the conditions noted above.
- PSG Room in Elevated Stations / PSD Room in U/G Stations will be air-conditioned to a temperature  $24^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ,  $60\% \text{ RH} \pm 5\%$ . The PSD System equipment shall function satisfactorily in these environments and provided anti condensation heater as required.
- The serial link and hardwired link cabling shall be supplied and installed by the Contractor up to and including terminations in the ISMS interface panel, the PSC and from the PSC to the ISMS interface panel.
- PSG Room in Elevated Stations / PSD Room in U/G Station - In general, one of these rooms will be provided for each pair of platforms. The rooms themselves will be designed and constructed by others including lighting, earthing, small power and ventilation.
- All central equipment, PSC and plant for the PSD door drive systems shall be installed in these rooms.
- All central ac/dc rectification, transformation and power conditioning where required, along with any associated control panels and the like shall be similarly located in this room. The Designated Building E&M Services Contractor will provide an incoming LV power supply (with isolator) and earthing point in each of these rooms for onward connection by the Contractor.
- An estimated maximum sensible heat emission of 5 kW per room has been allowed for the PSD equipment inside this PSG Room in Elevated Stations / PSD Room in U/G Station.
- The Contractor shall extend all Signalling System interface cabling to the Signalling Equipment Room, with all final terminations also by the Contractor. The ISMS Contractor will supply and install the ISMS interface panel in the PSG Room in Elevated Stations / PSD Room in U/G Station for incoming termination by the Contractor. All outgoing (to ISMS) cabling and terminations at this ISMS interface panel will be by the ISMS Contractor.
- An additional "clean" earth will be provided in this room for use by the Contractor. The Contractor shall note that the "clean earth" shall be used for grounding microprocessors as well as other sensitive electronic devices.

- For each Station, the power supply and isolator provided by the Designated Building E&M Services Contractor will be derived from the station essential power supply, and it is the Contractor's responsibility to provide their own UPS with 30 minutes back-up time and power conditioning unit for the PSG/PSD control equipment. The PSG Room in Elevated Stations / PSD Room in U/G Station will be air-conditioned by the Designated Building E&M Services Contractor.
- The following cable containment run at high level will be provided by the Designated Building E&M Services Contractors at each station for use by the Contractor:
  - Between the PSG Room in Elevated Stations / PSD Room in U/G Station and the Signalling Equipment Room.
  - Between the PSG Room in Elevated Stations / PSD Room in U/G Station, and one platform end.
  - Between the PSG Room in Elevated Stations / PSD Room in U/G Station and the Headwall Unit.
  - Between the PSG Room in Elevated Stations / PSD Room in U/G Station and Platform Supervisor's Booth.

**(Note** that such cable containment will only be provided at platform side. All trackside cable containment and track crossings shall be by the Contractor. The final routes will be as defined by the Station Building E&M Services Contractors. All cabling and any other cable containment necessary to support a complete PSG/PSD installation shall be provided by the Contractor.

- Boom lighting for platform and PSG / PSD illumination shall be supported from the PSG / PSD installation respectively. All cabling and cable containment for this lighting shall be provided by the Contractor and shall terminate at a junction box at each platform end beyond the 2m isolated area.
- PSG installations shall be located at six elevated stations and PSD installations shall be located at six U/G stations as in the Table. Each station will have different physical arrangements which affect the PSG/PSD System. The Contractor shall coordinate with the Civil Works Contractors of each station to confirm these physical arrangements and any modifications thereto prior to the finalisation of PSG/PSD System design.
- The Contractor shall be responsible for the true and proper setting-out of the Works and for the correctness of the position, levels, dimensions and alignment for all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of the Works any error shall appear or arise in the position, levels, dimensions or alignment of any part of the Works,

the Contractor on being requested to do so by the Employer's Representative shall rectify such error to the satisfaction of the Employer's Representative. It is the Contractor's responsibility to coordinate with Civil Works Contractor of each station to have joint inspection/survey on Site to ensure that all parts of the Works are provided to the acceptable construction tolerances.

- The checking of any setting out of any line or level by the Employer's Representative or his representative shall not in any way relieve the Contractor of his responsibility for the correctness thereof and the Contractor shall carefully protect and preserve all benchmarks, sight rails, pegs and other things used in setting-out the Works
- The Contractor shall be responsible for taking all his own dimensions on Site, checking runs and levels and marking out for builder's work.
- Any work carried out by the Contractor due to inaccuracy of the Contractor's drawings, dimensions, or marking out shall be rectified by the Contractor.
- The Contractor shall ensure that the setting out of plant or equipment permits it to fit into the space allocated and allows access for maintenance and replacement purposes. The Contractor shall allow in his design to level the support frame due to the un Setting out of the PSG/PSD System shall be derived from the Station Centre Line Coordinates and the Kinematic Envelope even surface provided by the Civil Works Contractors.
- A number of work items in support of the PSG/PSD installation will be provided by other Contractors, these work items will be limited to the following:
  - i) Provision of wall and slab penetrations where required by the Civil Works Contractor, (Sealing, water stopping and making good of openings between cables and cable sleeves or enclosures shall be carried out by the PSD/ PSG Contractor),
  - ii) Provision of one (essential) LV power supply and one electrical earthing point to each PSG Room in Elevated Stations / PSD Room in U/G Station by the Station Building E&M Services Contractor,
  - iii) Lighting and ECS to each PSG Room in Elevated Stations / PSD Room in U/G Station, will be provided by the Station Building E&M Services Contractor,
  - iv) Cable containment (final routes defined by the Station Building E&M Services Contractors). Note all trackside cable containment and track crossings shall be provided by the PSG/PSD Contractor,
  - v) Final routes will be subject to final coordination by Station Building E&M Services Contractors. The PSG/PSD Contractor shall work to the final coordinated routes as issued,
  - vi) Installation of ISMS interface panel within each PSG Room in Elevated Stations / PSD Room in U/G Station, all input cabling and terminations by the PSG/PSD

Contractor, all output (to ISMS central monitoring) cabling and terminations by the ISMS Contractor.

- The Contractor shall be responsible for identifying information required from other Contractors and/or the Employer's Representative and providing information in a timely manner to other Interfacing Contractors and the Employer's Representative. The Contractor shall communicate and coordinate with the Employer's Representative and ensure that all interfacing details are Approved by the Employer's Representative. Major coordination works include:
  - i) PSG/PSD installation structural attachments to station and platform elements to support PSG/PSD,
  - ii) Physical routing of all pipework, cable containment and associated ancillaries, supports, secondary steel and structural attachments,
  - iii) Signalling signal types, numbers and termination details,
  - iv) ISMS signal types, quantities, protocol, transmission rate, format and termination details,
  - v) LV power supply terminations,
  - vi) Earthing and bonding terminations,
  - vii) PSG Room in Elevated Stations / PSD Room in U/G Station power supply capacities and heat release (from PSD controller and equipment) figures,
  - viii) Layouts of taking cognisance of lighting, ECS, drainage, SMS interface panels, LV cabling, earthing provisions installed by others,
  - ix) Design of, and layout internal to, the Headwall Unit making due provision for handsets, closed-circuit televisions, fire extinguishers and other elements being installed by others within the unit enclosure,
  - x) Installation location and details, cabling and cable containment for all PSLs
  - xi) Coordination with Signalling Contractor within Signalling Equipment Rooms,
  - xii) Coordination with Traction Power and Station Building E&M Service Contractors for bonding connection to common bonding (or equivalent devices) at rail level
- Proto Type - Prototype shall be constructed to demonstrate the appearance and operation of a complete door installation and in this respect the trial installation is required to reflect, as far as possible, the conditions and support arrangements present in a station. The prototype shall incorporate all fixings, ironmongery, seals, finishes attachments, details and appurtenances to fully reflect the "as-installed" Site condition.
- The Contractor shall build following prototype to demonstrate the prototype design: a set of Fixed Screens, one set of PSG / EEG corresponding to one set of train doors, and

one set of MSD, integrated with a PSL assembly. In addition the Contractor shall install one set of PSD / EED corresponding to one set of train car door complete with PSL assembly. This equipment shall be mounted on a platform mock up to be provided by the Employer in a location in Kolkata to be specified by the Employer. The prototype shall be examined and comments sorted. Following the satisfactory completion of all tests on the prototypes, and at a date to be determined by the Employer's Representative, the Contractor shall dismantle, relocate, assemble and re-commission each prototype at a training facility in Central Plant Depot.

- At an agreed point in the test programme, the doors shall be subject to an accelerated life test. During the test, the door velocity profile shall be monitored and compared with the profile pre-programmed in the DCU. Any deviations discovered shall be duly recorded. This shall be for not less than 1,000,000 complete open/close cycles. The Employer's Representative will have the right to carry out interim inspection for the prototype testing at any time. Upon completion of this test, the door operational, drive, guide and running gear components shall be dismantled for inspection by the Employer's Representative. The door components shall be rigorously examined for incipient failure and wear. All components and sub assemblies indicating such signs shall be subject to review and appropriate steps taken to modify and/or replace the components and assemblies in question.
- Any equipment used in the prototype installation shall not be provided as part of the Contract installation. The prototype shall remain the property of the Employer.
- Provision of I/O points and accessories for the PSG/PSD system to Integrate with Station Management System (ISMS) (E & M SCADA).
- Interface and coordination with other Designated System Contractors.
- Preparation of Operation and Maintenance Manual, Training of maintenance / Operation personnel.
- Preparation of working drawings and "As Built" drawings
- Obtaining the Fire clearance certificate from Fire authorities, Environmental Dept of Govt. of West Bengal and other statutory authorities as applicable.
- Warranty Obligations during 2 years Defect Liability Period.
- 3 years Comprehensive Maintenance coverage of the entire system under the Scope of this tender beyond Defects Liability period
- Transportation of materials and equipment for installation purposes.
- Spare parts, special tools, testing and diagnostic equipment and measuring instruments.
- Training and Transfer of Technology
- Documentation

- Comprehensive Maintenance / Maintenance without Spares for specified period.
  - Services.
- 2.5 Applicants are required to read carefully the contents of this document and to provide the requested information in sufficient detail so that the capabilities of the applicant can be fully appreciated and assessed.
- 2.6 Applicants may be single firm / Indian and International Company, either by themselves or as a joint venture / consortium, interested in appointment through International Competitive Bidding (ICB) as the Full Height Platform Screen Doors / Half Height semi-outdoor Platform Screen Doors (PSG/PSD) designer and Manufacturers can apply. Applicants are required to have a good financial standing and performance record, requisite experience and capacity in the fields described above. Applicants must read carefully the directions concerning the requirements for groups. All members of a group will have their submittals individually evaluated in addition to evaluating their role in the group.
- 2.7 Applicants are to complete the Questionnaire and to provide the required information in separate Sections as described in the "Contents of each Section". These documents shall be submitted in sets of ONE original and ONE copy, and so marked. The use of sections is to separate the information provided so that there is no doubt as to the intention of the applicant, and to considerably simplify the process of assessment of the applicants' capability and suitability.
- 2.8 Submittals will be assessed to demonstrate convincingly that the applicant possesses the experience, and technical, administrative and financial capability to perform the contract for which application is made, and has a good performance record in the relevant area. Applicants will not be considered if they have a poor performance record such as the abandonment of works, not properly completing contracts, inordinate delays in completing contracts, litigation history, financial failure, etc. KMRCL reserves the right to approach previous clients of the applicants.
- 2.9 The applicant, (each member in the case of a group) or any associate shall have to confirm and declare that no agent, middleman or any intermediary has been or will be engaged for the services or any other item/work related to the award and performance of the Contract. **They shall further confirm and declare that no agency commission, or any payment, which may be construed as an agency commission, has been or will be paid and that the Tender Price will not include any such amount.**
- 2.10 All documents shall be in the English Language.
- 2.11 All bidders will be notified about the result of their Application within 90- days from the latest submission date. However, KMRCL will neither discuss any aspect of the evaluation process, nor the result of the evaluation.
- 2.12 Applicants should note clearly the date and time for submittal of applications. No late or delayed application will be accepted. Applicants are reminded that no supplementary material will be entertained by KMRCL, and that evaluation will be carried out only on the basis of

documents received by the closing time for receiving submittals. KMRCL may seek certain clarification(s) from the applicants during the evaluation process.

- 2.13 In the event of a conflict or ambiguity between documents submitted by the applicant, the material contained in the Original set only will prevail.
- 2.14 Applicants will not be considered if they suppress information or make misleading or false representations in statements, attachments and pre-qualification questionnaire submitted in proof of the qualification requirements.

**PRE-QUALIFICATION FOR THE DETAILED DESIGN, DETAIL ENGINEERING,  
MANUFACTURE, SUPPLY, DELIVERY AND STORAGE AT SITE, LAYING,  
INSTALLATION, TESTING AND COMMISSIONING, TRAINING OF PERSONNEL,  
DEMONSTRATION OF PERFORMANCE OF SYSTEM / EQUIPMENT OF  
PLATFORM SCREEN DOOR SYSTEM (PSD) OF UNDERGROUND STATIONS  
AND PLATFORM SCREEN GATE SYSTEM OF ELEVATED STATIONS OF  
KOLKATA METRO EAST-WEST LINE PROJECT  
(TENDER NO. 6 PQ-UG/EL - PSD)  
(Revision 0)**

**3.0 PROJECT**

The Kolkata Metro Rail Corporation Ltd. (KMRCL) has been authorised to proceed with the implementation of the Kolkata Metro East-West Line project.

- 3.1 The project is financed partly through equity participation by GOI and GOWB and partly through loan from Japan International Cooperation Agency (JICA). This work is funded by the two Governments. The execution of this tender **does not** require JICA concurrence at any time.
- 3.2 Payments under these contracts will be made in any two **freely tradable** foreign currencies, and Indian Rupees. The full detail will be provided in the main tender Documents.
- 3.3 This pre-qualification Document refers to Full Height Platform Screen Doors / Half Height semi-outdoor Platform Screen Doors System required to operate the Project or part thereof.
- 3.4 The KMRCL intends to invite suitably qualified Indian and international applicants/ Consortium / Groups/ Joint Ventures to submit tenders through International Competitive Bidding (ICB) for the Part Detailed Design based on Accepted Definitive Design, Manufacture, Supply, Delivery and storage at Site, Laying, Installation, Testing and Commissioning, Training of Personnel, Demonstration of Performance of the System and Equipment of Full Height Platform Screen Doors (PSD) System for Underground Stations / Half Height semi-outdoor Platform Screen Doors (PSG) System for Elevated Stations of Kolkata Metro East – West Metro project (Tender No. 6 – UG/EL - PSD).
- 3.5 This document describes the pre-qualification application procedure and requirements.
- 3.6 International Applicants may be required for transfer of technology for design, system assembly, laying, installation, and maintenance and software customization/ modification within a defined time frame. For this purpose the applicant may associate with local contractors experienced in requisite disciplines.
- 3.7 The contractor shall be required to interface closely with the General Consultants, Detail Design Consultants appointed by KMRCL and the civil/structural and other System wide Contractors working on Project.
- 3.8 The successful Bidder will be required to set up a design/ Project office in Kolkata to enable their design development to be monitored and checked by the KMRCL's authorised

representative.

- 3.9 Interested designers and Contractors, Indian and International may apply for pre-qualification as sole contractor or as joint venture, partnership or consortium (group). It will however, not be permitted to tender for the same contract in their own name and at the same time as part of a joint venture, partnership or consortium. In such as case both tenders will be rejected.
- 3.10 All members along with others will be jointly and severally responsible. They shall be evaluated for their particular roles, extent of participation, experience and capabilities. Applicant has to give the confirmation for above in the Verification Statement in Annexure 3. In case of non-confirmation and non-compliance of the statement, the Bidder is liable to be summarily rejected.
- 3.11 The basis for evaluation of applications is described in Clauses 7.13 and 7.15 to 7.17 herein. For any other contract of similar works KMRCL may invite Tenders from the same pre – qualified firms.
- 3.12 Applicants for pre-qualification should note that this Pre-qualification Enquiry and Questionnaire are intended to provide preliminary information concerning the scope of work and its component contracts. The information contained herein shall not in any way be interpreted as binding on Kolkata Metro Rail Corporation Ltd., and its agents, successors or assigns.
- 3.13 Applicants are advised that selection of contractors as potential Bidders shall be entirely at the discretion of KMRCL. Applicants will be deemed to have understood and agreed that no explanation or justification of any aspect of the pre-qualification process will be given and that the KMRCL's pre-qualification decisions are without any right of appeal whatsoever.
- 3.14 All costs incurred by an applicant for pre-qualification shall be borne by the applicant. KMRCL, its agents, successors and assigns are entirely without any liability for such costs.
- 3.15 KMRCL reserves the right not to proceed with the pre-qualification procedure at any time without notice or liability.
- 3.16 All documents and other information supplied by the KMRCL or submitted by an applicant shall remain or become the property of the KMRCL. Applicants are to treat all information as strictly confidential. KMRCL will not return any pre-qualification submission.
- 3.17 Applicants are advised that KMRCL will not respond to enquiries or enter into communications concerning or relating to the pre-qualification procedure. However, KMRCL may seek certain clarifications from the Bidders during evaluation of bids. The clarifications are to be replied within the time frame prescribed in the correspondence. **However no supplementary material (Document) submission will be entertained by KMRCL and the evaluation will be carried out only on the basis of Document received by the closing time stipulated for such submittals.****
- 3.18 Each applicant (each member in the case of a Group) or any Associate, will be required to confirm and declare with the Pre-Qualification Application that no agent, middleman or any intermediary has been, or will be, engaged to provide any service, or any other item or work related to the award and performance of this Contract. They will have to further confirm and declare in the submittal that no agency commission or any payment which may be construed

as an agency commission has been or will be, paid and that the tender price will not include any such amount.

- 3.19 KMRCCL reserves the right to accept or reject any or all proposals without assigning any reason what so ever. No Bidder shall have any cause of action or claim against KMRCCL for rejection of his proposal.
- 3.20 Canvassing in any form will result in summary rejection of the tender.
- 3.21 NOT USED
- 3.22 *The estimated cost of the work is approximately **INR 820 Million (US\$ 18.37 million)**.*
- 3.23 *The tender shall be valid for 90 days from the last date of submission of tender.*
- 3.24 For details, please visit our web site: [www.kmrc.in](http://www.kmrc.in).
- 3.25 Bidders shall be required to update the financial information used for pre-qualification at the time of submitting their bids and to confirm their continued compliance with the qualification criteria. A bid shall be rejected if the Applicants/group/ Consortium / joint venture qualified thresholds are no longer met at the time of bidding.

#### 4.0 PROJECT ORGANISATIONS

- 4.1 The Executing Agency for the KOLKATA East West Metro Project is the KOLKATA Metro Rail Corporation Ltd. The KMRCCL office is located at:

Chief Electrical Engineer

Kolkata Metro Rail Corporation Ltd.

HRBC Office Complex (4<sup>th</sup> & 5<sup>th</sup> Floor)

Munshi Prem Chand Sarani

Kolkata – 700 021

Telephone: (91) – 33 22314553

India

Facsimile:

- 4.2 The KMRCCL will be the "Employer" under the terms of any contracts to be awarded.

#### 5.0 PROJECT DESCRIPTION

- 5.1

Sl. No.	Name of section	Section length (Km)				Station			
		At grade	elevated	Under Ground	Total	At grade	elevated	Under Ground	Total
1	Howrah Maidan - Subhash Sarobar	-	-	8.84	8.84	-	-	6	6
2	Subhash Sarobar Sector V	-	5.74	-	5.74		6		6

Inter-station distance and their location from ground

Station	Distance(KM) from Howrah Maidan	Location from ground (meter)	Position & type of station
Howrah Maidan	0,00		
Howrah *	0,55	-30,75	Island type : UG
Mahakaran	2,25	-20,39	Island type with side platform: UG
Central	3,14	-21,48	Island type : UG
Sealdah *	5,10	-13,72	Island type with side platform: UG
Phool Bagan	6,945	-12,89	Island type : UG
Salt Lake Stadium	8,675	+8,6	Side Platform
Bengal Chemical	9,425	+11,97	- Do -
City Centre	10,55	+11,89	- Do -
Central Park	11,525	+11,87	- Do -
Karunamoyee	12,275	+11,87	- Do -
Sector V	13,4	+12,05	- Do -

With respect to ground 00

\* Additional side platform on both sides

Note: Final alignment may change the location and position of stations after accepted final design of U/G is submitted

The commissioning schedule of the project is targeted as follows:

Sl. No.	Section	Expected date of introduction of commercial services
1	Sector V – Subash Sarovar	NOV 2013
2	Yard & Depot at Central Park & OCC	JAN 2013
3	Complete Alignment	NOV 2014
4.	Tentative time required for the completion of this contract	36 months

- 5.2 The tender document to be issued by the KMRC for the UG/EL - PSD contract will include Tender Drawings, GCC, SCC, ITT Employer's Requirements, Technical Requirements, and Technical Specifications for Detailed Design, Detailed Engineering, Manufacture, Supply, Delivery and Storage at Site, Laying, Installation, Testing and Commissioning, Training of Personnel, Demonstration of Performance of System/Equipment and Construction of Full Height Platform Screen Doors (PSD) System for Underground Stations / Half Height semi-outdoor Platform Screen Doors (PSG) System for Elevated Stations of Kolkata Metro East – West Metro project (Tender No. 6 – UG/EL - PSD). This will principally cover performance but will provide technical requirements in sufficient depth to eliminate undesirable features.
- 5.3 The successful Bidder will be responsible for co-ordinating all interfaces between the systems he is offering and all other packages awarded to other Contractors / DDCs which impinge

upon his design e.g. ECS, TVS, E & M, Rolling Stock, Power Supply System, Tunnel Fixed Structure, Elevated Viaduct Track, Station Buildings and Platforms, Signalling, Telecommunication and Maintenance Management Information System, Lift & Escalator System, elevated Station Architectural finishes etc. KMRCL or its Engineers will supervise the Interface / co-ordination between the successful Bidder of contract UG – L & E and other designated Contractors/DDCs.

- 5.4 The successful Bidder will also be required to provide sufficient technical data, (dimensions, weight and mounting details) including maintenance schedules, inspection/repair produces any machinery/plant required of all equipment/all sub-systems. In addition other technical interface details will be provided including earthing details etc. to enable other project contractors to proceed in parallel with their design and development.
- 5.5 Safety worthiness of the system will be evaluated by Commissioner of Metro Rail Safety under Ministry of Civil Aviation Govt. of India.
- 5.6 The Contractor should be in position to provide necessary support (have experts with adequate knowledge and experience, qualification, and to submit such documentation as required) to assist KMRCL for effective interaction with Indian authorities viz. Ministry of Railways, RDSO, Commissioner of Metro Railway Safety, EIG and Kolkata Fire Service (KFS).

## **6.0 CONTRACTUAL MATTERS.**

- 6.1 The construction works will be procured through International Competitive Bidding (ICB) by pre-qualified Bidders.
- 6.2 The Tender for the Detailed Design, Detailed Engineering, Manufacture, Supply, Delivery and storage at Site, Laying, Installation, Testing and Commissioning, Demonstration of Performance of the System and Equipment of Full Height Platform Screen Doors (PSD) for Underground Stations / Half Height semi-outdoor type Platform Screen Gates (PSG) System for Elevated Station System of Kolkata Metro East – West project (Tender No. **6 – UG/ EL - PSD Rev 00**) will give details of conceptual designs and outline technical specification and Employer's Requirement. The Bidders will be required to develop from these details, designs and specifications sufficiently detailed to allow KMRCL to assess the fitness and adequacy of each Bidder.
- 6.3 The successful Bidder will be required to co-ordinate his system to interface where applicable with other designated contractors for services such as TVS, ECS, E & M, Power Supply System, Lift & Escalators, Rail Systems and Civil & Structural etc. to develop and execute the integrated system for the station. Such integration and co-ordination is of paramount importance for the timely and satisfactory completion of the project.
- 6.4 If contract UG/EL-PSD is awarded to a combination of commercial entities, as discussed in subsection each member thereof will be jointly and severally liable for the whole performance of the contract obligations. Jointly and severally liable performance guarantee may be required from the ultimate owning companies of a Bidder.
- 6.5 The contractor shall be responsible for obtaining relevant certificates or clearance from local

civic authorities, viz completion certificates, fire clearance etc. as per the time schedule prescribed by KMRCL. The Contractor to note that obtaining all the Authority related clearances, permissions and Certifications for the work carried out by the Contractor is included in the Scope of Work. This includes obtaining mandatory clearances from West Bengal Pollution Control Board (WBPCB) as applicable to the Contractor.

- 6.6 The successful Bidder will have to ensure transfer of technology for design, indigenous, system assembly, installation, maintenance and software customisation/modification within a defined time frame. Transfer of Technology will be limited to the Operation and Maintenance of the Equipment & Systems covered under this Contract. Canvassing in any form will result in summary rejection of the tender.
- 6.7 Applicants/Group/Consortium / JV shall be required to provide bid security in the form of a certified cheque, letter of credit, or bank guarantee from a Indian Scheduled Commercial Bank of bidders choice for an amount which will be specified in the bid document, which is usually 1 % to 2 % of the tender value.

## 7.0 PREQUALIFICATION APPLICATION

- 7.1 Copies of the Enquiry Document may be collected from the office of the KMRCL, 4<sup>th</sup> & 5<sup>th</sup> Floor, HRBC Bhaban, Munshi Premchand Sarani, Kolkata-21, INDIA. The Pre-Qualification Documents will be available on payment of a non-refundable fee of **Rs 25,000 (US\$ 500)** in the form of a crossed demand draft from a Scheduled Commercial Bank in India in favour of Kolkata Metro Rail Corporation Limited, payable at Kolkata, on all working days between **11.00hrs and 17.00hrs (IST) from 04<sup>th</sup> July 2011 till 14<sup>th</sup> July 2011**. In case Enquiry document is downloaded from web-site, cost of document to be submitted along with the submission of tender or before Pre-Bid meeting else the tender will be rejected.
- 7.2 Clarifications, if any, asked in writing only will be entertained by KMRCL. Pre-bid meeting may be held on **29<sup>th</sup> July 2011 at 14.30 hrs**. Last date for seeking clarifications is **9<sup>th</sup> August 2011** and this will be replied by **19<sup>th</sup> August 2011**.
- 7.3 Applicants for pre-qualification are required to submit the filled Pre-qualification Questionnaire and associated information as herein requested.
- 7.4 Applicants shall submit the requisite information in the sectional arrangements as indicated in the Table "Contents of Sections" in the pre-qualification questionnaire.
- 7.5 Applicants should attach clearly marked and referenced continuation sheets in the event that the space provided in the Questionnaire is insufficient. Alternatively, Applicants may format the questionnaire making due provision for incorporation of the requested information.
- 7.6 Applications for pre-qualification must be submitted by hand or by registered post so as to reach the office of the **KMRCL on or before 15.00 hrs (IST) on 19<sup>th</sup> September 2011**
- Late or delayed applications (received after date and time of submission of bids) will not be received or considered.**

- 7.7 Submissions shall be made in two sets of documents comprising one original set and one copy and addressed to :
- Managing Director  
Kolkata Metro Rail Corporation Ltd.  
HRBC Office Complex (4<sup>th</sup> & 5<sup>th</sup> Floor)  
Munshi Prem Chand Sarani  
Kolkata – 700 021 Telephone: (91) – 33 22314553  
India Facsimile:
- All envelopes shall be titled "**PRE-QUALIFICATION SUBMISSION PQ – UG/EL- PSD**" and clearly marked in English, duly giving:
- Name of Applicant  
Contract Number  
Copy Number (i.e. Original, or Copy 1)
- 7.8 Information supplied by an applicant (or other constituent member if the applicant is a group) must be relevant to the applicant or constituent member named in the application and not, unless specifically requested, to other associated companies or firms. Unless otherwise approved by the KMRCL, invitation to tender documents will only be issued to the Full Height Platform Screen Doors and Half Height semi-outdoor Platform Screen Doors Design, Supply and Construction companies or groups whose identity and/or constitution is/are identical to that at pre-qualification. The information and experience provided of an entity (Constituent Member) in a Group must be commensurate with the proposed role of that entity in the Contract to be awarded. However the lead member of the Consortium or the Applicant in case of a sole bid should be Technical Member
- 7.9 A Group comprising a joint venture, partnership or consortium may apply for pre-qualification. In the case of applications from groups, a statement of participation for each constituent member shall be submitted to the effect that they are bona fide members of the group applying for pre-qualification and that, in the event of pre-qualification, they agree to be jointly and severally liable to KMRCL under any contract which may be subsequently awarded to the group. Details of the existing or proposed joint venture, partnership or consortium agreement in the form of a Memorandum of Understanding (MOU) signed by all participants will be required. Foreign Applicants /Partners of JV / Consortium shall obtain requisite attestation to their notarisation from the Indian Embassy in their country.
- 7.10 The successful tenderer will be required to ensure transfer of technology for design, indigenous system assembly, installation, maintenance and software customisation / modifications within a defined time frame.
- 7.11 Applicants will be committed to the transfer of technology for the design, indigenous system assembly, Laying, installation, maintenance and software customisation/modifications within a defined time frame. For that purpose, the Applicants may set up suitable facilities in India. This aspect would need to be adequately reflected in the Indian rupees portion of the tender price.
- 7.12 KMRCL will review and evaluate the information submitted by applicants and select the

applicants to whom invitations to Tender will be issued.

- 7.13 In responding to the pre-qualification submission, applicants shall demonstrate their capabilities, by providing material based on their experience, past performance, their personnel, equipment and financial resources, including but not limited to the following:
- Capability to execute Full Height Platform Screen Doors (PSD) System for Underground Stations / Half Height semi-outdoor Platform Screen Doors (PSG) System for Elevated Stations as required under the scope of present contract PQ-UG/EL - PSD (Rev 00)
  - Capability to perform design verification and detail design engineering to the requisite standard and to monitor construction development.
  - Capability to programme and re-programme the design work.
  - Capability to undertake, manage and supervise the Full Height Platform Screen Doors (PSD) System / Half Height semi-outdoor Platform Screen Doors (PSG) System work, in a manner and to a quality commensurate with internationally accepted norms for the noted scope of work.
  - Capability to undertake and manage and co-ordinate contract interfaces.
  - Capability and experience to execute the work in time by having adequate resources.
  - Capability to carry out all minor civil works like Equipment related plinths, pockets, inserts, supports are part of PSD Contractor's scope. However all major foundations are carried out by Civil Contractors.
  - Capability to operate design verification, construction quality control programme.
  - Capability to transfer of technology for design, indigenous system assembly, installation, maintenance and software customisation/modifications with in a defined time frame.
  - In case the application is from Joint Venture, or consortium, each member of the group and each discipline should substantially satisfy the pre-qualification requirements for the system for which the Member is participating.
- 7.14 Applicants will not on their own, provide additional information or material subsequent to the date of submission, and such material if submitted will be disregarded. However KMRC may seek certain clarification(s) from the applications during the evaluation process.
- 7.15 LITIGATION HISTORY: The Applicant should provide accurate information on any litigation or arbitration resulting from contracts completed or under its execution over the last ten years in the pro-forma enclosed as Annexure – 1B, 2B. If the Applicant or any partner of joint venture is involved in frequent litigations, then it may result in failure of the application of the Applicant or any partner of joint venture as per the Initial Filter of Applicants – Check List.
- 7.16 EQUIPMENT CAPABILITIES: The Applicant should own or have assured access (through hire, lease, purchase agreement, availability of manufacturing equipment or other means) to the key items of equipment in full working order, and must demonstrate that, based on known commitments, they will be available for use in the proposed contract. The information is to be provided for all & each items in the pro-forma enclosed as Annexure – 4.
- 7.17 Pre – Qualification Evaluation Criteria (The lowest – point level summary) – To be evaluated

first based on criteria laid down in 7.17.1 based on information submitted. Further evaluation as per a), b), c) & d) will be done in case the sole bidder /JV / Consortium who qualifies the lowest point level summary and the same will not be done if any bidder fails to clear Clause 7.17.1

An applicant would pass pre – qualification criteria, if he meets all four requirements (Ref: PREQUALIFICATION EVALUATION CRITERIA) as detailed below:

- (a) Pass in Initial filter check – list.
- (b) Pass in Financial Criteria T1, T2, T2A and T3
- (c) 50% marks-in Topic – II and III each - Pass
- (d) 60% marks- in overall (Topic – II + III). - Pass

The Employer reserves the right to waive minor deviations if they do not materially affect the capability of an applicant/JV/Consortium to perform the contract.

7.17.1 The lowest point level for each topic and conditions to be qualified as per the Pre – Qualification Evaluation Criteria is summarised as below:

Topic		The Lowest Point Level
<b>I – Financial Standing</b>	T1	Adequate Liquidity, Cash flow of <b>INR 68 Million</b>
	T2	Earning before Tax, Positive in 3 years out of last 5 years
	T2A	Net Worth (Average of last Two Years), <b>INR 170 Million</b>
	T3	<b>INR 246 Million</b> , Average Annual Turn-over during last 5 years
<b>II – Technical and Organisational Capability</b>	T4	50% of Key Staff Graduates/Post Graduates
	T5	15 staffs
	T6	3 years experience
	T7	At least two disciplines not represented adequately in the Proposed Organisation
	T8	Follows internal QA Programme
<b>III – Experience Record</b>	T9	The Applicant shall have International Experience of supplying PSGs/PSDs outside the Country of Origin, Or Shall have accreditation by internationally recognized Bodies for Design and Manufacture of Semi-outdoor type Half Height Platform Screen Gates / Platform Screen Door System Works as detailed in Scope of Work

Topic		The Lowest Point Level
	T10	A minimum of at least 4 sets of Half Height semi-outdoor Platform Screen Gates and 4 sets of Full Height Platform Screen Doors works <b><u>in use</u></b> for 3 years in METRO stations.
	T11	A minimum 135 nos. of Platform Screen Gate / Platform Screen Door Driving Mechanism <b><u>in use</u></b> over the last 3 years in any Metro System.

The above table indicates the lowest point level. For details regarding T1 to T11, please refer to Section (C) – Assessment Score of Pre-Qualification Evaluation Criteria.

Note: The above table indicates the lowest point level. For Applicants / Joint venture / Consortium must qualify as a group against item T4, T5, T6, T7, T8, T9, T10 to T11 and by each member for T1, T2, T2A and T3 on the basis of their role as Lead member or member in case of a group.

- Only completed works only will be considered. Client's certificate is essential to cover all requirements of criteria.
- Financial evaluation against T1, T2, T2A & T3 will be done for sole bidder as a whole and for each member in case of JV/Consortium. In case of JV/ Consortium, Lead member must fulfil 40% of the criteria and other members 25%. However in totality JV/Consortium (all the partners) put together should meet 100% of financial standing criteria at all times. All other criteria will be evaluated jointly as Consortium.
- Experience of the applicant working as sub-contractor in previous projects will also be considered.

7.18 NOT USED

7.19 All documents submitted by applicants shall be in the English Language. Submitted documents will not be returned.

7.20 CONFLICT OF INTEREST

If any of the circumstances below apply to the Applicant, the Members or the Leader or the Principal, please provide details including how it is proposed to deal with such conflicts/obtain approvals.

The applicant (including all members of a joint venture/consortium/group) shall not be one of the following:

- i) A firm or organization which has been engaged by the Employer to provide consulting services for the preparation related to procurement for or implementation of the project;
- ii) Any association / affiliates ( inclusive of parent firm) of a firm or an organization mentioned in sub paragraph (i) above or,
- iii) A firm or an organization who lends , or temporarily seconds its personal to firms or organizations which are engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity of the same project.

KMRCL must be satisfied with the manner in which an Applicant proposes to deal with any conflict or approval as part of the award process.

## 7.21 CORRUPT OR FRAUDULENT PRACTICES

7.21.1 KMRCL requires that Bidders/ Contractors, under this contract, observe the highest standard of ethics during the procurement and executions of this contract. In pursuance of the policy/ KMRCL:

- (a) Defines, for the purpose of these provisions, the terms set forth below as follow:
  - (i) “Corrupt practice” means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution; and
  - (ii) “Fraudulent practices” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of KMRCL, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive KMRCL of the benefits of free and open competition.
- (b) will reject a proposal for award of work if he determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
- (c) will declare a Bidder in eligible, either indefinitely or for a stated period of time, to be awarded a contract/contracts if he at any time determines that the Bidder has engaged in corrupt or fraudulent practices in competing for, or in executing, the contract.

## 7.22 AMENDMENT OF PREQUALIFICATION DOCUMENT

7.22.1 At any time prior to the deadline for submission of applications, in exceptional case only, KMRCL may amend the Pre-qualification documents by issuing addenda.

7.22.2 Any addendum issued shall be part of the Pre-qualification Documents and shall be communicated in writing to all who have obtained the pre-qualification documents from KMRCL as well as in the web-site.

7.22.3 To give applicants reasonable time to take an addendum into account in preparing their applications, KMRCL may, at its discretion in exceptional case only extend the deadline for the submission of applications.

## 7.23 CHANGE IN COMPOSITION OF JOINT VENTURE/ GROUP/ CONSORTIUM

Any change in a pre – qualified Joint Venture / Group / Consortium, will be subject to the written approval of the Employer prior to the deadline for submission of the bids. The KMRCL at its discretion may deny such approval if:-

- (i) Remaining partners do not meet the qualifying requirements.
- (ii) The new partners to a joint venture are not qualified, individually or as another Joint Venture.

- (iii) In the opinion of Employer, a substantial reduction in competition may result.
- 7.24 All documents submitted by applicants shall be in the English Language. Submitted documents will not be returned.
- 7.25 An authorised representative shall have the authority to conduct all business and incur liabilities related thereto for and on behalf of the firm or group it represents, during the pre-qualification and bidding periods. In case of a JV an authorised representative shall sign the authorisation. Such necessary authorisations duly notarised shall be attached to the application.
- 7.26 Introduction of Deemed Export Benefit clause for International Competitive Bids.
- 7.26.1 Conditions as per Ministry of Finance in order to avail the benefits of this clause criteria requirement is as follows:
  - The overall project / specified work should have been funded by JICA and should be an International Competitive Bid.
- 7.26.2 The details about the deemed export benefits shall be indicated in the Main Tender document to be issued to the successful bidder.



KOLKATA METRO RAIL CORPORATION LTD  
HRBC Office Complex, (4<sup>th</sup> & 5<sup>th</sup> Floor)  
Munshi Premchand Sarani  
Kolkata – 700 021, India  
Phone : 22134344, Website: www.kmrc.in

**PRE-QUALIFICATION FOR THE DETAILED DESIGN, DETAIL ENGINEERING,  
MANUFACTURE, SUPPLY, DELIVERY AND STORAGE AT SITE, LAYING,  
INSTALLATION, TESTING AND COMMISSIONING, TRAINING OF PERSONNEL,  
DEMONSTRATION OF PERFORMANCE OF SYSTEM / EQUIPMENT OF  
PLATFORM SCREEN DOOR SYSTEM (PSD) OF UNDERGROUND STATIONS  
AND PLATFORM SCREEN GATE SYSTEM OF ELEVATED STATIONS OF  
KOLKATA METRO EAST-WEST LINE PROJECT  
(TENDER NO. 6 PQ-UG/EL - PSD)  
(Revision 0)**

**PRE-QUALIFICATION QUESTIONNAIRE**

**JULY 2011**

## PRE-QUALIFICATION QUESTIONNAIRE

This document contains pro-forma letters and the Pre-qualification Questionnaire. These are to be reproduced and completed as appropriate and submitted as part of the Applicant's pre-qualification submission.

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## CONTENTS OF EACH SECTION

SECTION NUMBER	CONTENTS OF EACH SECTION	REMARKS
1.	<u>Pro-Forma – General</u> Letter of Application	Pro-forma letters will be found on this part PQQ
	Completed Pre-qualification Questionnaire	The Pre-qualification Questionnaire is found on this part PQQ.
2.	<u>Pro-forma - Section 2</u> Memorandum and Articles of Association, or Partnership Deeds	A copy in English of the Memorandum and Articles of Association (or equivalent) for an incorporated applicant (or, in the case of a group, for each corporation forming a part of the applicant) / partnership Deeds.
	Documents relating to a Consortium / joint ventures, partnership or consortium. (a) Statement of participation from constituent members. (b) Details of previous collaborations. (c) Specimen Consortium / joint ventures, agreement and/or other (d) Details of proposed equity/other participation and areas of specialisation.	Applicant's attention is drawn to paragraph 7.8 of the Enquiry Document. A Pro-forma statement of participation to be completed by each member is on page 9 of the Questionnaire.
	Particulars of the authority which empowers the person or persons signing the letter of application, (and if appropriate, the statement of Participation from constituent members of groups) to represent the applicant.	KMRCL wishes to ensure that applications are submitted under the signature(s) of persons who properly represent the applicant. Accordingly, copies of such documents as powers of attorney, signed minutes of board meetings confirming board resolutions, current published lists of executive directors, etc should be submitted.
3.	<u>Pro-forma - Section 3</u> Documents relating to performance, current contracts, relevant experience.	The applicant shall submit details in support of statements (Clients certificate) in the Questionnaire or annexes thereto, which relate to performance, current contracts, relevant experience and Provenness of Service. .
4.	<u>Pro-forma - Section 4</u> Documents relating to Staff.	The applicant shall submit details in support of statements in the Questionnaire or annexes thereto which relate to its management organisation (existing or, in the case of new groups proposed), and of staff/principal or key members of staff as provided in the Questionnaire.

SECTION NUMBER	CONTENTS OF EACH SECTION	REMARKS
5.	<p><u>Pro-forma - Section 5</u> Documents relating to ownership and control of an applicant (or, in the case of a group, each constituent member)</p>	<p>Details shall be submitted giving full details of the ownership and control of the applicant (or, in the case of a group, each constituent member).</p>
	<p>Documents relating to the financial condition of an applicant (or, in the case of a group, each constituent member)</p>	<p>The following documents should be submitted in respect of each constituent, whether applying individually or as part of a group:</p> <ol style="list-style-type: none"> <li>1. Audited accounts for each of the last five full accounting periods together with their Auditor's Certificate. Such accounts shall include the Profit and Loss statement and the Balance Sheet. The Applicant also shall indicate the year wise Net Worth of each member for the previous five years from 2009-10.</li> <li>2. A financial statement covering the period between the end of the last full accounting period 2009-10. This statement should indicate all significant financial matters subsequent to the end of the last full accounting period. Additionally, the financial statement should indicate any significant off balance sheet liabilities, including contingent liabilities. The financial statement should be signed by the Managing Director or Company Secretary of the respective company.</li> </ol>
	<p>Document relating to the holding or parent company of an applicant (or, in the case of group, each constituent member).</p>	<p>If an applicant (or member of a group) is wholly or significantly owned by a holding or parent companies, the information relating to audited accounts and financial statement (as describe above) shall be provided for such intermediate or ultimate holding or parent companies. This information shall be provided in respect of all applicants, whether applying individually or as group together with Auditor's certification.</p>
	<p>Document including banking reference to demonstrate that the applicant has the liquidity to meet the requisite cash flow, after meeting requirements for known commitment</p>	<p>In respect of all applicants (whether applying individually or as part of a group) and all holding or parent companies thereof, a bankers reference (in English) should be provided from the applicant's or company's principal bank in its country of incorporation or registration. Such reference should indicate the financial standing of the applicant and access to lines of</p>

SECTION NUMBER	CONTENTS OF EACH SECTION	REMARKS
		credit of other financial resources
6.	Proforma Section 6 Documents relating to Project team.	The applicant shall submit details in support of statements in the Questionnaire or Annexes thereto, which relate to the design team.
	Documents relating to equipment capability.	The applicant shall submit details in support of statements in the Questionnaire or Annexes thereto, which relate to the equipment capability.

**PRO-FORMA LETTER OF APPLICATION (on Firm's Letter Head)**

(Applicant to provide date and reference)

Note: Spaces marked \* on this pro-forma letter and on subsequent forms are to be completed by the employer.

The Managing Director,  
 Kolkata Metro Rail Corporation Ltd  
 HRBC Office Complex (4<sup>th</sup> & 5<sup>th</sup> Floor)  
 Munshi Prem Chand Sarani  
 Kolkata – 700 021  
 India

Ladies and/ or Gentleman,

1. Being duly authorized to represent and act on behalf of..... (hereinafter referred to as to” the Applicant” ) and having reviewed and fully understood all of the prequalification information provided, the undersigned hereby apply to be prequalified by yourselves as a bidder for the following contract<s> under the.....\*[name of the Project] project

Contract number*	Contract name*
KMRCL EWL UG/EL – PSD	DETAILED DESIGN, DETAILED ENGINEERING, MANUFACTURE, SUPPLY, DELIVERY AND STORAGE AT SITE, LAYING, INSTALLATION, TESTING AND COMMISSIONING, TRAINING OF PERSONNEL, DEMONSTRATION OF PERFORMANCE OF SYSTEM / EQUIPMENT OF PLATFORM SCREEN DOORS (PSD) OF UNDERGROUND & SEMI-OUTDOOR PLATFORM SCREEN DOORS FOR ELEVATED SYSTEM (PSG) AND MAINTENANCE OF KOLKATA METRO EAST-WEST LINE PROJECT

<Note The Applicant is to delete, in ink, any contract for which it does not wish to prequalify, and sign and date the deletion.>\*

-----  
 \* if the prequalification refers to only one contract, delete this note and spaces for additional contract references.

2. Attached to this letter are copies of original documents defining <sup>26</sup>:
  - (a) The applicant’s legal status
  - (b) The principal place of business; and
  - (c) The place of incorporation ( for applicants who are corporations.) or the place of registration and the nationality of the owners ( for applicants who are partnerships or individually-owned firms)
3. Your Agency and its authorized representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents, and information submitted in connection with this application, and to seek clarification from our bankers and clients regarding any financial and technical aspects. This Letter of Application will also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information, to provide such information deemed necessary and as requested by yourselves to verify statements and information provided in this application such as the resources, and competence of the Applicant.

4. Your Agency and its authorized representatives may contact the following persons for further information<sup>27</sup>:

NOTES

- 26 For applications by Consortium / joint ventures, all the information requested in the prequalification documents is to be provided for the Consortium / joint venture, if it already exists, and for each party to the Consortium / joint venture separately. The lead partner should be clearly identified. Each partner in the Consortium / joint venture shall sign the letter.
- 27 Applications by Consortium / joint ventures should provide on separate sheet equivalent information for each party to the application.

General and managerial inquiries	
Contact 1	Telephone 1
Contact 2	Telephone 2

Personnel inquiries	
Contact 1	Telephone 1
Contact 2	Telephone 2

Technical inquiries	
Contact 1	Telephone 1
Contact 2	Telephone 2

Financial inquires	
Contact 1	Telephone 1
Contact 2	Telephone 2

5. This application is made with the full understanding that:
- (a) Bids by prequalified applicants will be subject to verification of all information submitted for prequalification at the time of bidding:
  - (b) Your Agency reserves the right to:
    - Amend the scope and value of any contracts bid under this project, in such event, bids will only be called from prequalified bidders who meet the revised requirements, and
    - Reject or accept any application, cancel the prequalification process, and reject all applications
  - (c) Your Agency shall not be liable for any such actions and shall be under no obligation to inform the applicant of the grounds for them.

Applicants who are not Consortium / joint ventures should delete paragraphs 6 and 7 and initial the deletions
---

6. Appended to this application, we give details of the participation of each party, including capital contribution and profit / loss agreements, in the Consortium / joint ventures or association. We also specify the financial commitment in terms of the percentage of the value of the <each> contract, and the responsibilities for execution of the <each> contract.
  
7. We confirm that if we bid, that bid, as well As any resulting contract, will be:
  - (a) Signed so as to legally bind all partners, jointly and severally; and
  - (b) Submitted with a Consortium / joint ventures agreement providing the joint and several liabilities of all partners in the event the contract is awarded to us.
  
8. The undersigned declare that the statements made and the information provided in the duly completed application are complete, true, and correct in every detail.

Signed Name	Signed Name
For and on behalf of (name of Applicant or lead partner of a Consortium / joint ventures)	For and on behalf of (name of partner)

Signed Name	Signed Name
For and on behalf of (name of partner)	For and on behalf of (name of partner)
Signed Name	Signed Name
For and on behalf of (name of partner)	For and on behalf of (name of partner)

## Joint Venture/ Consortium Summary

*Total value of annual construction (and/or equipment, goods or services which apply to this contract) turnover, in terms of work billed to clients, in US\$ equivalent, converted at the rate of exchange at the end of the period reported:*

<i>Names of all partners of a joint venture/Consortium</i>
1. Lead partner
2. Partner
3. Partner
4. Partner
5. Partner
6. Partner

**Total value of annual construction (and/or equipment, goods or services which apply to this contract) turnover, in terms of work billed to the clients, in US \$ equivalent, converted at the rate of exchange at the end of the period reported:**

<i>Annual turnover data ( Construction only: US\$ equivalent)</i>						
Partner	Form 2 page no.	Year 1	Year 2	Year 3	Year 4	Year 5
1. Lead partner						
2. Partner						
3. Partner						
4. Partner						
5. Partner						
6. Partner						
<b>Total</b>						

## Joint Venture/Consortium Agreement

To: The Managing Director,  
Kolkata Metro Rail Corporation  
4<sup>th</sup> & 5<sup>th</sup> Floor, HRBC Bhaban,  
Munshi Prem Chand Sarani  
KOLKATA 700021, INDIA

The undersigned of this declaration of cooperation are by means of attached Powers of Attorney legally authorized to act with regard to \_\_\_\_\_ [name of the Project] and on behalf of their organizations.

They hereby declare:

1. that they will legalize a Consortium / joint ventures Agreement in case that a Contract for the \_\_\_\_\_ [name of the Project] is awarded to their group;
2. that they have nominated \_\_\_\_\_ [name of the lead partner] as the Sponsor Firm of the group for the purpose of this Bid;
3. That they authorized Mr. /Ms. \_\_\_\_\_ [name of the person who is authorized to act as the Representative on behalf of the Consortium / joint ventures] to act as the Bidder's Representative in the name and on behalf of their group.
4. that all partners of the Consortium / joint ventures shall be liable jointly and severally for the execution of the Contract;
5. that this Consortium / joint ventures is an association constituted for the purpose of the execution of the \_\_\_\_\_ [name of the Project] under this Contract;
6. that if the Employer accepts the Bid of this Consortium / joint ventures, it shall not be modified in its composition or constitution until the completion of Contract without the prior consent of the Employer;
7. that each partner's share of the Work, stated as percentage of the total contract amount, shall be as follows:

Name of Partner	(Name the field of work)	Percentage Participation
1. Lead Partner		
2. Partner		
3. Partner		
4. Partner		
<b>Total</b>		<b>100</b>

Give names and positions of the proposed Consortium / joint ventures Representatives, as well as organization's names and addresses:

1.	Name:	Signature:
	Position:	Date:
	Representative of: (Organization's Name)	

2.	Name:	Signature:
	Position:	Date:
	Representative of: (Organization's Name)	

3.	Name:	Signature:
	Position:	Date:
	Representative of: (Organization's Name)	

4.	Name:	Signature:
	Position:	Date:
	Representative of: (Organization's Name)	

5.	Name:	Signature:
	Position:	Date:
	Representative of: (Organization's Name)	

### PRE-QUALIFICATION QUESTIONNAIRE

- Notes:**
- Each page of the Questionnaire and contents of Sections shall be signed by the Applicant.
  - This entire Questionnaire pro-forma shall be completed in all respect.
  - Questionnaire pro-forma relating to the various sections shall be incorporated in the respective sections. (i.e. Pro-forma section 2 (replies to questions 9 to 14) will be included in the contents of section 2.)
  - In the box 

Y	N
---	---

 'Y' denotes Yes and 'N' denote No. Please tick mark Whichever is applicable or write Yes or No explicitly, as the case may be.
  - The PQ Document submitted shall be numbered sequentially and the page number of each answer should be noted against the respective item below.

#### PRO-FORMA SECTION 1- GENERAL (By Each Applicant)

1.	Name of contract for which pre-qualification is sought:  <b>UG/EL - PSD (Provide Details for Full Height Platform Screen Doors and Half Height semi-outdoor Platform Screen Doors System In Separate Sheets)</b>																
2.	Type of Contract: Platform Screen Doors (PSD) & semi-outdoor Platform Screen Doors (PSG) System <u>Platform Screen Doors System for U/G Stations</u> <table style="float: right; margin-left: 20px;"> <tr><td style="border: 1px solid black; width: 20px; text-align: center;">Y</td><td style="border: 1px solid black; width: 20px; text-align: center;">N</td></tr> <tr><td style="border: 1px solid black; width: 20px; text-align: center;">Y</td><td style="border: 1px solid black; width: 20px; text-align: center;">N</td></tr> <tr><td style="border: 1px solid black; width: 20px; text-align: center;">Y</td><td style="border: 1px solid black; width: 20px; text-align: center;">N</td></tr> <tr><td style="border: 1px solid black; width: 20px; text-align: center;">Y</td><td style="border: 1px solid black; width: 20px; text-align: center;">N</td></tr> </table> <ol style="list-style-type: none"> <li>1. Design of Platform Screen Door System</li> <li>2. Supply and installation of equipments</li> <li>3. Testing and performance of the equipment and system</li> <li>4. Comprehensive Maintenance of the equipment &amp; system beyond defects liability period</li> </ol> <u>semi-outdoor Platform Screen Doors System for Elevated Stations</u> <table style="float: right; margin-left: 20px;"> <tr><td style="border: 1px solid black; width: 20px; text-align: center;">Y</td><td style="border: 1px solid black; width: 20px; text-align: center;">N</td></tr> <tr><td style="border: 1px solid black; width: 20px; text-align: center;">Y</td><td style="border: 1px solid black; width: 20px; text-align: center;">N</td></tr> <tr><td style="border: 1px solid black; width: 20px; text-align: center;">Y</td><td style="border: 1px solid black; width: 20px; text-align: center;">N</td></tr> <tr><td style="border: 1px solid black; width: 20px; text-align: center;">Y</td><td style="border: 1px solid black; width: 20px; text-align: center;">N</td></tr> </table> <ol style="list-style-type: none"> <li>1. Design of semi-outdoor type Platform Screen Doors System</li> <li>2. Supply and installation of equipments</li> <li>3. Testing and performance of the equipment and system</li> <li>4. Comprehensive Maintenance of the equipment &amp; system beyond defects liability period</li> </ol> Please ✓ whichever is applicable	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
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3.	State the structure of the applicant's organisation (applicants to complete/delete as appropriate) Individual company or firm Consortium / joint ventures Partnership Consortium Other (please specify) .....																
4.	For applicants who are individual companies or firms, state the following: Name of Company or firm: ..... Legal status: (e.g. incorporated private company, unincorporated business, etc.) ..... Registered address: ..... Principal place of business: ..... Country of incorporation or domicile: ..... Contact person: ..... Contact person's title: ..... Address, telephone and facsimile number of contact person: ..... ..... .....																

5.	<p>For applicants who are in Consortium / joint ventures, partnership, consortium or other association. State the following:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%; border: none;">Names of members (lead member first):</td> <td style="width: 20%; border: none;">Legal status:</td> <td style="width: 25%; border: none;">Registered address and principal place of business:</td> <td style="width: 25%; border: none;">Country of Incorporation or Domicile.</td> </tr> <tr> <td style="border: none;">(1) .....</td> <td style="border: none;">.....</td> <td style="border: none;">.....</td> <td style="border: none;">.....</td> </tr> <tr> <td style="border: none;">(2) .....</td> <td style="border: none;">.....</td> <td style="border: none;">.....</td> <td style="border: none;">.....</td> </tr> <tr> <td style="border: none;">(3) .....</td> <td style="border: none;">.....</td> <td style="border: none;">.....</td> <td style="border: none;">.....</td> </tr> <tr> <td colspan="4" style="border: none;">(etc)</td> </tr> <tr> <td colspan="4" style="border: none;">Contact person (from lead member)</td> </tr> <tr> <td colspan="4" style="border: none;">.....</td> </tr> <tr> <td colspan="4" style="border: none;">Contact person's title: .....</td> </tr> <tr> <td colspan="4" style="border: none;">Address, telephone, and facsimile number of contact person:</td> </tr> <tr> <td colspan="4" style="border: none;">.....</td> </tr> </table>	Names of members (lead member first):	Legal status:	Registered address and principal place of business:	Country of Incorporation or Domicile.	(1) .....	.....	.....	.....	(2) .....	.....	.....	.....	(3) .....	.....	.....	.....	(etc)				Contact person (from lead member)				.....				Contact person's title: .....				Address, telephone, and facsimile number of contact person:				.....			
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5a.	<p>In case of mergers / acquisition within the past 5 Years, state the following:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 45%; border: none; vertical-align: top;">Name of the Applicant (Each member in case of group)</td> <td style="width: 5%; border: none; text-align: center;">  </td> <td style="width: 50%; border: none; vertical-align: top;">Name of the companies merged with or acquired by the applicant (Member in case of group) and the dates of merger / acquisition</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;"> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%; text-align: center; border: none;"><b>Name</b></td> <td style="width: 40%; text-align: center; border: none;"><b>Date of Merger</b></td> </tr> <tr> <td style="border: none; text-align: center;">•</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none; text-align: center;">•</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none; text-align: center;">•</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none; text-align: center;">•</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none; text-align: center;">•</td> <td style="border: none;"></td> </tr> </table> </td> </tr> </table>	Name of the Applicant (Each member in case of group)		Name of the companies merged with or acquired by the applicant (Member in case of group) and the dates of merger / acquisition			<table style="width: 100%; border: none;"> <tr> <td style="width: 60%; text-align: center; border: none;"><b>Name</b></td> <td style="width: 40%; text-align: center; border: none;"><b>Date of Merger</b></td> </tr> <tr> <td style="border: none; text-align: center;">•</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none; text-align: center;">•</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none; text-align: center;">•</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none; text-align: center;">•</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none; text-align: center;">•</td> <td style="border: none;"></td> </tr> </table>	<b>Name</b>	<b>Date of Merger</b>	•		•		•		•		•																							
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6.	<p>For the applicant, (in case of group, for each constituent member), state the following information:</p> <ul style="list-style-type: none"> <li>• Date of incorporation of organisation.</li> <li>• Names and Titles of Directors or partners.</li> <li>• Has the company or firm ever failed to complete any work awarded to it in last 10 years? If Yes furnish details</li> </ul> <div style="text-align: right; margin-top: 10px;"> <table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> </table> </div>	Y	N																																						
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Y	N			
	<p>If yes give explanations.</p>			
	<ul style="list-style-type: none"> <li>• Is the firm or company involved or financially interested in any other Business not directly associated with the area of work for which pre-qualification is sought? If yes, give details.</li> </ul>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
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	<ul style="list-style-type: none"> <li>• Does the company or firm have an office or branch office in India? If so, provide address (es)</li> </ul>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
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	<ul style="list-style-type: none"> <li>• (Applicants are to present this information on sheets which are to be clearly referenced as being in response to this Question 6.)</li> </ul>			
7.	<p>Does your company (in case of a group, each constituent member) combine the functions of a designer with those of manufacturer? Please elaborate.</p> <p>.....</p>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
Y	N			
8.	<p>In case of International applicants,</p> <ul style="list-style-type: none"> <li>(i) Is there willingness to associate an Indian Partner</li> </ul>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
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	<ul style="list-style-type: none"> <li>(ii) Has an association been formed with an Indian partner for the Indigenous manufacture of some items and the assembly.</li> </ul>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
Y	N			
	<ul style="list-style-type: none"> <li>• If Yes, provide list of disciplines / products.</li> </ul> <p>.....</p> <p>.....</p> <p>.....</p>			
	<ul style="list-style-type: none"> <li>• Details on Association with Indian Partner for indigenous manufacture should include:                             <ul style="list-style-type: none"> <li>• (a) Details of Indian Partner, if any</li> <li>• (b) Memorandum of undertaking, if any</li> <li>• (c) Data to support capacity of the Indian Partner to indigenously manufacture the items and the assembly.</li> </ul> </li> </ul>			
	<ul style="list-style-type: none"> <li>• If not, give reasons.</li> </ul> <p>.....</p> <p>.....</p> <p>.....</p>			

**PRO-FORMA SECTION 2**

<p>9.</p>	<p>Does Section 2 contain Power of Attorney which empowers the person or persons to sign and submit the letter of application on behalf of the applicant and, if applicable, the statements of participation on behalf of all Constituent members of the group?</p> <p>If not, give reasons.                  .....</p>	<table border="1"> <tr> <td>Y</td> <td>N</td> </tr> </table>	Y	N		
Y	N					
<p>10.</p>	<p>In the case of an incorporated applicant (or constituent members who are incorporated) does Section 2 contain copies, in English, of the Memorandum and Articles of Association or equivalent expression of corporate capacity?</p> <p>If not, give reasons.                  .....</p>	<table border="1"> <tr> <td>Y</td> <td>N</td> </tr> </table>	Y	N		
Y	N					
<p>11.</p>	<p>In the case of applications from groups, does Section 2 contain statements of participation in the form appearing in the Pre-qualification Brochure for each member?</p> <ul style="list-style-type: none"> <li>• In the case of groups have you enclosed a MOU signed by each member that they will be jointly and severally responsible for the entire work?</li> </ul> <p>If not, give reasons.                  .....</p>	<table border="1"> <tr> <td>Y</td> <td>N</td> </tr> </table> <table border="1"> <tr> <td>Y</td> <td>N</td> </tr> </table>	Y	N	Y	N
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<p>12.</p>	<p>Have there been previous collaborations between constituent members?</p> <ul style="list-style-type: none"> <li>• If yes, give details.                  .....</li> </ul>	<table border="1"> <tr> <td>Y</td> <td>N</td> </tr> </table>	Y	N		
Y	N					
<p>13.</p>	<p>In the case of applications from groups, does Section 2 contain copies of the MOU, group agreements or other documents establishing or intending to establish the formation of such a group?</p> <p>If not, give reasons.                  .....</p>	<table border="1"> <tr> <td>Y</td> <td>N</td> </tr> </table>	Y	N		
Y	N					

14.	<p>In the case of applications from groups, does Section 2 contain details of:</p> <ul style="list-style-type: none"> <li>• Proposed equity participation by each constituent member for the proposed work? <span style="float: right; border: 1px solid black; padding: 2px 5px;">Y   N</span></li>   <li>• Areas of specialisation/responsibility of each member for the proposed work? <span style="float: right; border: 1px solid black; padding: 2px 5px;">Y   N</span></li>   <li>• Extent of participation (including deployment of major plant items and key personnel) by each member for the proposed work? <span style="float: right; border: 1px solid black; padding: 2px 5px;">Y   N</span></li>   <li>• Have you provided detailed information of the sub-systems of Platform Screen Doors &amp; semi-outdoor type Platform Screen Doors to be designed and or supplied by each member / Sub-contractor where applicable? <span style="float: right; border: 1px solid black; padding: 2px 5px;">Y   N</span></li>   <li>• Have you provided details as to who will co-ordinate the transfer of technology for design, indigenous system assembly, installation, maintenance, software customisation/modifications of systems and how this to be achieved? <span style="float: right; border: 1px solid black; padding: 2px 5px;">Y   N</span></li> </ul> <p>If the answer to any question is no, please give reasons.</p> <p>.....</p> <p>.....</p>
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**PRO-FORMA SECTION 3**

15.	<p>State the number of years the applicant (or each constituent member) has been in business under the business name appearing in the answer to question 4 or 5 above.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%; text-align: left; border-bottom: 1px solid black;">Name</th> <th style="width: 40%; text-align: left; border-bottom: 1px solid black;">No. of years</th> </tr> </thead> <tbody> <tr> <td>(1) .....</td> <td>.....</td> </tr> <tr> <td>(2) .....</td> <td>.....</td> </tr> <tr> <td>(3) .....</td> <td>.....</td> </tr> <tr> <td>etc.</td> <td></td> </tr> </tbody> </table>	Name	No. of years	(1) .....	.....	(2) .....	.....	(3) .....	.....	etc.							
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16.	<p>State the number of years the applicant (or each constituent member) has been undertaking work similar in scope and nature to the works for which pre-qualification is sought.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%; text-align: left; border-bottom: 1px solid black;">Name</th> <th style="width: 40%; text-align: left; border-bottom: 1px solid black;">No. of years</th> </tr> </thead> <tbody> <tr> <td>(1) .....</td> <td>.....</td> </tr> <tr> <td>(2) .....</td> <td>.....</td> </tr> <tr> <td>(3) .....</td> <td>.....</td> </tr> <tr> <td>etc.</td> <td></td> </tr> </tbody> </table>	Name	No. of years	(1) .....	.....	(2) .....	.....	(3) .....	.....	etc.							
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<b>17a</b>	<p>Performance Record. Applicants should scrutinise the contract description contained in this Pre-qualification Brochure and compile a list showing their previous experience of similar contracts completed during the last ten years. The applicant must demonstrate experience in all areas covered by this Contract including detailed design, system assembly, installing, testing and commissioning of systems of sizes and technology comparable to those contemplated under this contract and also show capability of full integration of sub-systems with Platform Screen Doors and semi-outdoor type Platform Screen Doors and other project elements. Further information and literature associated with system performance and reliability on previous contracts and relevant experience of the applicant and each constituent member shall be clearly referenced and enclosed in Section 3. In case of acquisitions / mergers, similar information should be supplied by the acquired / merged companies of the Applicant (or any constituent member in case of Group) in respect of works awarded to such acquired / merged companies prior to their acquisition / merger in the last 5 years. All the material should be clearly referenced as being in response to this Question 17a.</p> <ul style="list-style-type: none"> <li style="margin-bottom: 10px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; padding-left: 20px;"> <ul style="list-style-type: none"> <li>• Do you (and each constituent member of the group) authorise KMRCL to make enquiries with any of the Clients listed by the Applicant?</li> </ul> </td> <td style="width: 20%; text-align: right; vertical-align: middle;"> <table border="1" style="border-collapse: collapse; width: 40px; height: 20px;"> <tr> <td style="text-align: center; width: 15px;">Y</td> <td style="text-align: center; width: 15px;">N</td> </tr> </table> </td> </tr> </table> </li> <li style="margin-bottom: 10px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; padding-left: 20px;"> <ul style="list-style-type: none"> <li>• Have you (and each constituent member of the group) provided details required in Annexure 1 and 1A for similar Contracts undertaken in the last ten years? 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<ul style="list-style-type: none"> <li>• Have you carried out Comprehensive Maintenance / Maintenance without Spares of equipments beyond DLP? If the answer is No, give explanations. (Use a separate sheets for each Contract and include in the Questionnaire)</li> </ul>	<table border="1" style="border-collapse: collapse; width: 40px; height: 20px;"> <tr> <td style="text-align: center; width: 15px;">Y</td> <td style="text-align: center; width: 15px;">N</td> </tr> </table>	Y	N														
Y	N																

	<ul style="list-style-type: none"> <li>Have details required in Annex. 1 and Annex. 1A been given in respect of sub-contractors for the last 10 years? If the answer is No, give explanations. (Use a separate sheet for each Contract and include in the Questionnaire)</li> </ul> <div style="text-align: right; border: 1px solid black; width: 60px; float: right; margin-left: 10px;"> <table border="1" style="border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table> </div>	Y	N																										
Y	N																												
17b.	<p>Work in Hand. Applicant or each constituent member should indicate, in the form below, Details for each similar contract / commitment which is not yet completed or for which letter of intent or acceptance has been received.</p> <p>(Applicants are to present this information in the format shown below but on sheets which are to be included in the Questionnaire).</p> <p>Have you (and each constituent member of the group) provided details required in Annexure 2 and 2A?</p> <div style="text-align: right; border: 1px solid black; width: 60px; float: right; margin-left: 10px;"> <table border="1" style="border-collapse: collapse;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table> </div> <p>(Use a separate sheet for each Contract and include in the Questionnaire)</p> <hr/>	Y	N																										
Y	N																												
17c.	<p>Annual financial turnover of the applicant / members in case of group, Year-wise Ending 31.03.2010 for the last 5 years.</p> <p>Annual financial Turnover for foreign currency in US \$ and Rs. for Indian currency (in terms of rupee equivalent adjusted to 31.03.10 by assuming 5% escalation for Indian Rupee and 2% for foreign currency per year) pertaining to the Company.</p> <p>Turnover of each member of the Consortium will be considered. This particular Annexure shall be extracted from Annual Report and certified by the Chartered Accountants.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th colspan="4" style="text-align: left; padding: 5px;">Name of the applicant (Members in case of group)</th> </tr> <tr> <th style="width: 25%; padding: 5px;">Year</th> <th style="width: 25%; padding: 5px;">Foreign Currency ( )</th> <th style="width: 25%; padding: 5px;">INR</th> <th style="width: 25%; padding: 5px;">Foreign Currency + INR (Escalated cost)</th> </tr> </thead> <tbody> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> <tr> <td style="padding: 5px;"><b>Total (Including Escalation)</b></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Name of the applicant (Members in case of group)				Year	Foreign Currency ( )	INR	Foreign Currency + INR (Escalated cost)																	<b>Total (Including Escalation)</b>			
Name of the applicant (Members in case of group)																													
Year	Foreign Currency ( )	INR	Foreign Currency + INR (Escalated cost)																										
<b>Total (Including Escalation)</b>																													

17d.	Has the applicant executed
	<p>(a) Supply and Installation of Platform Screen Gates works completed for U/G METRO stations and are <b>in use</b> in the last 10 years. <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>(b) Supply and Installation of semi-outdoor type Platform Screen Doors works completed for Elevated METRO stations and are <b>in use</b> in the last 10 years. <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>(c) Supply and Installation of Platform Screen Gate / Platform Screen Door Driving Mechanism <b>in use</b> over the last 3 years in any Metro System <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>(d) Performance of the Platform Screen Doors and Semi-outdoor type Platform Screen Gates equipment and system in terms of reliability in % while in service in METRO stations in last 10 years <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>(e) Comprehensive Maintenance / Maintenance without spares after Defects Liability Period in Platform Screen Doors / Semi outdoor type Platform Screen Gates. <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>(f) Have accreditation by internationally recognized Bodies for Design and Manufacture of Semi-outdoor type Half Height Platform Screen Gates / Platform Screen Door System Works as detailed in Scope of Work <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>(g) Associated or willing to associate with an Indian partner(s) in the indigenous manufacture of PSGs/PSDs given in the document <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>If yes, give details (in case of a group, this information is to be given for each member.)</p> <p>Give reference of the work as submitted in Annexure 1 in reply to Question 17(a) and shall also give the reference of submitted project-wise all details such as supported completion certificate from the client c/w supply and commissioning dates, Station details, DLP period etc.</p>

## ANNEXURE 1

**(Use separate sheets for Platform Screen Doors & semi-outdoor type Platform Screen Doors s (PSD) System - Attach separate sheets to give details of Supply, Installation, Commissioning, In Use and Reliability in % of all types of Installations Claimed)**

Name of the Applicant / Member:

Project Title:	Location:		
Scope:	Address:		
Client::			
Client's Representative:	Tel.:		
Type of Contract: <b>Semi-outdoor type Platform Screen Gates Platform Screen Doors &amp; System</b>			
1. Supply and Installation of Platform Screen Doors works completed for U/G METRO stations and are <b>in use</b> in the last 10 years.	<table border="1" style="display: inline-table;"><tr><td style="width: 20px; height: 20px; text-align: center;">Y</td><td style="width: 20px; height: 20px; text-align: center;">N</td></tr></table>	Y	N
Y	N		
2. Supply and Installation semi-outdoor type Platform Screen Gates works completed for Elevated METRO stations and are <b>in use</b> in the last 10 years	<table border="1" style="display: inline-table;"><tr><td style="width: 20px; height: 20px; text-align: center;">Y</td><td style="width: 20px; height: 20px; text-align: center;">N</td></tr></table>	Y	N
Y	N		
3. Supply and Installation of Platform Screen Gate / Platform Screen Door Driving Mechanism <b>in use</b> over the last 3 years in any Metro System	<table border="1" style="display: inline-table;"><tr><td style="width: 20px; height: 20px; text-align: center;">Y</td><td style="width: 20px; height: 20px; text-align: center;">N</td></tr></table>	Y	N
Y	N		
4. Performance of the Platform Screen Doors and semi-outdoor type Platform Screen Gates equipment and system in terms of reliability in % while in service in METRO stations in last 10 years	<table border="1" style="display: inline-table;"><tr><td style="width: 20px; height: 20px; text-align: center;">Y</td><td style="width: 20px; height: 20px; text-align: center;">N</td></tr></table>	Y	N
Y	N		
5. Maintenance Experience beyond defects liability period Comprehensive Maintenance / Maintenance without spares in Platform Screen Doors / semi-outdoor type Platform Screen Gates	<table border="1" style="display: inline-table;"><tr><td style="width: 20px; height: 20px; text-align: center;">Y</td><td style="width: 20px; height: 20px; text-align: center;">N</td></tr></table>	Y	N
Y	N		
6. Have accreditation by internationally recognized Bodies for Design and Manufacture of Semi-outdoor type Half Height Platform Screen Gates / Platform Screen Door System Works as detailed in Scope of Work	<table border="1" style="display: inline-table;"><tr><td style="width: 20px; height: 20px; text-align: center;">Y</td><td style="width: 20px; height: 20px; text-align: center;">N</td></tr></table>	Y	N
Y	N		
7. Associated or willing to associate with an Indian partner(s) in the indigenous manufacture of PSGs/PSDs given in the document	<table border="1" style="display: inline-table;"><tr><td style="width: 20px; height: 20px; text-align: center;">Y</td><td style="width: 20px; height: 20px; text-align: center;">N</td></tr></table>	Y	N
Y	N		
Please ✓ whichever is applicable			
Was an Indian Government standard form of contract used?	<table border="1" style="display: inline-table;"><tr><td style="width: 20px; height: 20px; text-align: center;">Y</td><td style="width: 20px; height: 20px; text-align: center;">N</td></tr></table>	Y	N
Y	N		
If Yes, ✓ give details:			
Was an international standard form of contract used?	<table border="1" style="display: inline-table;"><tr><td style="width: 20px; height: 20px; text-align: center;">Y</td><td style="width: 20px; height: 20px; text-align: center;">N</td></tr></table>	Y	N
Y	N		
If Yes give details:			

Was the work carried alone or as a member of the group?	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
Y	N		
If a group, indicate percentage participation and area/s of participation.	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
Y	N		
Date, work commenced	Date, work was completed		
Was the date of completion given in the original contract extended? <b>If so, how much and why?</b>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
Y	N		
Were any penalties imposed For delay?	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
Y	N		
If yes, give details.	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
Y	N		
Were any penalties imposed for reasons other than delay? If yes, give details	Did the applicant go in for Arbitration?		
If yes, give details	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
Y	N		
If yes, give details	If yes, give details. Each constituent member should indicate in the Form in Annexure-1B.		
If yes, give details	Did the applicant go in for Litigation? If yes, give details. Each constituent member should indicate in the Form in Annexure-1B.		
If yes, give details	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
Y	N		
Contract Value as on 31.03.10 prices in Rupee equivalent, assuming 5% inflation for Indian Rupees and 2% for foreign currency portion every year. Only the value of contract as executed by the applicant / member in his own name should be indicated. Where a work is undertaken by a Group, only that portion of the Contract which is undertaken by the concerned applicant / member should be included and the remaining done by the other members of the Group excluded.			
Details of work undertaken:			
Were Quality Assurance obligations required in the contract?	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
Y	N		
If yes, whether they were fulfilled?	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
Y	N		
Were specified performance requirements of the systems achieved? If yes, please give details of reliability in terms of availability of the systems achieved during warranty period or three years from the date of commissioning whichever is later. If No, give reasons -----	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
Y	N		
Has the applicant (or any member of a group) been blacklisted by a client? If Yes, Why?	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">Y</td> <td style="width: 20px; height: 20px; text-align: center;">N</td> </tr> </table>	Y	N
Y	N		

Was there any complaint received from the client relating to the performance of the Systems? If yes, give details.	<table border="1"><tr><td>Y</td><td>N</td></tr></table>	Y	N
Y	N		
Was the warranty clause invoked by the client? If yes, give details.	<table border="1"><tr><td>Y</td><td>N</td></tr></table>	Y	N
Y	N		
Did the arrangements/facilities exist to rectify defects during warranty period? If yes, give details including the location of facilities.	<table border="1"><tr><td>Y</td><td>N</td></tr></table>	Y	N
Y	N		
Was technology transfer a part of the contract? If Yes, what was the time frame?	<table border="1"><tr><td>Y</td><td>N</td></tr></table>	Y	N
Y	N		
Was the technology transfer achieved within the time frame as contracted? If No, give reasons thereof.	<table border="1"><tr><td>Y</td><td>N</td></tr></table>	Y	N
Y	N		
Project Description including transfer of technology for design indigenous system assembly, installation, maintenance and software customisation/ modification details. Briefly indicate plan of action in the direction of progressive transfer to India.	<table border="1"><tr><td>Y</td><td>N</td></tr></table>	Y	N
Y	N		

**ANNEXURE 1A  
SUMMARY OF INFORMATION PROVIDED IN ANNEXURE-1**

Name of applicant (each member in case of group)	Total number of contracts completed in last 10 years	Number of system designed of each type: <b>(a) Supply and Installation of Platform Screen Doors works completed for U/G METRO stations and are <u>in use</u> in the last 10 years.</b> <b>(b) Supply and Installation of semi-outdoor type Platform Screen Gates works completed for Elevated METRO stations and are <u>in use</u> in the last 10 years.</b> <b>(c) Supply and Installation of Platform Screen Gate / Platform Screen Door Driving Mechanism <u>in use</u> over the last 3 years in any Metro System</b> <b>(d) Performance of the Platform Screen Doors and semi-outdoor type Platform Screen Gates equipment and system in terms of reliability in % while in service in METRO stations in last 10 years</b> <b>(e) Maintenance Experience beyond defects liability period Comprehensive Maintenance / Maintenance without spares in Platform Screen Doors / semi-outdoor type Platform Screen Gates.</b> <b>(f) Have accreditation by internationally recognized Bodies for Design and Manufacture of Semi-outdoor type Half Height Platform Screen Gates / Platform Screen Door System Works as detailed in Scope of Work</b> <b>(g) Associated or willing to associate with an Indian partner(s) in the indigenous manufacture of PSGs/PSDs given in the document</b>	Number of contracts for which Contractor went for Litigation / Arbitration* (Further details in Annexure – 1B)		Number of Contracts delayed i.e., complete beyond the original date of completion	Total value of contracts in 10 years (in rupees) prices as on 31.3.10 assuming 5% inflation for the Indian rupee portion and 2% escalation on foreign currency portion.
			Litigation	Arbitration		
<p><b>* Note: Applicant or each constituent member should indicate, in the form in Annexure – 1B, details for each contracts for which they went for Litigation / Arbitration. Separate sheet for each case be submitted.</b></p>						

**Annexure – 1B**

**Litigation History**

Name of Applicant or partner of a Consortium / joint ventures

Applicants, including each of the partners of a Consortium / joint ventures, should provide information on any history of litigation or arbitration resulting from contracts executed in the last 10 years. A separate sheet should be used for each partner of a Consortium / joint ventures.

*(Attach separate sheets to give details of Supply, Installation, Commissioning, In Use and Reliability in %)*

Year	Award FOR or AGAINST Applicant	Name of client, cause of litigation, and matter in dispute	Disputed amount (current value, US\$ equivalent)

**ANNEXURE 2**

Name of the applicant or member of constituent Group				
Applicants (each member of the Group) should provide information on their current commitments or all contracts that have been awarded or for which a letter of intent or acceptance has been received or for contracts approaching completion but for which a completion certificate is yet to be issued.				
<i>(Attach separate sheets to give details of Supply, Installation, Commissioning, In Use and Reliability in %)</i>				
Particulars of Contract	Name of Client with telephone number	Type of System	Value of balance work yet to be done in Rupee equivalent as on 31.03.10 (Assume inflation as given in Annexure 1)	Estimated completion Date
		<p><b>(a) Supply and Installation of Platform Screen Doors works completed for U/G METRO stations and are <u>in use</u> in the last 10 years.</b></p> <p><b>(b) Supply and Installation of semi-outdoor type Platform Screen Gates works completed for Elevated METRO stations and are <u>in use</u> in the last 10 years.</b></p> <p><b>(c) Supply and Installation of Platform Screen Gate / Platform Screen Door Driving Mechanism <u>in use</u> over the last 3 years in any Metro System</b></p> <p><b>(d) Performance of the Platform Screen Doors and semi outdoor type Platform Screen Gates equipment and system in terms of reliability in % while in service in METRO stations</b></p> <p><b>(e) Maintenance Experience beyond defects liability period Comprehensive Maintenance / Maintenance without spares in Platform Screen Doors / semi outdoor type Platform Screen Gates.</b></p> <p><b>(f) Have accreditation by internationally recognized Bodies for Design and Manufacture of Semi-outdoor type Half Height Platform Screen Gates / Platform Screen Door System Works as detailed in Scope of Work</b></p> <p><b>(g) Associated or willing to associate with an Indian partner(s) in the indigenous manufacture of PSGs/PSDs given in the document</b></p>		
<b>NOTE:</b>				
<b>List only 10 Largest similar works</b>				

## ANNEXURE 2A Summary of Information for Works In Hand

*(Attach separate sheets to give details of Supply, Installation, Commissioning, In Use and Reliability in %)*

Name of applicant (each member in case of group)	Total number of contracts completed in last 10 years	Type and number of system designed of each type: <b>(a) Supply and Installation of Platform Screen Doors works completed for U/G METRO stations and are <u>in use</u> in the last 10 years.</b> <b>(b) Supply and Installation of semi-outdoor type Platform Screen Gates works completed for Elevated METRO stations and are <u>in use</u> in the last 10 years.</b> <b>(c) Supply and Installation of a minimum 135 nos. of Platform Screen Gate / Platform Screen Door Driving Mechanism <u>in use</u> over the last 3 years in any Metro System</b> <b>(d) Performance of the Platform Screen Doors and semi-outdoor type Platform Screen Gates equipment and system in terms of reliability in % while in service in METRO stations in last 10 years.</b> <b>(e) Maintenance Experience beyond defects liability period Comprehensive Maintenance / Maintenance without spares in Platform Screen Doors / semi outdoor type Platform Screen Gates.</b> <b>(f) Have accreditation by internationally recognized Bodies for Design and Manufacture of Semi-outdoor type Half Height Platform Screen Gates / Platform Screen Door System Works as detailed in Scope of Work</b> <b>(g) Associated or willing to associate with an Indian partner(s) in the indigenous manufacture of PSGs/PSDs given in the document</b>	Number for which contractor has gone in for Litigation / Arbitration* (Further details in Annexure – 2B)	Number of current Contract s in which date of completi on given in the original has already burst	Total value of balance works yet to be done in Rupee equivalent as on 31.03.10 (Assume inflation as given in Annexure 1)
			Litigati on	Arbitra tion	
* Note: Applicant or each constituent member should indicate, in the form in Annexure – 2B, details for each contracts for which they went for Litigation / Arbitration. Separate sheet for each case be submitted.					
<b>NOTE:</b>					

This information should be for all the works in progress including those listed in Annexure 2.

APPLICATION FORM (8)

Annexure – 2B

Litigation History

Name of Applicant or partner of a Consortium / joint ventures

Applicants, including each of the partners of a Consortium / joint ventures, should provide information on any history of litigation or arbitration resulting from contracts currently under execution. A separate sheet should be used for each partner of a Consortium / joint ventures.

*(Attach separate sheets to give details of Supply, Installation, Commissioning, In Use and Reliability in %)*

Year	Award FOR or AGAINST Applicant	Name of client, cause of litigation, and matter in dispute	Disputed amount (current value, US\$ equivalent)

Note:- This information should be for all the works in progress including those listed in Annexure – 2.

**PRO-FORMA SECTION 4**

18	<p>Staff. Applicants (and each constituent member of the Group) should indicate the number of staff employed (total and at specified offices). Specify number of each member's professional, technical, personnel at each location. Indicate how many staff professional and technical personnel are regular employees of more than six months of the applicant</p> <p>Name of the applicant (Member in case of Group)</p>		
Location	Discipline	Managerial / Professional	Technical and Engineers (including those deployed in design work)
<p>1.....</p> <p>2.....</p> <p>3.....</p> <p>4.....</p> <p>TOTAL:-.....</p> <p>Discipline</p>	<p>(a) Supply and Installation of Platform Screen Doors works completed for U/G METRO stations and are <u>in use</u> in the last 10 years.</p> <p>(b) Supply and Installation of semi-outdoor type Platform Screen Gates works completed for Elevated METRO stations and are <u>in use</u> in the last 10 years.</p> <p>(c) Supply and Installation of Platform Screen Gate / Platform Screen Door Driving Mechanism <u>in use</u> over the last 3 years in any Metro System</p> <p>(d) Performance of the Platform Screen Doors and semi outdoor type Platform Screen Gates equipment and system in terms of reliability in % while in service in METRO stations in last 10 years</p> <p>(e) Maintenance Experience beyond defects liability period Comprehensive Maintenance / Maintenance without spares in Platform Screen Doors / semi outdoor type Platform Screen Gates.</p> <p>(f) Have accreditation by internationally recognized Bodies for Design and Manufacture of Semi-outdoor type Half Height Platform Screen Gates / Platform Screen Door System Works as detailed in Scope of Work</p> <p>(g) Associated or willing to associate with an Indian partner(s) in the indigenous manufacture of PSGs/PSDs given in the document</p>		

***(Attach separate sheets to give details of Supply, Installation, Commissioning, In Use and Reliability in %)***

19a.	<p>Provide the following information for the applicant (or in case of a group each member) in Section 4, <b><u>separately for each system / sub-system.</u></b> The minimum experience of each personnel to be deployed should be minimum three years in the related field. The Applicant must have suitably qualified personnel to fill the following positions<sup>19</sup>. The applicant will supply information on a prime candidate and on an alternate for each position of deployment ; both people should meet the experience requirements specified below:</p> <p>Name of the applicant / member in case of Group</p>						
<b>Discipline</b>		Total Numbers Available	Number Available for proposed Contract	<b>Academic Qualifications</b>			
				PGs	Graduates	Others	No. of years of experience in discipline
Team Leader (Engineer) Project Management Expert Design Engineer Safety Officer Procurement Specialist Electrical Engineer Mechanical Engineer Fire Engineer Building Management Expert Quality Control Expert Control system specialist Testing Engineer (Mechanical) Testing Engineer (Electrical) Testing Engineer (Fire) Others (give details) (CADD operator, Finance Expert etc.)							
19b.	Which member of the Applicant / group / consortium will provide the Project Leader? Provide the academic and professional qualifications and experience of the proposed Project Leader.						
20.	Provide in Section 4 the following for both Prime and Alternate Candidate: Relevant CV's of the Key Design/Development Engineers and Specialists of all relevant disciplines from each group member indicating their qualification, length of service, previous experience of work similar in nature to the works for which pre-qualification is sought and their involvement in those contracts. This should be given separately for subsystems and number limited to 5 for each system/sub-system.						
21.	Provide in Section 4 the following : <ul style="list-style-type: none"> <li>• Details of your current management organisation as the applicant or, if a group, of each constituent member.</li> <li>• A proposed management organisation for this contract along with number of staff, their discipline with their CVs.</li> </ul>						

<sup>19</sup> List only key management and specialist positions. Do not include all principals, head office personnel who are not key to the project, and other non-specialist personnel.

**PRO-FORMA SECTION 5**

22.	Include in Section 5 details of ownership and control of applicant, or if a group, of each constituent member.
23.	<p>Have you in Section 5 provided documents, including Banking Reference, to demonstrate that you have access to, or have available, liquid assets, lines of credit and other financial means sufficient to meet cash flow of <b>INR 68 Million</b> for a period of 3 months for the proposed contract net of your commitments for other contracts. <span style="float: right;"><input type="checkbox"/> Y <input type="checkbox"/> N</span></p> <p>Do you authorise KMRCL to make enquiries with any of the Banks you listed in this application? <span style="float: right;"><input type="checkbox"/> Y <input type="checkbox"/> N</span></p> <p>Have you provided Annual Reports of the Applicant (and of each constituent member in the case of a group) for each of the last five years and also information given in Annexure 3. <span style="float: right;"><input type="checkbox"/> Y <input type="checkbox"/> N</span></p> <p>Has the Applicant / Joint venture/ Group / Consortium has suffered bankruptcy or has been insolvent in the last 5 years <span style="float: right;"><input type="checkbox"/> Y <input type="checkbox"/> N</span></p> <p>In case of Indian company participating as a member of the Consortium, Income Tax certificate for the last 3 years, be furnished. <span style="float: right;"><input type="checkbox"/> Y <input type="checkbox"/> N</span></p>

## ANNEXURE -3

Sl. No	Financial Information in Rupee equivalent	Actual for Previous five years ending 2009-10															Projection for the current financial year 2010-11		
		Financial Year 2005-06			Financial Year 2006-07			Financial Year 2007-08			Financial Year 2008-09			Financial Year 2009-10			In Respective currencies	Exchange rate	Rupee equivalent
		In Respective currencies	Exchange rate	Rupee equivalent	In respective currencies	Exchange rate	Rupee equivalent	In Respective currencies	Exchange rate	Rupee equivalent	In Respective currencies	Exchange rate	Rupee equivalent	In Respective currencies	Exchange rate	Rupee equivalent			
1.	Total Assets																		
2.	Current Assets																		
3.	Loans & Advances																		
4.	Total Liabilities																		
5.	Current Liabilities																		
6.	Provision																		

## ANNEXURE -3

7.	Profit Before Interest and Tax																		
8.	Profit before Tax but after interest																		
9.	Profit after Tax																		
10.	Net worth **																		
11.	Total Debt (including Current Liabilities) /Total Equity (including Preference capital)																		

\*\* Net worth is paid up Capital plus Reserves & Surplus less Intangible assets.

**This information should be submitted by all applicants and individually by all members in case of JV / Consortium, extracted through Audited Balance sheet.**

**(The information should be duly certified and signed by the qualified Chartered Accountant)**

**PRO-FORMA SECTION 6**

<p>24.</p>	<p>Do you intend, in case of being invited to tender, to engage the services of an independent professional designer for the purposes of undertaking the Detailed Design of the system or any of the sub-systems?</p> <p>If yes, provide the name or names of potential professional designers their capability, resources and the extent of their participation.</p> <p>Further details and literature should be enclosed in Section 6, clearly referenced as being in response to this Question 24.</p>	<table border="1"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> </table>	Y	N
Y	N			
<p>25.</p>	<p>Do you intend, in case of being invited to tender, to subcontract with other contractors any part of the work?</p> <p>If yes, in Section 6 provide the name or names of the subcontractors, their experience, resources and the extent of their participation, clearly referenced as being in response to this Question 25.</p> <p>Provide details of all sub-systems that will be designed in-house.</p> <p>Provide information on systems that will be designed by the applicant.</p>	<table border="1"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> </table>	Y	N
Y	N			
<p>25a.</p>	<p>Applicants (each member in case of group) are to include in Section 6 information relating to number of works of Detailed Design, Detailed Engineering of the system or any of the sub-systems of Platform Screen Doors and semi-outdoor Platform Screen Doors system as well as testing facilities for major equipment. The applicant must also demonstrate that, based on known commitments, the availability of staff and resources (including design staff) shall be adequate such that the contract can be completed in time.</p> <ul style="list-style-type: none"> <li>• Provide Number, qualification and experience in similar projects of the Project staff proposed to be deputed for this contract. List out the resources and the facilities available to complete design verification and detail engineering works as per the contract requirement.</li> <li>• Provide details of proposed approach for the Manufacture, Supply, Delivery and Storage at Site, testing &amp; Commissioning and Demonstration of Performance of the Equipment / System of major equipment for the Platform Screen Doors and semi-outdoor Platform Screen Doors System works.</li> </ul> <p>Provide details of the testing and commissioning approach and the facilities of major testing equipments available.</p>			

<p>26a.</p>	<p>Applicants (each member in case of Group) are to include in Section 6 information relating to the availability of major facilities for this work.</p> <p>Applicants or each constituent member thereof should provide in Section 6 information on the number, location facilities and Offices that they own or operate that they would use for this contract.</p> <p>Provide similar information facilities available in India.</p> <p>Provide information on the test facilities used for proving the performance and quality of your systems.</p> <p>Provide the number and specifications of CADD Plotters and workstations available for the designs for the systems and sub-systems, the computing power and programmes available for the contract.</p> <p>Provide information on the equipment capabilities as per Annexure – 4. The applicant must demonstrate that based on known commitments, key items of equipment will be available in full working order for the project in such number that the contract can be completed in time.</p> <p>Provide information on the test facilities used for proving the performance and quality of your systems.</p>				
<p>26b.</p>	<p>Quality Assurance Programme:</p> <p>Do Applicants or each constituent member currently maintain an in-house Quality Assurance programme? If yes, give details.</p> <table border="1" data-bbox="1208 947 1318 1003"> <tr> <td>Y</td> <td>N</td> </tr> </table> <p>Have you (or each constituent member in the case of a group) had any of your recent projects ISO 9000 / 9001 / 9002 certified? If yes, give details.</p> <table border="1" data-bbox="1208 1150 1318 1207"> <tr> <td>Y</td> <td>N</td> </tr> </table>	Y	N	Y	N
Y	N				
Y	N				
<p>26c.</p>	<p>Do you (each constituent member) have cost control mechanism in your organisation.</p> <table border="1" data-bbox="1208 1291 1318 1348"> <tr> <td>Y</td> <td>N</td> </tr> </table>	Y	N		
Y	N				

**VERIFICATION STATEMENT**

27.	<p>I confirm and declare that no agent, middleman or any intermediary has been, or will be, engaged by me to provide any services, or any other item or work related to the award and performance of this Contract. I further confirm and declare that no agency commission or any payment which may be construed as an agency commission has been, or will be, paid by me and that the tender price will not include any such amount.</p> <p>Signed : .....</p> <p>(to be signed by applicant and each member of the group)</p> <p>Date: .....</p>
28.	<p>Applicants are to verify that the information contained in this completed Questionnaire, any annex thereto and all supporting and explanatory information is, to their best knowledge and belief, truthful and exact.</p> <p>By virtue of my signature below, I confirm to my best knowledge and belief the information contained in this questionnaire and sections, any annex thereto and all supporting and explanatory information is truthful and exact.</p> <p>Signed: .....</p> <p>(Same signatory as on letter of application)</p> <p>Date: .....</p>
29.	<p>Applicants are to verify that the Tender for the Contract in their own name and at the same time as a part of JV, Partnership or Consortium has not been submitted.</p> <p>By virtue of my signature below, I confirm to my best knowledge and belief the information contained in this questionnaire is truthful and exact.</p> <p>Signed: .....</p> <p>(to be signed by applicant and each member of the group)</p> <p>Date: .....</p>

The undersigned declare that the statements made and the information provided in the duly completed application are complete, true, and correct in every detail.

Signed Name	Signed Name
For and on behalf of (name of Applicant or lead partner of a Consortium / joint ventures)	For and on behalf of (name of partner)

Signed Name	Signed Name
For and on behalf of (name of partner)	For and on behalf of (name of partner)
Signed Name	Signed Name
For and on behalf of (name of partner)	For and on behalf of (name of partner)

**Annexure – 4****Equipment Capabilities**

<b>Name of Applicant</b>
--------------------------

<b>The Applicant shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for each and all items of equipment required for execution of work under the contract.</b>
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The Equipments required are:-

1. Insulation Resistance Tester
2. DG Set
3. Distribution Board
4. Welding Set
5. Brazing Kit.
6. Mounting Trolley
7. Gas Leakage Detector

**Item of equipment**

Equipment Information	1.Name of manufacturer	2.Model and power rating
	3.Capacity	4.Year of manufacture
Current status	5.Current location	
	6.Details of current commitments	
Source	7.Indicate source of the equipment Owned      Rented      Leased      Specially manufactured	

Omit the following information for equipment owned by the Applicant or partner
--

Owner	8.Name of owner	
	9. Address of owner	
	Telephone	Contact name and title
	Fax	Telex
Agreements	Details of rental/lease/manufacture agreements specific to the Project	



**PRE-QUALIFICATION FOR THE DETAILED DESIGN, DETAIL ENGINEERING,  
MANUFACTURE, SUPPLY, DELIVERY AND STORAGE AT SITE, LAYING,  
INSTALLATION, TESTING AND COMMISSIONING, TRAINING OF PERSONNEL,  
DEMONSTRATION OF PERFORMANCE OF SYSTEM / EQUIPMENT OF PLATFORM  
SCREEN DOOR SYSTEM (PSD) OF UNDERGROUND STATIONS AND  
PLATFORM SCREEN GATE SYSTEM OF ELEVATED STATIONS OF  
KOLKATA METRO EAST-WEST LINE PROJECT  
(TENDER NO. 6 PQ-UG/EL - PSD)  
(Revision 0)**

**PRE-QUALIFICATION EVALUATION CRITERIA**

**JULY 2011**

**(A) INITIAL FILTER OF APPLICANTS – CHECKLIST**

Code of Applicant: .....

No.	Criteria	Yes	No
1	Has the Applicant abandoned any work in the last ten years?		
1A	Has any of the merged / acquired companies of the applicant ever failed to complete any work awarded to it for a period of 5 years prior to its being merged / acquired.		
2	Has the Applicant involved in frequent litigations in the last ten years?		
3	Has the Applicant delayed any work in the last ten years by more than 75% of the original period of completion due to his default?		
4	Has the Applicant delayed by more than 50% of original period of completion in more than 20% of the number of works in the last ten years due to his default?		
5	Has the Applicant suffered bankruptcy / insolvency in the last five years?		
6	Has the Applicant been blacklisted by any organization?		
7	Has the Applicant been penalized by poor quality of work in the last ten years?		
8	Has any misleading information been given in the application?		
9	Is the Applicant financially sound to perform the work as per criteria T <sub>1</sub> and T <sub>2</sub> ?		
9 <sub>A</sub>	Is the Net Worth of the applicant positive?		
10 <sub>A</sub>	Has the applicant certified that no agent / middleman has been or will be engaged or any agency commission been or will be paid?		
10 <sub>B</sub>	Do the documents submitted by the applicant reveal that agency commission has been or will be paid?		
11	Has the Applicant submitted duly filled verification statement page no. – 34 of 35		

- Notes:**
1. A “YES” answer to question 1 to 8 and 1<sub>A</sub> and 10<sub>B</sub> will disqualify the Applicant
  2. A “NO” answer to question 9, 9<sub>A</sub>, 10<sub>A</sub>, 11 will disqualify the Applicant.
  3. In case of Joint Ventures/Group/Consortium, each individual Member must qualify in the Initial Filter of Applicants – Check List.

**(B) Assessment Scoring**

This is based on the weightage to be given to each Topic relative to the whole of the pre-qualification topics, and the points scored by the Applicant against each topic.

**Assessment Scoring**

TOPIC NO.	ASSESSMENT TOPIC	MAX. POINTS	WEIGHTAGE	MAX. SCORE
<b>I</b>	<b>Financial Standing</b>			
T1	Liquidity and Banking Reference			
T2	Profitability			
T2A	Networth			
T3	Average Annual Turnover			
	<b>Total I</b>			
<b>II</b>	<b>Technical and Organizational Capability</b>			
T4	Academic Qualifications	4	5	20
T5	Total number of staff that would be made available for the project	4	3	12
T6	Experience of Key staff	4	8	32
T7	Management Organization	4	2	8
T8	Quality Assurance	4	2	8
	<b>Total II</b>		<b>20</b>	<b>80</b>
<b>III</b>	<b>Experience Record - General</b>			
T9	The Applicant shall have International Experience of supplying PSGs/PSDs outside the Country of Origin, Or Shall have accreditation by internationally recognized Bodies for Design and Manufacture of Semi-outdoor type Half Height Platform Screen Gates / Platform Screen Door System Works as detailed in Scope of Work	4	2	8
T10	No. of Design, Supply and Installation, Testing and Commissioning of Full Height Platform Screen Doors for U/G Stations and Half Height semi-outdoor type Platform Screen Doors for Elevated Stations Installation works <b>in use</b> for 3 years for METRO stations.	4	3	12
T11	Platform Screen Gate / Platform Screen Door Driving Mechanism <b>in use</b> over the last 3 years in any Metro System	4	5	20
T12	No. of Design, Supply, Installation, Testing, commissioning of similar Full Height Platform Screen Doors for U/G Stations and Half Height semi-outdoor type Platform Screen Doors for Elevated Stations Installation works completed for METRO stations in last 10 years	4	5	20
T13	No. of Performance of the Full Height Platform Screen Doors for U/G Stations and Half Height semi-outdoor type Platform Screen Doors for Elevated Stations equipment and system in terms of reliability in % while in service for METRO stations in last 10 years.	4	3	12
T14	No. of Comprehensive Maintenance / Maintenance without Spares of similar work of Full Height Platform Screen Doors for U/G Stations and Half Height semi-outdoor type Platform Screen Doors for Elevated Stations after DLP period	4	3	12
T15	Associated or willing to associate with an Indian partner(s) in the indigenous manufacture of PSGs/PSDs given in the document	4	2	8
	<b>Total III</b>		<b>18</b>	<b>92</b>
	<b>Grand Total</b>			<b>172</b>

**Note:** In case of Joint Ventures/ Group/Consortium the evaluation against the individual eligibility criteria will be done in totality, Except in case of financial criteria T1, T2, T2A and T3 where individual member has to qualify depending upon their participation in the tender (Lead member or member).

**Basis for Weightage**

The weightage has been determined by the importance of the topic in relation to the project.

**Basis for Awarding Points**

The purpose of the points system is to be able to put the Applicants into a “pecking order” of capability. Therefore, whilst there may be some subjective consideration as to what constitutes the award of points, as much as possible criteria for awarding points has been based on the response of the Applicant to the Questionnaire.

The basis for the award of points is:

**T<sub>1</sub>** It is necessary that the firm can withstand the Cash Flow that the contract will require until payment received from Employer. Liquidity therefore becomes an important consideration. This can be seen from the balance sheets and from the banking reference if required. Net current assets { (Current assets + loans & advances) – (current liabilities + provision) } for the last financial year (Balance Sheets / Annex. 3 of Pre-qualification documents), documents including current documents banking reference if required, should show that the applicant has access to or has available liquid assets, lines of credit, if any, and other financial means to meet the **Liquidity / cash flow of Rs. 68 Million** for a period of 3 months for this contract, net of applicant’s commitments for other Contracts.

Adequate liquidity	<b>≥ INR. 68 Million</b>	=	Pass
Inadequate Liquidity	<b>&lt; INR. 68 Million</b>	=	Fail

**T<sub>2</sub>** The same condition applies as in T<sub>1</sub>, therefore from the Annual statements:

Profit before tax but after interest, 3 positive out of five years	=	Pass
Other wise	=	Fail

**T<sub>2A</sub>** Networth as item 10 of Annexure 3 of pre-qualification document.

<b>≥ INR. 170 Million</b>	=	Pass
<b>&lt; INR. 170 Million</b>	=	Fail

**T<sub>3</sub>** Average Annual Turn-over for the last five years (Q.17c)

<b>≥ INR. 246 Million</b>	=	Pass
<b>&lt; INR. 246 Million</b>	=	Fail

**T<sub>4</sub>** Academic Qualifications of key staff limited to say 30 in number to be made available for the contract to cover various disciplines mentioned in PQ Document:

100% Graduates / Post Graduates	=	4 points
>75% of key staff Graduates / Post Graduates	=	3 points
50% to 75% of key staff Graduates/ Post Graduates	=	2 point
<50% of key staff Graduates / Post Graduates	=	0 points

The areas/disciplines where key staffs are to be evaluated:

S.No:	Position	Nos.
1.	Team Leader	1
2.	Project Management Expert	1
3.	Design Engineer	1
4.	Safety Officer	1
5.	Procurement Specialist	1

6.	Electrical Engineer	4
7.	Mechanical Engineer	4
8.	Fire Protection Engineer	4
9.	Plumbing Engineer	4
10.	Control System Specialist	1
11.	Building Management Expert	1
12.	Quality Control Expert	1
13.	Testing Manager (PSD)	2
14.	Testing Engineer (Mechanical)	2
15.	Testing Engineer (Electrical)	2
14.	Testing Engineer (Fire Protection)	2
15.	Others (CADD operator, Finance Expert etc.)	3

**T<sub>5</sub>** Total Engineering / Technical staff to be made available for the project as obtained from answer to PQ Questionnaire will determine whether the Applicant can complete the work in time:

≥ 30 = 4 points

≥ 20 < 30 = 3 points

≥ 15 < 20 = 2 points

< 15 = 0 points

**T<sub>6</sub>** Experience of key staff (limited to say 30 in numbers) available for the services to be performed averaged for 30:

> 7 years = 4 points

> 5 but upto 7 years = 3 points

≥ 3 but upto 5 years = 2 point

< 3 years = 0 points

**T<sub>7</sub>** The proposed Organization must be divided into basic functions (3 disciplines) like Electrical, & Mechanical (PSD//PSG related) and strong overall management control. This is to a certain amount subjective, but has only low weightage. (refer Q. 21):

Excellent = 4 points (All disciplines represented adequately)

Good = 3 points (One discipline not represented adequately)

Average = 2 point (Two disciplines not represented adequately)

Poor = 0 points

**T<sub>8</sub>** Quality Assurance Programme in place. This is a major requirement and can only be assessed as existing or non-existing:

Possesses QA Programme certified by ISO = 4 points

Follows internal QA Programme & applied for ISO Certification = 3 points

Follows internal QA Programme = 2 points

Does not have QA Programme = 0 point

- T9 The number of projects executed outside the Country of Origin for which the applicant has undertaken works similar in scope and nature (Averaged) in case of Consortium) with the accreditation by internationally recognized Bodies:
- |                           |   |          |
|---------------------------|---|----------|
| > 3 projects              | = | 4 points |
| > 1 projects ≤ 3 projects | = | 3 points |
| = 1 project               | = | 2 points |
| < 1 project               | = | 0 point  |
- T<sub>10</sub> No. of Design, Supply, Installation, Testing, commissioning of similar Full Height Platform Screen Doors for U/G Stations and Half Height semi-outdoor type Platform Screen Doors for Elevated Stations Installation works **in use** for 3 years for METRO stations **(Average of (a) and (b))** (Q.17d):
- |                                   |   |          |
|-----------------------------------|---|----------|
| a) ≥ 8 sets of PSDs               | = | 4 points |
| > 4 sets of PSDs < 8 sets of PSDs | = | 3 points |
| = 4 sets of PSDs                  | = | 2 point  |
| < 4 sets of PSDs                  | = | 0 point  |
| b) ≥ 8 sets of PSGs               | = | 4 points |
| > 4 sets of PSGs < 8 sets of PSGs | = | 3 points |
| = 4 sets of PSGs                  | = | 2 point  |
| < 4 sets of PSGs                  | = | 0 point  |
- T<sub>11</sub> No. of Platform Screen Gate / Platform Screen Door Driving Mechanism **in use** over the last 3 years in any Metro System
- |                      |   |          |
|----------------------|---|----------|
| > 250 nos            | = | 4 points |
| ≥ 200 nos < 250 nos. | = | 3 points |
| ≥ 135 nos < 200 nos  | = | 2 point  |
| < 135 nos.           | = | 0 point  |
- T<sub>12</sub> No. of Design, Supply, Installation, Testing, commissioning of similar Full Height Platform Screen Doors for U/G Stations and Half Height semi-outdoor type Platform Screen Doors for Elevated Stations Installation works each completed for METRO stations, completed during last 10 years **(Average of (a) and (b))** (Q.17d):
- |                                   |   |          |
|-----------------------------------|---|----------|
| a) ≥ 8 sets of PSDs               | = | 4 points |
| > 4 sets of PSDs < 8 sets of PSDs | = | 3 points |
| = 4 sets of PSDs                  | = | 2 point  |
| < 4 sets of PSDs                  | = | 0 point  |
| b) ≥ 8 sets of PSGs               | = | 4 points |
| > 4 sets of PSGs < 8 sets of PSGs | = | 3 points |
| = 4 sets of PSGs                  | = | 2 point  |
| < 4 sets of PSGs                  | = | 0 point  |

- T<sub>13</sub>** No. of Performance of the PSD/PSG equipment and system in terms of reliability in % while in service for METRO stations in last 10 years. (refer Q.17d):
- |   |   |          |
|---|---|----------|
| ≥ Reliability less than 99.8 %                                | = | 4 points |
| ≥ Reliability less than 99.5 % < Reliability less than 99.8 % | = | 3 points |
| ≥ Reliability less than 99 % < Reliability less than 99.5 %   | = | 2 point  |
| < Reliability less than 99 %                                  | = | 0 point  |
- T<sub>14</sub>** No. of Comprehensive Maintenance / Maintenance without Spares of similar works of PSD & PSGs after DLP period for a minimum of at least one year (ref: Q. 17a)
- |           |   |          |
|-----------|---|----------|
| ≥ 3 works | = | 4 points |
| = 2 works | = | 3 points |
| = 1 work  | = | 2 point  |
| = 0 work  | = | 0 point  |
- T<sub>15</sub>** Has the Applicant associated or willing to associate with an Indian partner(s) in the indigenous manufacture of PSGs/PSDs given in the document (ref: Q. 8.a)
- |           |   |          |
|-----------|---|----------|
| Excellent | = | 4 points |
| Good      | = | 2 points |
| Poor      | = | 0 point  |

Where the Indian partner is named and a Memorandum of Understanding is furnished and sufficient data is provided to establish their ability to indigenously manufacture the items and the assembly, 4 points shall be scored. Where the Indian partner is named and a Memorandum of Understanding tabled but data provided is inadequate to establish their ability to indigenously manufacture, 2 points will be scored. Where only willingness is expressed 0 points shall be scored.

**(C) Summary of Evaluation Criteria**

**Applicants must PASS all Evaluation criteria below i.e. a, b, c & d**

- Pass in Initial filter check – list.
- Pass in Financial Criteria T1, T2, T2A and T3
- 50% marks-in Topic – II and III each - Pass
- 60% marks- in overall (Topic – II + III). - Pass

All criteria shall be Pass/Fail Criteria. The Employer reserves the right to waive minor deviations if they do not materially affect the capability of an applicant/JV/Consortium to perform the contract.

. The Employer reserves the right to waive minor deviations if they do not materially affect the capability of an applicant/JV/Consortium to perform the contract.