



**REQUEST FOR PROPOSALS (RFP)**

**for**

**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply  
in Peshawar BRT System**

**Tender No. TPC/Operations/Maintenance-03/2020**

Date: 05.09.2020

**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in  
Peshawar BRT System**

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# Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in Peshawar BRT System

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# Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in Peshawar BRT System

## SECTION 1 - DEFINITIONS

1.1.1 The following words or terms shall have the following meanings in this Request for Proposals:

**Affiliate** means a corporation or entity effectively under the Control of, or in Control of, a Service provider or associated with a Service provider under common ownership and Control.

**Service provider** means a legal entity which includes Sole Proprietor, Partnership, company, corporation, Consortium or joint venture which participates in the Bidding Process.

**Bid Bond** has the meaning given to it in paragraph 6.5.4.

**Bidding Process** or **Bidding** means the process beginning from the publication of the Invitation to Bid until the signing of the Service Agreement.

**BRT** means a flexible, rubber-tired rapid transit mode that combines stations, bus stops, vehicles, services, running ways, and technological elements into an integrated system.

**Coercion, Collusion, Corrupt Practices, Fraud, Restrictive Practices and Undesirable Practices** have the meanings given to them in paragraph 8.4.2.

**Consortium** means an unincorporated association of juridical persons bound by contract or law, solidarily undertaking by mutual written agreement a common enterprise which is to participate in the Bidding Process.

**Consortium Member** means any of the juridical persons comprising a Consortium, each having a definite interest in the common undertaking, solidarily liable in the Bid and whose interest may be converted into an equivalent equity participation in the corporation that will become a service provider if the Consortium is awarded and accepts the obligation to provide the Required Services.

**Control** means, for purposes of defining an Affiliate, the power to direct or cause the direction of the management policies of a body corporate whether through: (i) ownership of at least fifty per cent (50%) plus one share of the outstanding voting shares or (ii) ownership of at least twenty per cent (20%) of the outstanding voting shares and (a) possession of at least fifty per cent (50%) plus one share of the voting rights through voting trust or other voting agreements entered into at least one year before the Proposal Submission Date or (b) the ability to elect a majority of the members of the Affiliate's board of directors. In determining ownership by a corporation of the shares of another corporation, shares held both directly and indirectly will be counted. If the Service provider or Consortium Member was incorporated only within the last six (6) months, then the requirement herein that the voting trust or other voting agreement should have been entered into at least one (1) year before the Proposal Submission Date, will not be applicable.

**Financial Proposal** has the meaning given to it in paragraph 6.4.1.

**Winning Service provider** means the Lowest Evaluated Service provider as determined by TransPeshawar Company after having declared responsive and qualified technically.

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**KPPRA** means the Khyber Pakhtunkhwa Public Procurement Regulatory Authority.

**Net Worth** means total assets minus total liabilities.

**Procurement Rules** means the Khyber Pakhtunkhwa Public Procurement of Goods, Works and Services Rules of 2014.

**Proposal** means the bid submitted by a Service provider for the provision of the Required Services.

**Proposal Submission Date** means the date specified as such in paragraph 5.1.1.

**Required Services** has the meaning given to it in the Service Agreement.

**Service Agreement** means the service contract to be entered into between TransPeshawar Company and a Winning Service provider.

**Technical Proposal** has the meaning given to it in paragraph 6.4.1.

**Monthly Charges** shall mean the amount payable by TPC to the Service Provider for one month of Services.

**TransPeshawar (The Urban Mobility Company) or “TransPeshawar Company” or “TPC”** means the entity responsible for BRT project design, procurement, implementation and ongoing BRT operations and management of service contracts, a public Company (Section 42 Company) registered on February 09, 2017 with Security Exchange Commission of Pakistan with address: - TransPeshawar (The Urban Mobility Company), KPUMA Building, Chamkani, GT Road, Peshawar, Khyber Pakhtunkhwa, Pakistan.

### **SECTION 2 – NOTICE**

#### **2.1 Introduction**

2.1.1 This RFP is provided to the recipient solely for use in preparing and submitting a Proposal in a competitive tender to procure the Required Services.

2.1.2 This RFP is being issued to the Service providers by TransPeshawar Company, a public agency under the Government of Khyber Pakhtunkhwa.

#### **2.2 Disclaimer**

2.2.1 No employees or consultants of TransPeshawar Company:

- (a) make any representation (express or implied) or warranties as to the accuracy or completeness of the information contained in this RFP or other document made available to a person in connection with the tender process for the Required Services and shall have no liability for this RFP or for any other written or oral communication transmitted to the recipient in the course of the recipient's evaluation of the service provider for **Operation and Maintenance of Generators, Dewatering Pumps and Fuel Supply Services in Peshawar BRT System**; or

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- (b) will be liable to reimburse or compensate a recipient for any costs or expenses incurred by the recipient in evaluating or acting upon this RFP or otherwise in connection with Peshawar Sustainable BRT Corridor System.
- 2.2.2 The RFP does not constitute a solicitation to invest or otherwise participate in the assignment.
- 2.2.3 The Bidding Process is conducted through the procedures specified in this RFP, in line with the principles of the Khyber Pakhtunkhwa Public Procurement Regulatory Authority Act and the Procurement Rules of 2014.
- 2.2.4 The issuance of this RFP does not imply that TransPeshawar Company is bound to appoint a Winning Service provider or enter into a Service Agreement. TransPeshawar Company reserves the right to reject all or any of the Proposals received or otherwise discontinue the Bidding Process at any time.

### **SECTION 3 - PESHAWAR SUSTAINABLE BRT CORRIDOR SYSTEM DETAILS**

#### **3.1 Background**

The Peshawar BRT system is operated and is an important part of the public transport system in Peshawar.

- 3.1.1 The total length of the BRT corridor is approximately 28.0 kilometres, with an at-grade section of approximately 12 kilometres and elevated section of approximately 13 kilometres.
- 3.1.2 BRT services are operated as “Direct-Service” concept. According to this concept, routes will start outside the BRT corridor, join and then pass along the BRT corridor and leave the corridor at different stations according to their existing route. When running on the corridor, the BRT vehicles will pick up passengers from BRT stations, and when running outside BRT corridor, passengers will board from curb-side BRT vehicle stops.
- 3.1.3 The system is expected to be an “open” BRT system, meaning that passengers need to validate and pay for their journey using their fare medium (e.g. a contactless smart card) via validators at the BRT vehicle doors.
- 3.1.4 The Peshawar Sustainable BRT Corridor System involves among others the following roles:
  - (a) BRT Vehicle Service Providers (VSPs);
  - (b) System Control Service Provider (SCSP); and
  - (c) Operation and Maintenance of PSD Service Providers; and
  - (d) Operation and Maintenance of Elevators and Escalators;

#### **3.2 Infrastructure**

- 3.2.1 The 28.0-kilometre-long corridor for the Peshawar BRT planned is expected to consist of:

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- (a) BRT infrastructure (stations, dedicated lanes, depot) designed and built following international best practices and quality standards;
  - (b) sidewalks, mixed-traffic lanes and non-motorized transport lane along the BRT;
  - (c) improvement of access roads and surrounding areas in favour of non-motorized transport and potential feeder services.
- 3.2.2 Thirty (30) BRT stations constructed, with an average distance of approximately 900 meters between stations.
- 3.3 **Operations**
- 3.3.1 It is intended that the BRT System shall be operated so that:
- (a) BRT vehicles shall provide a combination of stopping and express services on the trunk routes;
  - (b) most stations shall have passing lanes in order to allow express BRT vehicles to overtake stopping BRT vehicles;
  - (c) passengers shall board onto and alight from BRT vehicles on the right-hand side from stations located in the median of the roadway that is part of the BRT infrastructure, or on the left-hand side from the pavement or comparable when off the BRT infrastructure;
- 3.3.2 The estimated maximum capacity of the system is approximately twenty thousand (20,000) passengers per direction per hour.
- 3.3.3 The estimated maximal load during the morning peak hour is approximately five thousand (5,000) passengers per direction per hour.

## **SECTION 4 – SERVICE PROVIDER REQUIREMENTS FOR OPERATION AND MAINTENANCE OF GENERATORS, DEWATERING PUMPS & FUEL SUPPLY SERVICES IN PESHAWAR BRT SYSTEM**

### **4.1 Required Services**

This RFP specify the operation and maintenance obligations of Equipment in jurisdiction of TransPeshawar / Peshawar BRT which includes 30 number of Bus rapid transit stations, BRT Corridor and KPUMA Building (From outer boundary of depot and railway track). The Service Provider shall be responsible for all costs of required services mentioned in RFP, Agreement, Operational Specifications Schedule and their annexures/ attachments. The operation and maintenance services are required for following Equipment:

- A. **Generators** including Auxiliary tank (approximate 500-liter capacity), ATS Panel, flow meter, electric motor, automation sensors, fitting, pipes, base tank, connection pipes/cable, software's and any other components required for successful operations. The scope of this contract covers Generators installed at stations, along the corridor, and at KPUMA Building.

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- B. **Dewatering Pumps** including pump control panels, float switches/sensors, connection pipes/hoses, valves, cables, ladders, Software and any other associated component required for intended purpose.
- C. **UPS** including Invertor, Battery Chargers, batteries, Connection cables, Isolators, Manual Bypass Switches, DB-UPS and any other associated component required for intended purpose.
- D. **Fuel Supply for Generators** including fuel, transportation to site, filling and fuel testing related services as required by TPC.

### SECTION 5 - BIDDING PROCESS

#### 5.1 Planning

- 5.1.1 This Request for Proposals introduces the Bidding Process for the procurement of Required Services. The indicative overall planning for the Bidding Process is presented below:

Milestone	Party Responsible	Target Date
Issuance of Request for Proposal (RFP)	TransPeshawar Company	<b>05-09-2020</b>
Pre-Bid Meeting	TransPeshawar Company	<b>10-09-2020 Time 11:00 AM</b>
Queries by the Bidder	Service providers	<b>10-09-2020</b>
Upload of Pre-Bid Minutes along with clarifications	TransPeshawar Company	<b>11-09-2020</b>
<b>Proposal Submission Date</b>	<b>Service providers</b>	<b>21-09-2020 Time 2:00 PM</b>
Notification of the Results of the Evaluation and Appointment of Winning Service provider	TransPeshawar Company	<b>Tentatively in October</b>
Signing Date of Service Agreement and Compliance with other Requirements	Winning Service provider and TransPeshawar Company	<b>Tentatively in October</b>

#### 5.2 Information Sources

- 5.2.1 The primary sources of information provided to Service providers in relation to this Request for Proposals are:



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- (a) Request for Proposals (the present document);
  - (b) Service Agreement including Annexures (attached to the present document).
  - (c) Pre-Bid Meeting as organised by TransPeshawar Company (cf. Section 5.3);
- 5.2.2 Service providers relying on information from other sources or the public domain do so at their own risk.

### **5.3 Pre-Bid Meeting**

5.3.1 A Pre-Bid Meeting shall be organised by TransPeshawar Company to:

- (a) Explain the project, the Bidding Process and the Request for Proposals;
- (b) Receive questions on the Request for Proposals; and

5.3.2 The pre-bid meeting shall be organised at a date specified in Article 5.1.1.

### **5.4 Questions and Answers on the Request for Proposals**

5.4.1 The Service providers shall have the opportunity to ask questions concerning the Request for Proposals by the date specified in Article 5.1.1. Questions can only be addressed by email to the following address:

Attention: Mr. Fayyaz Khan

Chief Executive Officer, TransPeshawar Company.

Email: [fayyazak@yahoo.co.uk](mailto:fayyazak@yahoo.co.uk), [khalil.ahmed@transpeshawar.pk](mailto:khalil.ahmed@transpeshawar.pk), with cc to [charbagh@hotmail.com](mailto:charbagh@hotmail.com), [ashfaq.rauf@gmail.com](mailto:ashfaq.rauf@gmail.com)

5.4.2 The Service provider's questions shall be treated anonymously.

5.4.3 TransPeshawar Company shall endeavour to respond to all clarification or information requests, however requests received later than date specified in Article 5.1.1 would be left unanswered. Every such clarification delivered to Service providers shall be made in the form of an appendix to the Request for Proposals and shall, upon being issued, be sent in the shortest possible time to all Service providers. All such appendices shall automatically become an integral part of the Request for Proposals.

5.4.4 All Service providers shall therefore be provided with the same information simultaneously. TransPeshawar Company does not assume any responsibility for emails not received or delivered late.

### **5.5 Submission of Comments on the RFP/ Service Agreement**

5.5.1 The Service providers shall have the opportunity to submit comments concerning the RFP/Service Agreement before the Comment Submission Date specified in paragraph 5.1.1. Comments shall be submitted in conformity with Schedule 9 and shall be sent by email to the address specified in paragraph 5.4.1. The Service providers' comments shall be treated anonymously.

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5.5.2 TransPeshawar Company shall endeavour to respond to all comments and may decide to issue a revised RFP / Service Agreement taking some or all of the comments into consideration. Every such response and, if applicable, the revised RFP / Service Agreement shall, upon being issued, be sent in the shortest possible time to all Service providers.

5.5.3 All Service providers shall therefore be provided with the same information simultaneously. TransPeshawar Company does not assume any responsibility for emails not received or delivered late.

### **5.6 Formation and Modification in the Composition of a Consortium**

5.6.1 Service providers can make Joint Venture / Consortium to meet requirements of the Request for Proposal. The Joint Venture shall clearly mention lead partner in Joint Venture.

5.6.2 TransPeshawar Company will not accept any modification in the composition of a Consortium / JV after Bid Submission.

### **5.7 Rejection of Proposals**

5.7.1 TransPeshawar Company has a discretionary right to reject a Proposal. Reasons for rejecting a Proposal include, but are not limited to, the following:

- (a) The Proposal does not contain all elements defined in the instructions;
- (b) The Proposal is not submitted before the Submission Deadline;
- (c) The Service provider or the bank which has issued the Bid Bond are insolvent or in the process of liquidation or bankruptcy;
- (d) The amount, format or issuer of the Bid Bond does not meet the requirements; or
- (e) TransPeshawar Company becomes aware of facts which can influence the free will of contractual parties.

5.7.2 The Proposal may also be rejected up until signing of the Service Agreement, in case TransPeshawar Company concludes, in its discretionary right, that one of the following applies:

- (a) The Proposal does not comply with the objectives of the tender or is not in line with the applicable laws (especially in case the Proposal proposed is not acceptable to TransPeshawar Company in terms of conditions offered or their alignment with applicable laws and existing practice in the Islamic Republic of Pakistan;
- (b) There is evidence of collusion/joint agreement between Service providers;
- (c) There is reason to believe that tender rules have been violated (for example, failure to keep confidential information);
- (d) There is evidence that the Service provider is trying to gain advantage over other Service providers in an incorrect manner; or

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- (e) The Financial Offer varies significantly from the estimate of TransPeshawar Company.
- 5.7.3 In the event of the rejection of a Proposal, TransPeshawar Company shall inform the relevant Service provider in a written form, in accordance with the applicable laws.
- 5.8 **Cancellation of the Bidding Process and Proclamation of the Bidding Process as Unsuccessful**
- 5.8.1 TransPeshawar Company reserves the right to unilaterally cancel or suspend the Bidding Process at all times. In case of cancellation, TransPeshawar Company will inform the Service providers.
- 5.8.2 The tender may be cancelled at any time prior to the Submission Deadline at no cost to, if TransPeshawar Company determines that this action is in its best interest or that of the Government of Pakistan/Khyber Pakhtunkhwa. Reasons for cancellation include, but are not limited to:
  - (a) Changes in the legislative framework in the Islamic Republic of Pakistan, causing the Bidding Process or the Required Services to become impossible, illegal or economically unviable; or
  - (b) Proposed amendments to the instructions or procedure would be of such magnitude and substance that a new Bidding Process would be desirable.
- 5.8.3 The Bidding Process may be proclaimed unsuccessful at any time after the Submission Deadline, at no cost to TransPeshawar Company, if:
  - (a) No Proposals have been submitted;
  - (b) The Proposals which have been submitted, in the opinion of TransPeshawar Company, do not meet the criteria, goals and requirements of the Bidding Process; or
  - (c) The Winning Service provider refuses to sign the Service Agreement in the form offered by TransPeshawar Company.
- 5.8.4 In the event of such rejection of a Proposal, or cancellation or proclamation of the Bidding Process as unsuccessful, no Service provider shall be entitled to any claim whatsoever against TransPeshawar Company or the Government of Pakistan/Khyber Pakhtunkhwa for any costs, expenses or damages resulting directly or indirectly from such cancellation of the Bidding Process or rejection of Proposal.
- 5.9 **Opening and Evaluation of Proposals**
- 5.9.1 The opening of the Technical Proposals shall occur fifteen minutes after the Proposal Submission Date at the address indicated in paragraph 6.3.1. The Service providers may be represented, by not more than two (2) persons, at the opening of the Technical Proposals. Proposals for which a notice of withdrawal request has been submitted shall not be opened.
- 5.9.2 TransPeshawar Company shall evaluate the Technical Proposals in accordance with the provisions of SECTION 7. TransPeshawar Company shall then inform all Service providers of the results in writing.

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- 5.9.3 The opening of the Financial Proposals shall be during a public session at a time notified later on. The Service providers who have been qualified for the evaluation of their Financial Proposal may be represented, by not more than two (2) persons, at the opening of the Financial Proposals. After the conclusion of the public opening, TransPeshawar Company shall evaluate the Financial Proposals.
- 5.9.4 TransPeshawar Company shall evaluate the Financial Proposals in accordance with the provisions of SECTION 7. TransPeshawar Company shall then inform all Service providers who have been qualified for the evaluation of their Financial Proposal of the results in writing.
- 5.10 Signing of the Service Agreement**
- 5.10.1 The Winning Service provider shall receive an invitation in form of Letter of Award from TransPeshawar Company with the aim to sign a Service Agreement for Required Services as defined in the Service Agreement. The Winner Service provider shall, within **Fourteen days (14)** days of receipt of Letter of Award, furnish Performance Security in favour of TransPeshawar on prescribed format. The successful service provider shall immediately sign the agreement with TransPeshawar in the form and manner as prescribed in the RFP but not later than seven (07) days after submission of performance security.
- 5.10.2 In the event of a withdrawal by a Winning Service provider, TransPeshawar Company may invite the next Service provider to conclude a Service Agreement for the Required Services.
- 5.10.3 If a Service provider which was invited by TransPeshawar Company to sign a Service Agreement withdraws from the Bidding Process, the Bid Bond of the said Service provider shall be called by TransPeshawar Company.

## **SECTION 6 – INSTRUCTIONS TO SERVICE PROVIDERS/ BIDDING PROCESS**

### **6.1 General Terms that the Proposal Must Fulfil**

- 6.1.1 All elements of the Proposal containing monetary values, whether they apply to business activities in the Islamic Republic of Pakistan or abroad, must be expressed in Pakistani Rupees (PKR).
- 6.1.2 All documents forming part of the Proposal must be written in the English language; copies of legal or similar supporting documents in other languages must be accompanied with a notarised translation.

### **6.2 Proposal Package**

- 6.2.1 The Proposal must be submitted in a master envelope containing two inner envelopes, i.e. the Technical Proposal envelope and the Financial Proposal envelope.
- 6.2.2 The master envelope must be properly sealed and must be marked with:
- (a) The name and the address of the Service provider;
  - (b) The address of TransPeshawar Company as indicated in paragraph 6.3.1;

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- (c) The warning: “Do not open before <insert Proposal Submission Deadline>”;
  - (d) The wording: “**Master envelope – Proposal for Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply Services in Peshawar BRT System.**”
- 6.2.3 The Technical Proposal envelope must be marked as “Technical Proposal” and must contain:
- (a) One (1) complete original set of the Technical Proposal, clearly marked as “**ORIGINAL**”;
  - (b) One (1) certified true copy of the Technical Proposal, clearly marked as “**COPY NO. \_\_**”; and
  - (c) One (1) readable flash drive containing an electronic copy of Technical Proposal document, in either Microsoft Word (.doc) or Portable Document Format (.pdf) format.
- 6.2.4 The Financial Proposal envelope must be marked as “Financial Proposal” and must contain:
- (a) One (1) complete original set of the Financial Proposal, clearly marked as “**ORIGINAL**”; and
  - (b) One (1) certified true copy of the Financial Proposal, clearly marked as “**COPY NO. \_\_**”.
- 6.2.5 In the event of any discrepancy between an original and the copies, the original shall prevail.

### 6.3 Submission of Proposal

- 6.3.1 The Proposal must be delivered to TransPeshawar Company on or before the submission Date and time (**Proposal Submission Deadline**) at the following address:
- Attention: Mr. Fayyaz Khan  
Chief Executive Officer, TransPeshawar Company.
- Address: TransPeshawar (The Urban Mobility Company), KPUMA Building, Chamkani GT Road, Peshawar, KPK, Pakistan.
- 6.3.2 The Proposal must be submitted in person or via registered post mail or via courier, in closed envelopes. The Proposal shall be considered submitted upon physical receipt by TransPeshawar Company of the master envelope. TransPeshawar Company shall issue a Proposal receipt confirmation, which shall clearly indicate the date and time at which the Proposal was received. Late submission, for whatsoever reason, will not be acceptable.

### 6.4 Content of Proposal

- 6.4.1 The Proposal shall contain all components listed in the table below. The Proposal shall be considered only on the basis of information provided in accordance with this predefined format.

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Item	Schedule
<b>Technical Proposal</b>	
Business Structure	Schedule 1 or Schedule 2
Technical Proposal Submission Letter	Schedule 3
Authority to Bid and Designation of Authorized Representative	Schedule 4 or Schedule 5
Bid Bond	Schedule 6
Financial Offer	Schedule 7
Affidavit of Integrity Pact	Schedule 8

**6.5 Technical Proposal**

6.5.1 The Service provider must submit a **Business Structure** in conformity with Schedule 1 (or, in case the Service provider is a Consortium, Schedule 2).

- (a) The Business Structure must be signed and dated by the Authorised Representative.
- (b) In the case of a Consortium, each Consortium Member shall appoint one, and only one, of their number to be the lead member (**Lead Member**) who shall be authorised by each Consortium Member to represent and irrevocably bind all members of that Consortium in all matters relating to the procurement process for the provision of the Required Services, including, but not limited to, the submission of the Bid on behalf of the Consortium. All members shall be jointly and severally liable for the execution of the Service Agreement.

6.5.2 The Service provider must submit a **Technical Proposal Submission Letter** in conformity with Schedule 3.

- (a) The Technical Proposal Submission Letter must be signed and dated by the Authorised Representative.

6.5.3 The Service provider (or, in case the Service provider is a Consortium, each Consortium Member) must submit an **Authority to Bid and Designation of Authorized Representative** in conformity with Schedule 4 (or, in case the Service provider is a Consortium, Schedule 5).

- (a) The Authority to Bid and Designation of Authorized Representative must be signed and dated by the Corporate Secretary or equivalent officer of the Service provider (or, in case the Service provider is a Consortium, of the Consortium Member).

6.5.4 The Service provider must submit a **Bid Bond** of Four Million Pakistani Rupees (PKR 4,000,000) in conformity with Schedule 6 or in Shape of Call Deposit Receipt (CDR) or Demand Draft. Call Deposit Receipt (CDR) or Demand Draft shall be in the name of Chief Executive Officer, TransPeshawar (The Urban Mobility Company).

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- (a) The Bid Bond must be provided by the Service provider from Schedule Bank in Pakistan. In case of Joint Venture / Consortium submitting Bid Bond through Bank guarantee, the Bid Bond must be on the name of all members of JV / Consortium. In case of Joint Venture / Consortium submitting Bid Bond in the Shape of Demand Draft or Call Deposit Receipt (CDR), the Bid Bond may be on the name of any one member of JV / Consortium.
- (b) The Bid Bond can be claimed by TransPeshawar Company in case of:
  - (i) Withdrawal from the Bidding Process during Bid Validity Period;
  - (ii) Failed to submit Performance Security within prescribed time;
  - (iii) Exclusion from the Bidding Process by TransPeshawar Company in case of any wilful misconduct such as Corrupt Practice, Collusion, Coercion, Fraud, Fraudulent Practice, Undesirable Practice or Restrictive Practice.
- (c) Within seven (7) days after the submission of Performance Security by Winner Service provider, TransPeshawar Company shall release the Bid Bond to all Service providers. The Bid Bond of the Winning Service provider shall be released on the submission of Performance Security.
- (d) In case of annulment, Bid Bond shall be returned to the bidder.
- (e) The Bid Bond must be signed and dated by the Corporate Secretary or equivalent officer of the bank providing the Bid Bond.

6.5.5 The Service provider must submit a **Technical Proposal** in conformity with paragraph 7.1.1. of the RFP.

- (a) The Technical Offer must be signed and dated by the Authorised Representative.

### **6.6 Financial Proposal**

6.6.1 The Service provider must submit a **Financial Offer** in conformity with Schedule 7.

- (a) The Financial Offer must be signed and dated by the Authorised Representative.

## **SECTION 7 - EVALUATION**

### **7.1 Responsiveness Criteria**

7.1.1 Prior to evaluation of Proposals, TransPeshawar Company shall determine whether each Proposal is responsive to the requirements of the RFP. A Proposal shall be considered responsive only if:

- (a) the Proposal is received by the Proposal Submission Deadline;
- (b) the Proposal contains all the information (complete in all respects) as requested pursuant to this RFP; and

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(c) the Proposal does not contain any condition or qualification(s).

7.1.2 TransPeshawar Company reserves the right to reject any Proposal which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by TransPeshawar Company in respect of such Proposal.

**7.2 Evaluation Criteria**

7.2.1 TransPeshawar Company shall evaluate the Technical Offers in accordance with the following criteria:

<b>Technical Offer</b>	<b>Maximum Points</b>	<b>How each item is scored</b>	<b>Data to be provided by the Service provider</b>
Organisational structure	05	Current Organizational structure if the bidder has a well-defined departmental structure, such as Accounts, operations, HR/Admin, Quality Management etc  No Organization Chart/Hierarchy: 0  Organization Chart/Hierarchy: 5	Organization Chart  (In case of JV/Consortium, apply to all members)
Total number of human resources managed by the company	05	Less than 100= 0 Points 101 or more =05 Points	List of Human Resources Employed Stating Designation and Contact numbers (Duly attested).  (In case of JV, any one member of the JV/Consortium can fulfil this criteria or both members collectively)
<b>Generator Experience</b>			
Number of years of experience in operation and maintenance of Generators	20	More than 5 years = 20 Points 4.1 to 5 years = 15 Points 3.1 to 4 years = 10 Points  Less than 3 years = 00 Points	Contract document OR Letter of Award OR Any other valid document for evidence  (In case of JV, applies to any one single member with relative experience or both members collectively)



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Total number of Generators operated and maintained by the bidder in various projects so far	20	More than 30 = 20 Points 21 to 30= 15 Points 11 to 20 = 10 Points Less than 10 = 00 Points	Contract document OR Letter of Award OR Any other valid document for evidence  (In case of JV, applies to any one single member with relative experience or both members collectively)
Number of Generator installed	10	More than 30 = 10 Points 15 to 30= 05 Points Less than 15 = 00 Points	Contract document OR Letter of Award OR Any other valid document for evidence (In case of JV, applies to any one single member with relative experience or both members collectively)
<b>Financial Capability</b>			
Average Annual Turnover in last three years in Millions	20	More than 150 = 20 Points 101 to 150= 15 Points 50 to 100= 10 Points Less than 50 = 0 Points	Financial Statements/audited statements for the last three Fiscal years OR Calendar Years whichever is applicable in the country origin of operations.  (In case of JV, any one member of the JV/Consortium can fulfil this criteria or both members collectively)
Net Worth in Last three Year in Millions (Total Assets - Total Liabilities)	20	More than 100 = 20 Points 76 to 100 = 15 Points 51 to 75 = 10 Points Less than 50 = 0 Points	Financial Statements/audited statements for the last three Fiscal years OR Calendar Years whichever is applicable in the country origin of operations.  (In case of JV, any one member of the JV/Consortium can fulfil this criteria or both members collectively)
<b>Total Technical Offer Score</b>	<b>100</b>		

7.2.2 All Service providers having submitted:

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- (a) a non-responsive Technical Proposal and/or having obtained a total Technical Offer score of less than seventy (70) points shall be disqualified and their Financial Proposals shall be returned unopened; and
- (b) a responsive Technical Proposal and having obtained a total Technical Offer score of seventy (70) points or more shall be qualified for the evaluation of their Financial Proposal.
- (c) Following documents shall be submitted as part of Technical Proposal: -
  - i. Copy of its company registration with the Securities and Exchange Commission of Pakistan (SECP), or Registrar of Firms. In case of JV, applicable to all.
  - ii. Audited Financial Statements of last three years (In case of JV/consortium apply to all) or Financial Statements as applicable in the country origin of operations.
  - iii. Valid Registration Certificate for Income Tax from Government of Pakistan (FBR) and Sales Tax from Khyber Pakhtunkhwa Provincial Revenue Authority (KPRA). In case of JV, applicable to all members.
  - iv. is on Active Tax Payer list with FBR and KPRA;
  - v. MOU or Agreement Deed or JV Agreement, in case of JV;
  - vi. Company is not blacklisted (Provide undertaking on Judicial Paper)
  - vii. Supporting documents mentioned in Article 7.2.1
  - viii. Affidavit of Integrity Pact
  - ix. Initials on RFP, Operator agreements and all its attachments as token of acceptance of terms and conditions.

(Notes: All documents must be supported by English translation, if in another language)

7.2.3 Among the Service providers having qualified for the evaluation of their Financial Proposal and having submitted a compliant Financial Proposal, the Service provider offering the lowest price shall be appointed as the First Winning Service provider/ best evaluated bid.

### **7.3 Information**

7.3.1 Any information contained in the Application shall not in any way be construed as binding on TransPeshawar Company, its agents, successors or assigns, but shall be binding against the Service provider if any contract is subsequently awarded to it under the Bidding Process on the basis of such information.

### **7.4 Clarification**

7.4.1 TransPeshawar Company may, at its sole discretion, seek clarifications and ask for supporting documents from any Service provider regarding its Proposal. Such

## **Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in Peshawar BRT System**

clarification(s) must be provided within the time specified by TransPeshawar Company for this purpose. Any request for clarification(s) and all clarification(s) must be sent by email, at the address specified in paragraph 5.4.1.

- 7.4.2 If a Service provider does not provide clarifications sought under paragraph 7.4.1. within the prescribed time, its Proposal may be rejected. In case the Proposal is not rejected, TransPeshawar Company may proceed to evaluate the Proposal by construing the particulars requiring clarification to the best of its understanding, and the Service provider shall be barred from subsequently questioning such interpretation of TransPeshawar Company.

### **SECTION 8 - GENERAL MATTERS**

#### **8.1 Responsibility of Service providers**

- 8.1.1 Notwithstanding any information given in the RFP and any additional communication from TransPeshawar Company, including supplemental notices and bid bulletins, it is the sole responsibility of any Service provider to:

- (a) be fully acquainted with the laws, requirements, terms, and conditions of the Bidding Process;
- (b) examine all the bidding documentation, including all instructions, annexes, forms, schedules, terms, specifications, and drawings; and
- (c) familiarize itself with all existing laws, decrees, acts, rules, and ordinances of Islamic Republic of Pakistan, whether national or local, which may affect the provision of the Required Services.

#### **8.2 Confidentiality**

- 8.2.1 Information relating to the examination, clarification, evaluation and recommendation for the Service providers shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising TransPeshawar Company in relation to or matters arising out of, or concerning the Bidding Process.

- 8.2.2 TransPeshawar Company shall treat all information submitted as part of the Proposal in confidence and shall require all those who have access to such material to treat the same in confidence.

- 8.2.3 TransPeshawar Company shall not divulge any such information, unless it is directed to do so by any statutory body that has the power under law to require its disclosure or to enforce or assert any right or privilege of the statutory body and/or TransPeshawar Company.

#### **8.3 Proprietary Data**

- 8.3.1 All documents and other information supplied by TransPeshawar Company or submitted by a Service provider to TransPeshawar Company shall remain or become the property of TransPeshawar Company.

## **Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in Peshawar BRT System**

- 8.3.2 Service providers must treat all information related to the Bidding Process as strictly confidential and must not use it for any purpose other than for preparation and submission of a Proposal.
- 8.3.3 TransPeshawar Company will not return any Proposal or any information provided along therewith except copy of Proposal and unopened Financial Proposal.

### **8.4 Fraud and Corruption**

- 8.4.1 It is TransPeshawar Company policy to require that procuring entities and employers (including beneficiaries of public funds), as well as Service providers, suppliers and contractors under PPP or Public-funded contract, observe the highest standard of ethics during the procurement and execution of such contracts.
- 8.4.2 In pursuit of this policy, TransPeshawar Company:

- (a) defines, for the purposes of this provision, the terms set forth below as follows:

**Coercion** means harming or threatening to harm, directly or indirectly, persons, or their property to influence their involvement in the Bidding Process, or affect the execution of the Service Agreement.

**Collusion** means a scheme or arrangement between two or more Service providers, with or without the knowledge of the government, designed to establish financial offers or prices at artificial, non-competitive levels.

**Corrupt Practice** means the offering, giving, receiving, or soliciting, of anything of value to influence the action of a public official in the Bidding Process or in contract execution and includes inter alia bribery, extortion or coercion, which involves threats of injury to person, property or reputation.

**Fraudulent Practice** means a misrepresentation of facts in order to influence the Bidding Process or the execution of a contract to the detriment of the procuring entity, and includes collusive practices among Service providers (prior to or after the submission of Proposals) designed to establish bid prices at artificial, non- competitive levels and to deprive the procuring entity of the benefits of free and open competition.

**Restrictive Practice** means any act, scheme, plan or agreement such as forming a group, clique, cartel, trust, syndicate, combine, pool and the like or arriving at any understanding or arrangement among Service providers, Consortium Members, Subcontractors, or the Affiliates of any of these entities, with the objective of restricting, subverting or manipulating a full and fair competition in the Bidding Process.

**Undesirable Practice** means (i) establishing contact with any person connected with or employed or engaged by TransPeshawar Company with the objective of canvassing or lobbying or (ii) in any manner influencing or attempting to influence the Bidding Process.

- (b) will exclude from the Bidding Process any Service provider found to be engaging or having engaged in any Corrupt Practice, Collusion, Coercion, Fraud, Fraudulent Practice, Undesirable Practice or Restrictive Practice in competing for the provision of the Required Services; and

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- (c) will denounce to relevant authorities any Service provider found to be engaging or having engaged in any Corrupt Practice, Collusion, Coercion, Fraud, Fraudulent Practice, Undesirable Practice or Restrictive Practice in competing for the provision of the Required Service, which may result in the Service Agreement being cancelled and/or such Service provider incurring civil and criminal liability under the applicable laws and regulations and being declared ineligible, for a period of ten (10) years, to be awarded any public-funded contract in the Islamic Republic of Pakistan.

**8.5 Governing Law and Rules**

- 8.5.1 The provisions of Islamic Republic of Pakistan shall govern all matters relating to this RFP.

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**Schedule 1 Business Structure (Firm/Company/corporation)**

*To be submitted by a Service provider which is a partnership or corporation*

Name of Service provider: \_\_\_\_\_

**Contact Information of Service provider:**

Address	
Website	
Contact Person	
Telephone	
Fax	
Email	

Entity which fulfils the **Financial Capability** requirement:

Name of Entity	
Relationship to Applicant	
Address	
Website	
Contact Person	
Telephone	
Fax	
E-mail	

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Entity which fulfils the **Required Services Experience** requirement:

Name of Entity	
Relationship to Applicant	
Address	
Website	
Contact Person	
Telephone	
Fax	
E-mail	

For and on behalf of (*name of Service provider*)

(*signature of Authorized Representative*)

\_\_\_\_\_

(*name, title and date*)

**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in  
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**Schedule 2 Business Structure (consortium)**

*To be submitted by a Service provider which is a Consortium*

Name of Consortium: \_\_\_\_\_

**Consortium Members**

	Member	Other member	Other member
Name			
Percentage Interest in the Consortium			
Type of Legal Entity (corporation/ partnership)			

Notes: 1) *Insert columns as necessary to table above*

2) *Attach supporting attested documents*

**Contact Information of Consortium Members**

Consortium Member	
Address	
Website	
Contact Person	
Telephone	
Fax	
Email	

Consortium Member	
Address	
Website	
Contact Person	
Telephone	
Fax	
Email	



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Consortium Member	
Address	
Website	
Contact Person	
Telephone	
Fax	
Email	

*(Insert tables as necessary)*

Entity which fulfils the **Financial Capability** requirement:

Name of Entity	
Relationship to Applicant	
Address	
Website	
Contact Person	
Telephone	
Fax	
E-mail	

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Entity which fulfils the **Required Services Experience** requirement:

Name of Entity	
Relationship to Applicant	
Address	
Website	
Contact Person	
Telephone	
Fax	
E-mail	

For and on behalf of (*name of Service provider*)

(*signature of Authorized Representative*)

\_\_\_\_\_

(*name, title and date*)

**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in  
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**Schedule 3 Technical Proposal Submission Letter**

*To be submitted by the Service provider on the letterhead of the firm/company*

I, (name), (citizenship), of legal age, with office address at (address), as the Authorized Representative of (name of Service provider), hereby certify for and on behalf of (name of Service provider) that:

1. (name of Service provider) is bidding for the provision of the Required Services for **Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply Services in Peshawar BRT System**.
2. and hereby submitting its Proposal, which shall remain valid and binding upon (name of Service provider) for a period of one hundred eighty (180) days from the Proposal Submission Date;
3. (name of Service provider) confirms that all statements made and the information and documents provided in its Proposal, including statements made by all Consortium Members, their Affiliates and proposed Subcontractors, are true and correct, and any misrepresentation or false statement made therein shall be a ground for its disqualification;
4. (name of Service provider) authorizes TransPeshawar Company to conduct any inquiries or investigations to verify the statements, documents, and information submitted in its Proposal, and to seek clarification from its clients and bankers regarding any technical and financial aspects; (name of Service provider) also permits third parties to supply information required to verify statements and information submitted in its Proposal;
5. (name of Service provider) acknowledges the right of TransPeshawar Company to reject its Proposal and to cancel the Bidding Process at any time, without incurring any liability, and accepts all the terms and conditions of the Request for Proposals;
6. (name of Service provider), including all Consortium Members, their Affiliates and proposed Subcontractors, have not at any time during the Bidding Process engaged in any Corrupt, Fraudulent, Coercive, Undesirable, or Restrictive Practices, nor have a Conflict of Interest;
7. (name of Service provider) waives any right to and shall not seek or obtain any restraining order, writ of injunction or prohibition or any other form of coercive judicial, quasi-judicial or administrative writ, process or issuance against TransPeshawar Company inconvenient the Bidding Process; and
8. (name of Service provider) acknowledges that TransPeshawar Company is undertaking this Bidding Process in the performance of its functions to ensure the provision of a critical basic necessity and that, therefore, the provision of the Required Services is of paramount public interest and importance and that TransPeshawar Company will suffer serious and irreparable damage on account of any breach by (name of Service provider) of these undertakings, and agree that the breach of these undertakings shall result in (name of Service provider)'s automatic disqualification from the Bidding Process.

For and on behalf of (name of Service provider)

(signature of Authorized Representative)

**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in  
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---

*(name, title and date)*

**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in  
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**Schedule 4 Authority to Bid and Designation of Authorized Representative  
(Company/corporation)**

*To be submitted by a Service provider which is a partnership or corporation*

I, (Corporate Secretary or equivalent officer), hereby depose and state that:

I am a citizen of the (Islamic Republic of Pakistan), of legal age and a resident of (Pakistan);

I am the duly elected (Corporate Secretary or equivalent officer) of (name of Service provider), a (corporation/partnership) organized and existing under and by virtue of the laws of (Pakistan);

At a regular/special meeting of the Board of Directors/Partners of the Firm, held on (date) at (place), in which meeting a quorum was present and acting throughout, the following resolutions were unanimously passed and approved:

1. That (name of Service provider) be, and is, authorized to participate in the Bidding Process and to bid for the provision of the Required Services for TransPeshawar Company;
2. That (name of Representative) be and is hereby appointed as the authorized representative of the Service provider during the Bidding Process, authorized to execute, sign, and receive documents for, and otherwise act in the name of, the Service provider; and
3. That any and all acts done and/or performed by (name of Representative) under and by virtue of this resolution be, as they are hereby, confirmed and ratified.

These resolutions have not been revoked, amended or modified and remain valid and binding on the Service provider;

That the above resolutions are in accordance with the records of the Service provider.

For and on behalf of (name of Service provider)

(signature of Corporate Secretary or equivalent officer)

\_\_\_\_\_

(name, title and date)

**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in  
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**Schedule 5 Authority to Bid and Designation of Authorized Representative  
(Consortium)**

*For a Service provider which is a Consortium, to be submitted by each Consortium Member*

I, (Corporate Secretary or equivalent officer), hereby depose and state that:

I am a citizen of the (Islamic Republic of Pakistan), of legal age and a resident of (Pakistan);

I am the duly elected (Corporate Secretary or equivalent officer) of (name of Consortium Member), a (corporation/partnership) organized and existing under and by virtue of the laws of (Pakistan);

At a regular/special meeting of the Board of Directors/Partners of the Firm, held on (date) at (place), in which meeting a quorum was present and acting throughout, the following Resolutions were unanimously passed and approved:

1. That the Firm be, and is, through a Consortium consisting of the following Members and their respective nationalities and percentage interests in the Consortium, authorized to participate in the Bidding Process and bid for the provision of the Required Services for TransPeshawar Company;

Name of Consortium Member	Nationality	% Interest

*(Insert rows as necessary)*

2. That (name of Authorized Representative) be and is hereby appointed as the authorized representative of the Firm, authorized to execute, sign, and receive documents for, and otherwise act in the name of, the Firm;
3. That the Firm in the exercise of its interest in the Consortium hereby authorizes (name of Authorized Representative) as representative of the Consortium during the Bidding Process for the provision of the Required Services, and for such purpose shall have the authority to execute, sign and receive documents for, and otherwise act in the name of the Consortium; and
4. That any and all acts done and/or performed by (name of Authorized Representative) under and by virtue of this resolution be, as they are hereby, confirmed and ratified.

These resolutions have not been revoked, amended or modified and remain valid and binding on the Firm;

That the above resolutions are in accordance with the records of the Firm.

**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in  
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For and on behalf of (*name of the Firm*)

(*signature of Corporate Secretary or equivalent officer*)

\_\_\_\_\_

(*name, date and title*)

**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in  
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**Schedule 6 Bid Bond**

*To be submitted by the Bank providing the Bid Bond*

Whereas *(name of Service provider, in case of JV insert all names)* has submitted a Proposal for the Tender: **Operation and Maintenance of Generators, Dewatering Pumps and Fuel Supply Services in Peshawar BRT System** for TransPeshawar Company.

I, *(name)*, *(citizenship)*, of legal age, with office address at *(address)*, hereby declare for and on behalf of *(name of Bank)* that *(name of Bank)* is bound to TransPeshawar Company in the sum of ----- Pakistani Rupees (PKR -----) for payment to TransPeshawar Company.

*(name of Bank)* undertakes to pay to TransPeshawar Company up to the above amount upon receipt of its first written demand, without TransPeshawar Company having to substantiate its demand, provided that in its demand TransPeshawar Company will note that the amount claimed by it is due because *(name of Service provider)* has violated one of the conditions stated in the Request for Proposals.

This Bid Bond will expire, (a) if the Service provider is a Winning Service provider, upon signing of Agreement, or (b) if the Service provider is not a Winning Service provider, upon the earlier of (i) seven (7) days after signing of Agreement by successful service providers and (ii) thirty (30) days after the expiry date of the Service provider's Proposal.

Any demand for payment under this guarantee must be received by *(name of Bank)* on or before the date of expiry of the Bid Bond.

For and on behalf of *(name of Bank)*

*(signature of Corporate Secretary or equivalent officer)*

---

*(name, title and date)*



**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in  
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**Schedule 7 Financial Offer**

*To be submitted by the Service provider*

I, (name), (citizenship), of legal age, with office address at (address), as the Authorized Representative of (name of Service provider), hereby declare for and on behalf of (name of Service provider) that:

1. (name of Service provider) has examined the information provided in the Request for Proposals (including annexures) and the Service Agreement;
1. (name of Service provider) has examined the specifications of Equipment and made all due diligence in estimation of all operation and maintenance costs of the Equipment and allied services under the Agreement;
2. (name of Service provider) hereby submits its Financial Proposal, which includes cost of all services mentioned in RFP, Service Agreement, Operation Specification Schedule and its attachment (Annexures), which shall remain valid and binding upon (name of Service provider) for a period of one hundred eighty (180) days from the Proposal Submission Date; and
3. The Monthly Service charge offered by (name of Service provider) is of an amount of (integer amount in words) Pakistani Rupees (PKR (integer amount in numbers)).

S. No	Financial Quote	Unit	Quantity (A)	Price/ Unit (PKR) (B)	Total Price = A x B (PKR)
1	Supply, Installation, Testing and Commissioning of New Flow Meters with 01-year warranty with specifications mentioned in this document and to be installed on auxiliary tanks. (The price shall be quoted exclusive of sales tax on Goods)	Nos	34		
2	Monthly Service charge offered by the service provider to TransPeshawar including cost of all taxes for provision of all services mentioned in RFP/ Contract including its attachments. (The price shall be quoted exclusive of sales tax on services)	Months	60		
<b>Amount in Pakistani Rupees in words (Amount in integer)</b>					

For and on behalf of (name of Service provider)

(signature of Authorized Representative)

\_\_\_\_\_

(name, title and date)

**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in  
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**Schedule 8 Affidavit of Integrity Pact**

**DECLARATION OF FEES, COMMISSIONS AND BROKERAGE ETC. PAYABLE BY THE  
SUPPLIERS/CONTRACTORS OF GOODS, SERVICES & WORKS**

[Name of service provider/operator] hereby declares its intention not to obtain or induce the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of KPK (GoKPK) or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoKPK) through any corrupt business practice.

Without limiting the generality of the foregoing, [Name of service provider/operator] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or including the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoKPK, except that which has been expressly declared pursuant hereto.

[Name of service provider/operator] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoKPK and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[Name of service provider/operator] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to GoKPK under any law, contract or other instrument, be voidable at the option of GoKPK.

Notwithstanding any rights and remedies exercised by GoKPK in this regard, [Name of service provider/operator] agrees to indemnify GoKPK for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoKPK in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by [Name of service provider/operator] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoKPK.

\_\_\_\_\_  
Signature & Stamp

Subscribed and sworn to me this \_\_\_\_\_ day of \_\_\_\_\_ 2020

**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in  
Peshawar BRT System**

**Schedule 9 Comment Form**

Name of Service provider: \_\_\_\_\_

Individual Clarification Meeting requested : Yes / No

**Comment 1**

Subject	
Location in RFP (clause and page number)	
Original wording in RFP	
Comment / motivation for amendment	
Suggested amended wording	

**Comment 2**

Subject	
Location in RFP (clause and page number)	
Original wording in RFP	
Comment / motivation for amendment	
Suggested amended wording	

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**Comment 3**

Subject	
Location in Service Agreement (clause and page number)	
Original wording in Service Agreement	
Comment / motivation for amendment	
Suggested amended wording	

**Comment 4**

Subject	
Location in Service Agreement (clause and page number)	
Original wording in Service Agreement	
Comment / motivation for amendment	
Suggested amended wording	

**Comment 5**

Subject	
Location in Service Agreement (clause and page number)	
Original wording in Service Agreement	
Comment / motivation for amendment	

**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in  
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Suggested amended wording	
---------------------------	--

**Comment 6**

Subject	
Location in Service Agreement (clause and page number)	
Original wording in Service Agreement	
Comment / motivation for amendment	
Suggested amended wording	

**Comment 7**

Subject	
Location in Service Agreement (clause and page number)	
Original wording in Service Agreement	
Comment / motivation for amendment	
Suggested amended wording	

**Comment 8**

Subject	
Location in Service Agreement (clause and page number)	
Original wording in Service Agreement	

**Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply in  
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Comment / motivation for amendment	
Suggested amended wording	

**Comment 9**

Subject	
Location in RFP (clause and page number)	
Original wording in Sub-Concession Agreement	
Comment / motivation for amendment	
Suggested amended wording	

**Comment 10**

Subject	
Location in RFP (clause and page number)	
Original wording in Sub-Concession Agreement	
Comment / motivation for amendment	
Suggested amended wording	

For and on behalf of (*name of Service provider*)

(*signature of Authorized Representative*)

\_\_\_\_\_

(*name, title and date*)

**Agreement for Operation and Maintenance of  
Generators, Dewatering Pumps & Fuel Supply  
Services in Peshawar BRT System**

between

**TransPeshawar Company**

and

**[SERVICE PROVIDER]**

**Date: XX.XX. 2020**

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**THIS OPERATION AND MAINTENANCE OF GENERATORS, DEWATERING PUMPS AND FUEL SUPPLY SERVICES, IN PESHAWAR BRT SYSTEM AGREEMENT** (the “Agreement”) is made on [REDACTED] 2020

**BETWEEN**

1. **TRANSPESHAWAR (THE URBAN MOBILITY COMPANY)**, a company incorporated with Security Exchange Commission of Pakistan on February 09, 2017 with company registration no.0105691 and whose registered address is at KPUMA Building, Chamkani, GT Road, Peshawar, Khyber Pakhtunkhwa, Pakistan (“**TPC**”); and
2. *<Insert name of the Service Provider>*, a company incorporated in [REDACTED], with company registration no. [REDACTED] and whose registered address is at [REDACTED] (the “**Service Provider**”).

TPC and the Service Provider are individually referred to herein as a “**Party**” and collectively as the “**Parties**”.

**WHEREAS:**

- A. TPC is a corporate entity established by the Government of Khyber Pakhtunkhwa, Pakistan responsible for design, procurement, implementation and ongoing BRT operations in the Peshawar BRT System.
- B. TPC intends to enter into long-term agreements based on output based or performance-based parameter with suitable Service Provider (selected through a competitive bidding process) who will provide operation and maintenance of generators, dewatering pumps and fuel supply services as part of the Project.
- C. The Service Provider is a company/ Joint Venture entering into and performing this Agreement.
- D. TPC wishes to appoint the Service Provider on a non-exclusive basis to provide the Services and the Service Provider wishes to accept such appointment and carry out the Services, in accordance with the terms and conditions of this Agreement.

**NOW THE AGREEMENT PROVIDES:**

**PART A - GENERAL**

**1. Preliminary Matters**

**1.1 Definitions and Interpretation**

1.1.1 The defined words and expressions set out in Clause 1 of Annex A [*Definitions and Interpretation*] hereof and the provisions relating to the construction and interpretation of the Agreement set out in Clause 2 of Annex A [*Definitions and Interpretation*] hereof shall apply to the Agreement.

1.1.2 In the event of any inconsistency between the provisions of the body of this Agreement and the Annexes, or between any of the Annexes, the conflict shall be resolved according to the following descending order of priority:

- (a) the body of this Agreement, including Annex A;
- (b) Annex B [Operational Specifications Schedule];
- (c) Annex C [Payment Calculation Schedule];
- (d) Annex D [Performance Guarantee],
- (e) Annex E [Request for Proposal and Proposal of Service Provider]
- (f) Annex F [EOP List to be provided after signing of the Agreement]
- (g) Annex G [Integrity Pact]
- (h) Annex H to N

- 1.2 Effect of this Agreement
  - 1.2.1 The Parties hereby agree that this Agreement shall immediately be binding on them as of the Effective Date.
- 1.3 Conditions Precedent
  - 1.3.1 TPC shall issue a Service Notice to Service Provider indicating the date upon which the Services are to commence subject to conditions precedent are met.
- 2. Appointment of Service Provider**
  - 2.1 Appointment
    - 2.1.1 TPC's signing this Agreement shall indicate its appointment of the Service Provider to provide the Services. Such appointment shall only be effective as of the Effective Date.
    - 2.1.2 The Service Provider hereby accepts the appointment by TPC and agrees to provide the Services in accordance with the terms and conditions of this Agreement.
  - 2.2 Commencement of the Services and Term
    - 2.2.1 The Service Provider shall provide the Services from the Commencement Date until the Termination Date.
    - 2.2.2 Unless this Agreement is earlier terminated, the Service Provider shall continuously provide the Services contemplated under this Agreement (as may be amended pursuant to its terms) for a term of five (05) years commencing from the Commencement Date. After five years, Agreement may be extended year-on-year basis subject to satisfactory performance and approval of TPC.
- 3. Performance Guarantee**
  - 3.1 The Service Provider shall ensure that it maintains with TPC a valid and enforceable Performance Guarantee until the Service Provider has fulfilled all its obligations under the Agreement. The Service Provider shall have delivered to TPC as a Condition Precedent the duly executed Performance Guarantee in the form attached hereto as Annex D and in the amount of PKR 20,000,000 (Twenty Million). The Performance Guarantee shall have a term of one (01) years and shall be renewed or replaced and delivered to TPC no later than thirty (30) days before its expiry. TPC shall return the previously provided Performance Guarantee to the Service Provider within fourteen (14) days of the receipt of the replacement of Performance Guarantee.
  - 3.2 Subsequent to the delivery of the initial Performance Guarantee, the Service Provider shall thereafter ensure that the amount of the renewed or replacement Performance Guarantee is of PKR 20,000,000 (Twenty Million).
  - 3.3 The Performance Guaranteed shall be issued by the Scheduled Bank of Pakistan having minimum Credit Rating of AA in long run.
  - 3.4 If the Service Provider fails to provide TPC with a replacement Performance Guarantee as required under this Agreement, TPC may (without prejudice to its other remedies) immediately liquidate all or part of the Performance Guarantee.
  - 3.5 If the Performance Guarantee is partially liquidated, the Service Provider is obliged to replenish the Performance Guarantee in full within seven (7) days of the date of any liquidation thereof. If the Service Provider fails to replenish the Performance Guarantee in accordance with this clause, this shall constitute a material breach of this Agreement and TPC shall be entitled to liquidate the remainder of the Performance Guarantee and terminate this Agreement pursuant to clause 31.1.

3.6 Subject to the fulfilment by the Service Provider of all of its obligations under this Agreement, the Performance Guarantee shall be released by TPC within thirty (30) days after the Termination Date.

3.7 All fees, taxes and expenses associated with preparing, providing, issuing, extending, replacing, replenishing or stamping (if applicable) of the Performance Guarantee shall be borne by the Service Provider.

#### **4. Payment for Services**

4.1 Payment to the Service Provider for the provision of the Services shall be made in accordance with the Payment Calculation Schedule and to Lead Partner or nominated by both among the parties, in case of JV/consortium.

4.2 TPC shall be entitled to set off against any amounts payable to the Service Provider, any amount which may be due by the Service Provider to TPC.

4.3 The procedure for payments of Diesel Supplies to the Service Provider shall be as under:

4.3.1 The price of Diesel shall be paid on the regulated Diesel price of the respective petrol pump.

4.3.2 Payment of Diesel invoice shall be made within 7 days of receipt of the invoice. However, the invoice would be processed only if it is accompanied by reports required in Operation Specification Schedule.

4.4 Any payment to the Service Provider shall not constitute a waiver of any right held by TPC in respect of a breach of this Agreement by the Service Provider.

#### **5. Tax**

5.1 To the extent that the Services or any additional activities and/or services offered by the Service Provider pursuant to this Agreement are taxable, the Service Provider agrees to bear all Applicable taxes, charges, duties and/or tariffs by itself (Except Sales Tax on Services) and, upon request from TPC, provide proof that such obligations have been satisfied in full. Sales Tax on Services, if any, shall be paid by TPC.

5.2 Withholding of all taxes will be made as per applicable law. Services exempt from withholding of taxes, the Service Provider shall at all times be in possession of a valid tax exemption certificate and shall provide the same to TPC along with each invoice / bill for payment. In case the services are exempt from sales tax, the service provider shall furnish a valid reference of exemption from the applicable tax law.

5.3 TPC may cease all payments to the Service Provider in respect of any period during which the Service Provider is not in compliance with the provisions of clauses 5.1 and 5.2 above. Upon such compliance by the Service Provider, TPC shall affect payment of all amounts that had been withheld pursuant to this clause.

### **PART B - THE EQUIPMENTS**

#### **6. The Equipment**

6.1 Generator, Dewatering Pumps, UPS

6.1.1 Peshawar Development Authority (PDA) design, procured and commissioned Generator, Dewatering Pumps, UPS and pump control panels for Peshawar BRT System and handed over to TPC for Operation and Maintenance with details given in Operation Specification Schedule. Equipment(s) is defined in Operation Specification Schedule.

6.1.2 The Equipment shall be handed over to the Service Provider at BRT Stations, Depot, BRT Corridor, Buildings with details given in Operation Specification Schedule within one (01) week of Commencement.

- 6.1.3 For the duration of this Agreement, unless agreed otherwise in writing by the Parties, the Service Provider shall use the Equipment solely for the provision of the Services in accordance with this Agreement.
- 6.1.4 Legal title to and ownership of the Equipment (including all associated tools and equipment) shall remain with TPC.
- 6.1.5 The Service Provider shall not create or allow the creation of any Encumbrance in any manner of any or all of the Equipment without the prior written consent of TPC.
- 6.1.6 TPC shall not hold Service Provider responsible to provide services outside the capability of the Equipment furnished, installed and commissioned under the PDA Contracts.

## **7. Delivery, Care and Ownership of the Equipment**

- 7.1 TPC shall handover the Equipment allocated to the Service Provider on the relevant Equipment Handover Date(s) (tentatively) and the Service Provider shall be obliged to accept such handover in accordance with this Agreement.
- 7.2 The Equipment shall be properly maintained by the Service Provider in accordance with the manufacturer's standards and/or requirements.
- 7.3 TPC shall be entitled to conduct unscheduled inspections of each Equipment to ensure that it continues to be in compliance with the Operational Specifications Schedule and in satisfactory operational condition (fair wear and tear excluded). If any Equipment is found not to be in compliance with the Operational Specifications Schedule or in unsatisfactory condition, TPC shall immediately inform the Service Provider and the Service Provider shall, within a reasonable time or a time determined by TPC, effect the required repairs/replacement at its own cost.
- 7.4 If an Equipment requires repair/replacement and is not so repaired/replaced by the Service Provider within a reasonable time or the time determined by TPC, TPC shall be entitled to either liquidate a part or all of the Performance Guarantee for purposes of effecting such repairs/replacement and/or access the Reserve Fund for purposes of effecting such repairs/replacement. Any usage of the Reserve Fund by TPC shall obligate the Service Provider to replenish the Reserve Fund to the required and/or agreed levels.

## **PART C - SERVICE PROVIDER RESPONSIBILITIES**

### **8. General Obligations – Equipment and Operations**

- 8.1 The Service Provider shall abide by all the terms, rules and regulations in accordance with this Agreement (including the Operational Specifications Schedule) and the Applicable Law.
- 8.2 The Service Provider shall employ and engage trained and skilled staff (within 07 days of the award of contract) reasonably required to complete the duties of this contract to the satisfaction of TPC.
- 8.3 The Service Provider shall provide the list of Service provider's personnel working on stations/TPC office, along with their basic information, to TPC for security clearance and issuance of permit to the BRT Corridor with sufficient details. The list to be shared on monthly basis or at time when changes occurs. Furthermore, the Service provider shall provide registration details of vehicles, used for delivery and otherwise essential for the execution of services, requiring access to BRT corridor during refuelling hours and maintenance of Equipment.
- 8.4 The Service Provider shall provide and cater for any kind of transportation needs for supply of diesel and human resource for execution of Services. The vehicles entered into the corridor must be in good working condition. The Service provider shall be responsible for the prompt removal of any vehicles broken down inside the BRT corridor.

- 8.5 The Service provider shall maintain vigilant supervision over its staff at all times. Dress code is to be applied with their service I.D for their distinct recognition. Apart from generally applied moral code the personnel of the service provide shall avoid to use any kind of toxic and narcotics, even BRT premises is a smoke free zone.
- 8.6 The Service Provider be responsible, at all times, for the conduct of its personnel and take prompt and strict disciplinary action against any conduct not in compliance with TPC's rules, regulations and instructions issued from time to time.
- 8.7 The Service Provider staff shall communicate with passengers and members of public in a customer friendly, professional and helpful manner.
- 8.8 The Service Provider shall ensure presence of its authorized representative(s) at any BRT site or TPC office at short but reasonable notice when so required by TPC and respond to queries of TPC in a timely manner.
- 8.9 The Service Provider shall be responsible for the medical and accidental insurance of its staff, payment of all dues like Social Security, EOBI. The Service Provider shall not engage staff below minimum wage as notified under Applicable Law. TPC shall not accept any responsibility of the designated personnel in the event of death, injury, disability or illness that may take place while performing/executing services required under the scope of this contract. Any compensation or expenditure towards the treatment of such injury/disability or loss of life shall be the sole responsibility of the Service provider.
- 8.10 The Service Provider shall be responsible that it does not engage or continue to engage any person having a criminal record/ conviction or otherwise undesirable persons.
- 8.11 TPC requires all Employees who are required to fulfil their duties in view of the public to wear uniforms at all relevant times during the rendering of the Services. The Service Provider shall ensure that its Employees are appropriately attired in the prescribed Uniforms. The Service Provider shall comply with the specification and/or design provided by TPC from time to time.
- 8.12 The Service Provider shall take prompt and reasonable action for resolution of each complaint and maintain a Log book, containing details regarding Turnaround Time (TAT), parts repaired/replaced, Service person etc., of each complaint received and resolved. TPC may prescribe a format of the Log book or established an electronic system, which shall be mandatory for the Service Provider to adopt. This includes resolution of complaints received from passengers as well as technical nature from TPC.
- 8.13 Agree to remove from the site, whenever required to do so by the TPC, any personnel considered by TPC to be unsatisfactory or undesirable.
- 8.14 Be liable to the penalty and Liquidated Damages for any loss incurred or suffered/any damage caused to movable or immovable property of TPC, on account of delayed, deficient or inadequate Services, or any actions adversely affecting warranty of the Equipment, or supply of substandard fuel, or interruption in the smooth operations of BRT Bus Service for reasons directly and solely attributable to the Service provider.
- 8.15 Report immediately to TPC any kind of material incident (to the extent of scope of Service Provider required as per this Contract) including but not limited to spillage of fuel, fuel theft, damage to TPC property and provide photographs of the incident.
- 8.16 Ensure their personnel do not enter into the BRT territory without valid entry cards/permit issued by the TPC.
- 8.17 The Service Provider shall ensure that the Equipment at all times are in compliance with the Operational Specifications Schedule, the requirements of any applicable specifications and the Applicable Law.

- 8.18 The Service Provider shall maintain detailed Equipment maintenance and repair records for the duration of this Agreement. TPC shall be entitled to audit such records upon giving the Service Provider no less than twenty-four (24) hours' notice. The Service Provider shall also provide these records (or any portions thereof) as may be reasonably requested by TPC.
- 8.19 Unless expressly specified in this Agreement, the Service Provider shall solely be responsible for all cost and/or expenses associated with the fit-out, furnishing, administration, office space and/or any and all operational costs associated with its operations until the Termination Date.

## **9. Operations and Maintenance of the Equipment**

- 9.1.1 The Service Provider shall provide the Services strictly in accordance with the Operational Specifications Schedule and any further instructions of TPC given pursuant to this Agreement.
- 9.1.2 The Service Provider shall be obliged to log a report with TPC within fifteen (15) minutes of the occurrence (or as soon as practicable thereafter) of any incident/accident, detailing the nature and location of the incident and where applicable, details of the parties involved. Service Provide shall report any incident to TPC at station or in corridor which are even not related to Service Provider scope of work.
- 9.1.3 From the Commencement Date and for the duration of the Agreement, the Service Provider shall be entitled to operate the Equipment and provide services in accordance with Operation Specification Schedule.
- 9.2 Temporary interruptions, delays or deviation from Services
- 9.2.1 The cancellation of Services by the Service Provider shall only be permitted if such cancellation is due to:
- (a) weather conditions (subject to prior agreement with TPC), or any Event of Force Majeure; or
  - (b) immediate danger to life and/or personal injury and/or serious damage to property,
- in which event, TPC and the Service Provider shall meet in good faith on an urgent basis, to agree upon the deviation from the Services to be allowed and the expected date and/or time of recommencement of the Services, or if the Parties fail to reach agreement within one (1) hour after having met for the first time, TPC's decision shall be final and binding on the Parties.
- 9.2.2 Where the Service Provider is of the opinion that Services should be cancelled due to boycott action, intimidation, violence, strike action or any threats of the foregoing, either against the Service Provider or generally, the Service Provider shall refer the matter to TPC for its decision, which shall be final and binding and not be subject to the provisions of clause 32. Should TPC decide that such cancellation is justified, no Liquidated Damages shall apply. However, should TPC decide that such cancellation is not justified and the Service Provider nevertheless fails to render the Services for any period of time whilst the action or threats contemplated above continue, the Service Provider shall be penalised in accordance with clause 27 and the Operational Specifications Schedule and no payment shall be made in respect of such cancelled Services.
- 9.2.3 The Service Provider shall inform TPC immediately of any proposed cancellation of any Services pursuant to clause 9.2.1(a) and/or clause 9.2.1(b) and the Parties shall meet on an urgent basis to agree upon the deviation to be allowed and the recommencement of the Services, or if they fail to reach agreement within a reasonable time as determined by TPC, TPC's decision shall be final and binding on the Parties and clause 32 shall not apply in relation to TPC's decision.



- 9.3 Skill and care in rendering uninterrupted Services
- 9.3.1 The Service Provider shall exercise the highest degree of skill, care and diligence in the provision of the Services to the reasonable satisfaction of TPC.
- 9.3.2 Without limiting the generality of the foregoing, the Service Provider shall provide the Services at a standard which would reasonably avoid the incurring of Liquidated Damages as contemplated in the Operational Specifications Schedule.
- 9.3.3 The Service Provider acknowledges and accepts that it is imperative for the success of the BRT System that the Services are rendered without interruption or delay and undertakes to do all things reasonably necessary to ensure such uninterrupted, prompt and efficient service.
- 9.4 Compliance with standard operating and control procedures and requirements
- 9.4.1 The Service Provider shall at all times comply with any standard operating and control procedures and requirements for the day to day administration, monitoring, control and performance of this Agreement as may be reasonably determined by TPC from time to time and the specific circumstances under which the BRT System operates from time to time, which shall include the Operational Specifications Schedule.
- 10. Operating Licenses**
- 10.1 The Service Provider shall maintain the validity of all Operating Licences, if required under Applicable Law, for the duration of this Agreement and shall ensure that the terms or conditions of such Operating Licenses are not contravened.
- 11. Technical Staff**
- 11.1 No later than 30 days before the Commencement Date, the Service Provider shall employ one or more Project Manager for coordination with TPC and dealing of day to day matters. They shall be fluent in the language for day to day communications. His name, duty, authority and any changes therein shall be communicated in writing to TPC.
- 11.2 The Service Provider shall hire Technical Staff who are suitably qualified and shall ensure that all Technical Staff for duration of the Services remain suitably qualified, trained and meet the requirements set out in the Operational Specifications Schedule and any Applicable Laws. TPC may implement their attendance system in their biometric system for monitoring.
- 11.3 Notwithstanding any Liquidated Damages that may be applied pursuant to this Agreement, in relation hereto, where a Technical Staff operates an Equipment in contravention of any Applicable Law and/or the requirements of the Operational Specifications Schedule, TPC shall be entitled to demand (and the Service Provider shall be obliged to promptly comply with such demand) that such Technical Staff is immediately removed from the BRT System and replaced with another Technical Staff who is suitably qualified.
- 12. Co-operation with Other Contractors**
- 12.1 Where interaction between the Service Provider and any Other Contractors/Service Providers is required in accordance with this Agreement, in practice or in accordance with a Service Notice or Protocol, for the efficient and effective operation of the BRT system, the Service Provider shall co-operate with Other Contractors/Service Providers and shall take such reasonable steps as may be required to formulate the necessary operating procedures and practices by agreement with Other Contractors, in accordance with the Service Notice or Protocol, as the case may be.
- 12.2 Should the Service Provider and Other Contractors fail to reach an agreement as contemplated in clause 12.1, TPC shall be entitled to issue a Protocol to regulate their interaction or make a final determination in the event of a dispute between them, as the case may be.

12.3 In any event, notwithstanding the provisions above, TPC shall at all times be entitled to issue Protocols regulating the interaction between the Service Provider and Other Contractors/Service Providers.

12.4 The Service Provider shall be obliged to follow such Protocols, which, in the event of a conflict, shall supersede any agreement between the Service Provider and Other Contractors in accordance with clause 12.1 above.

### **13. Employment**

13.1 The Service Provider shall recruit and employ all Employees necessary to provide the Services, including Operators, security, washer/cleaner, inspectors and all other administrative and management staff.

13.2 The Service Provider shall, in recruiting staff to comply with its obligations in accordance with this Agreement, and shall where appropriate, provide any training required (including but not limited to operating equipment, janitorial services, customer service, emergency management and services) to render such persons suitable to provide the Services required under this Agreement.

13.3 The Service Provider shall, for a period of no less than three (03) years from the Commencement Date, ensure that at least thirty percent (30%) of its Employees shall be employed from the EOP List. The Service Provider shall screen the potential staff on the EOP List and provide any training required in order to achieve and maintain the thirty percent (30%) threshold.

13.4 Should the percentage of Employees employed from the EOP List at any time fall below the threshold referred to in clause 13.3, TPC shall be entitled to request that the Service Provider provide TPC with a brief statement setting out:

13.4.1 the reasons for failing to maintain any of these thresholds;

13.4.2 all steps the Service Provider has taken to meet and maintain these thresholds (including providing applicable training to available but unqualified potential staff); and

13.4.3 any other factors which the Service Provider considers relevant in assisting TPC to exercise its discretion under clause 13.5.

13.5 After consideration of the Service Provider's statement and such further information as TPC may request, TPC shall be entitled, in its sole discretion, to waive all or part of any applicable Liquidated Damages under the Operational Specifications Schedule.

### **13.6 Gender Action Plan**

13.6.1 The Service Provider shall ensure that at least twenty percent (20%) of its Employees are female. Service Provider shall also develop internal policies to promote working environment for women, and person with disabilities which should be in line with national regulations.

13.6.2 Offices hired/ used by the Service Provider shall be universally accessible for women, children, and person with disabilities. Service Provider shall provide employment opportunities to person with disabilities in accordance with the relevant laws and provide equal employment opportunities irrespective of Gender preference.

13.6.3 Should the percentage of Employees employed from at any time fall below the threshold referred above, TPC shall be entitled to request that the Service Provider to provide TPC with a brief statement setting out:

a) the reasons for failing to maintain any of these thresholds;

- b) all steps the Service Provider has taken to meet and maintain these thresholds (including providing applicable training to available but unqualified potential staff); and
- c) any other factors which the Service Provider considers relevant in assisting TPC to exercise its discretion under clause below.

13.6.4 After consideration of the Service Provider's statement and such further information as TPC may request, TPC shall be entitled, in its sole discretion, to waive all or part of any applicable Penalty under the Key Performance Indicators/ Operational Specification Schedule.

#### **14. Uniforms**

14.1 The Service Provider shall ensure that its Employees are appropriately attired in the Uniforms prescribed in the Operational Specifications Schedule (as may be amended from time to time) or approved by TPC.

#### **15. Image and Marketing**

15.1 The Service Provider shall not use any image, brand name, company name or his parent company name, markings, graphics and/or signage of TPC for any purpose except with the written approval of TPC.

15.2 The Service Provider shall comply with instructions from TPC from time to time regarding branding in terms of the use of graphics, brand name, company name, information, signage, information, advertising and Equipment livery and will co-operate with and participate in agreed marketing programmes as directed by TPC.

#### **16. Monitoring of the Services**

16.1 TPC shall be entitled to require regular written reports by the Service Provider in such reasonable form, detail and frequency as may be determined by TPC or to call meetings with the Authorised Representative of the Service Provider on reasonable notice, for any purposes regarding the performance of the Services and/or the implementation of this Agreement.

16.2 An Authorised Representative of TPC shall at all reasonable times be given access to the Equipment, Employees and any place where the Services (or any portion thereof) are being performed to satisfy itself as to the Service Provider's compliance with its obligations under this Agreement and for purposes of assessing the Service Provider's performance against agreed KPIs. TPC shall be entitled to conduct random or schedule inspections of any Equipment, its component or its subsystems.

#### **17. Provision of Financial Information**

17.1 For the duration of this Agreement, the Service Provider shall deliver to TPC:

17.1.1 Audited annual financial statements of the Service Provider within ninety (90) days after each relevant Financial Year-end; and

17.1.2 Unaudited management accounts of the Service Provider (comprising a profit and loss account, balance sheet and cash flow statement), copies of which shall be delivered to TPC within thirty (30) days after the end of each Quarter of a Financial Year. Without detracting from TPC's rights under this Agreement, and in order to assist the Service Provider in taking proactive steps to ensure the sustainability of its operations and identify any negative trends which may likely impact the Services, TPC may provide the Service Provider with such feedback as it may consider appropriate from time to time arising from its consideration of the Service Provider's management accounts submitted in accordance with this clause 17.1.2.

- 17.2 The Service Provider shall provide TPC with all information as TPC may be required to provide to any Regulatory Bodies, from time to time.
- 17.3 The Service Provider's financial statements shall be prepared in accordance with IFRS (international financial reporting standards within the meaning of Companies Act 2017 as applicable in Pakistan) and fairly reflect the financial position of the Service Provider as at the date and for the period for which such statements are prepared.
- 17.4 The Service Provider shall furnish to TPC, within three (03) Business Days of receipt by it of written demand from TPC, all such additional information as may be reasonably required by TPC from time to time.
- 17.5 The Service Provider shall notify TPC in writing, immediately (but in all events within seven (7) days) upon the occurrence of any of the following events:
- 17.5.1 if at any time the Service Provider becomes Financially Distressed; or
- 17.5.2 if the Service Provider considers or resolves to seek any insolvency, bankruptcy or similar protection under Applicable Law.
- 17.6 If the Service Provider notifies TPC pursuant to clause 17.5, such notice shall set out the full details of the Financial Distress or the actual or proposed action, and TPC shall be entitled, without derogating from and/or diminishing any rights and/or entitlements it may have under this Agreement, under Applicable Law or otherwise, to do all things it deems necessary in order prevent any potential disruption to the Services.

## **18. Incident Reporting**

- 18.1 Should the Service Provider become aware of events or circumstances which have prevented, are preventing or will prevent the Service Provider from providing the Services, the Service Provider shall immediately after becoming so aware, advise TPC of such events or circumstances and also indicate the manner in which the provision of the Services were, are or are going to be impacted.
- 18.2 In addition to any obligations under Applicable Law, the Service Provider shall immediately after its occurrence notify TPC or its Authorised Representative of any accident relating to the Services (whether or not a Equipment has been involved) in which persons have been injured or killed.
- 18.3 The Service Provider shall be required to report all other incidents as may be further defined by a Protocol, excluding such incidents as described in clause 18.2 above, to TPC in writing within two (2) Business Days of the Service Provider becoming aware or where a prudent Service Provider should have reasonably become aware of the incident.
- 18.4 The Service Provider shall report any acts of vandalism or damage to Equipment to TPC within one (1) days of becoming aware of their occurrence.

## **19. Other responsibilities**

- 19.1 The Service Provider shall be responsible for the safe disposal of waste, oil, lubricant or water containing any variation of such lubricant in accordance with the Applicable Law.
- 19.2 The Service Provider shall at its own cost comply with all labor, employment, occupational health and safety regulations and standards applicable to the Services.
- 19.3 The Service Provider shall depute at least one person in Control Centre during Operation Hours (16 hours) for effective co-ordination with TPC.
- 19.4 The Service Provider shall be liable to compensate, replace, repair (whatever the case may be) as per original specification or as per work order issued by TPC for any damage caused to the property of TPC.

- 19.5 The Service Provider shall do all facilitation of TPC in the awareness of BRT System regarding its use and shall bear the cost of any incident or misuse of BRT Equipment (handed over to Service Provider) by passengers, public or any other third party and must recoup all missing equipment's and do necessary repair, if required. In addition, the Service Provider shall print 10,000 pamphlets of A4 size for as part of awareness campaign of passengers. The contents shall be approved by TPC.

## **PART D - MAINTENANCE OF EQUIPMENT**

### **20. General Obligations**

- 20.1 The Service Provider shall, at all times during the term of this Agreement, ensure that all Equipment utilised in rendering of the Services are kept in a state of good repair and maintained in accordance with the Equipment Supplier requirements and/or recommendations and the provisions of this Agreement. Notwithstanding anything to the contrary contained in this Agreement, the Service Provider shall:
- 20.1.1 be liable for any damage caused to the Equipment in accordance with its obligations under this Agreement; and
  - 20.1.2 at all times, unless expressly stated otherwise in this Agreement, be responsible for the service, maintenance and upkeep of the Equipment, including during the Defect Liability Period.

### **21. Maintenance**

- 21.1 The Service Provider shall at all times be required to service, maintain and repair the Equipment at its own cost and in strict accordance with the specifications, requirement and/or recommendations of the Equipment Supplier as notified to the Service Provider from time to time. The Service Provider shall not do anything which has the effect of voiding any warranty provided by an Equipment Supplier in respect of any of the Equipment. The Service Provider shall do all things required to ensure that TPC does not in any way breach its obligations under the Equipment Sale Agreement.
- 21.2 The Service Provider shall, at its own cost, ensure that each Equipment undergoes an Equipment Inspection Test according to Applicable Law and the results and other records relating to such tests shall be maintained and made available to TPC at its request. TPC may, in its discretion, request that the results of each such test be forwarded to TPC within seven (7) days of the completion of each such test.
- 21.3 If at any time Equipment is in need of service, maintenance and/or repair and the Service Provider fails to make such repair within a reasonable time, TPC shall notify the Service Provider of such failure and shall indicate in that notice the type of service, maintenance and/or repair that is required and the period within which such service, maintenance and/or repair must be completed. If such service, maintenance and/or repair is not completed within the time specified in TPC's notice, TPC shall be entitled to effect such service, maintenance and/or repair at the cost and expense of the Service Provider in which case TPC may, in its discretion, liquidate partially or fully the Performance Guarantee or pursue its reimbursement of costs and expenses by accessing the Reserve Fund.
- 21.4 The Service Provider shall maintain a complete and detailed record of all service, maintenance and/or repairs (including the cost of any such service) for each Equipment and shall, upon reasonable notice, make such records available to TPC for audit and/or inspection.

### **22. Reserve Fund**

- 22.1 The Service Provider shall establish the Reserve Fund which shall be maintained by TPC as security against amounts which may become due and payable to TPC during the term of this Agreement.

- 22.2 The Reserve Fund shall be built up from amounts retained by TPC from payments to be made to the Service Provider. TPC shall retain no more than three percent (3%) of each payment due to the Service Provider, up to PKR 10,000,000 (Ten million). The Service Provider shall not withdraw from the account/ Reserve Fund without written permission of TPC.
- 22.3 Subject to clause 22.4, TPC shall be entitled to, in accordance with the express terms of this Agreement, make withdrawals from the Reserve Fund at any time after the Commencement Date.
- 22.4 The Service Provider shall name TPC as a co-beneficiary on the Reserve Fund account and execute all documents and do all things necessary to ensure that the bank or other financial institution with whom the Reserve Fund is established is authorized and empowered to, upon first written demand from TPC, immediately withdraw and/or transfer the demanded amounts to TPC with or without objection from the Service Provider.
- 22.5 Prior to making any withdrawal from the Reserve Fund, TPC shall have notified the Service Provider of the Service Provider's breach of a specific obligation under the Agreement, and shall also provide relevant details in respect of the breach (including the details of the Service Provider's failure to remedy the breach within the time agreed and/or specified by TPC).
- 22.6 TPC shall, prior to making a withdrawal or as soon as practicable following a withdrawal from the Reserve Fund, provide details of the amount to be withdrawn or the amount that has been withdrawn, and purpose of use. Following a withdrawal, the Service Provider shall, within the period specified by TPC or agreed between the Parties, replenish the Reserve Fund in a manner prescribed in clause 22.2. Failure of the Service Provider to replenish the Reserve Fund following a withdrawal pursuant to this clause shall constitute a material breach of this Agreement. TPC has the right to withdraw from Reserve Fund, if the Equipment are not made operational by Service Provider in a time specified by TPC or in case of loss of passenger revenue.
- 22.7 If, upon the expiry of the term of the Agreement or its earlier termination or the termination of the Service Provider's employment under the Agreement, no amounts are due and/or payable to TPC under this Agreement, then the Service Provider shall (within fourteen (14) days of such expiry or termination), be entitled to liquidate the Reserve Fund and retain any and all amounts remaining therein.

### **23. Spare Parts**

- 23.1 The Service Provider is required to stock and secure spare parts store (at his own cost) as well as provide suitably qualified staff members to manage such store in accordance with the Operational Specifications Schedule.
- 23.2 Unless expressly agreed otherwise, the Service Provider shall be responsible for the provision of all spare parts required for the performance of the Services.
- 23.3 To the extent any spare part is required for the performance of the Services, the Service Provider shall be responsible for providing the same at its own cost and expense.

### **24. Tools and equipment**

- 24.1 The Service Provider is required to provide the required tools and equipment to maintain the Equipment and/or otherwise to provide the Services in accordance with the Operational Specifications Schedule.

## **PART E - AUTHORISED REPRESENTATIVES, PROTOCOLS AND SERVICES NOTICES**

### **25. Authorised Representative**

- 25.1 TPC and the Service Provider shall notify each other, by no later than five (5) days after the Effective Date, of the identity and contact details of their Authorised Representatives. Each Party shall be entitled to replace such Authorized Representative by notice to the other Party.



- 25.2 In addition to TPC's Authorized Representative, TPC shall, by written notice to the Service Provider, be entitled to engage a System Controls Service Provider and/or otherwise delegate from time to time certain of its obligations under this Agreement. TPC shall clearly specify the responsibility(ies) and/or authority(ies) of such delegate in the notice to the Service Provider. The Service Provider agrees to cooperate fully with any such delegate as a representative of TPC.
- 25.3 Unless it is stated otherwise in the notice of a Party, a Party's Authorized Representative shall be entitled to bind such Party for any and all purposes connected with this Agreement.
- 25.4 All Service Notices and other notices required under or pursuant to this Agreement, unless expressly stated otherwise in this Agreement (or instructed in writing by the Party to whom notice is to be given) shall be directed to the Authorised Representative of such Party.
- 25.5 Without derogating from the generality of this clause 25, TPC and the Service Provider, as the case may be, shall be entitled to appoint further Authorised Representatives for specific matters as detailed in its notification of such Authorized Representative.

**26. Service Notices, Protocols and Amendments**

- 26.1 TPC shall be entitled to issue Protocols under this Agreement or for interaction with other Services Provider/Contractors or use of common facilities within BRT system or use of corridor etc.
- 26.2 In the event that TPC wishes to amend the items listed in clause 26.1 above, it shall do so by delivery of a Service Notice to the Service Provider.
- 26.3 Notwithstanding clause 26.2:
- 26.3.1 where amendments due to an emergency are required by TPC in circumstances where the requisite notice periods cannot be adhered to, TPC shall be entitled to issue such instructions as it may deem necessary without complying with the provisions of clause 26.2; or
- 26.3.2 where amendments due to urgent operational requirements are required by TPC, the provisions of clause 26.3.1 shall apply *mutatis mutandis*, save that TPC shall provide at least seven (7) days' notice of such amendment; or
- 26.3.3 in cases where the urgent operational requirements demand less than seven (7) days' notice, TPC shall first consult with the Service Provider, and
- the Service Provider shall be obliged to comply with such notice.
- 26.4 TPC shall be entitled to issue reasonable Protocols or amend previously issued Protocols on twenty-four (24) hours' notice to the Service Provider in the case of urgent matters and on seven (7) days' notice in respect of all other matters.
- 26.5 Should TPC issue a Service Notice or Protocol in accordance with this Agreement and the implementation of such Service Notice or Protocol is likely to result in a material increase or decrease in the Service Provider's costs and/or expenses (which are not already remunerated through the payments made or to be made to the Service Provider):
- 26.5.1 the Service Provider shall be obliged to implement the Service Notice or Protocol, as the case may be, irrespective of the materiality of the expense; and
- 26.5.2 the Parties shall negotiate with each other in good faith in order to agree an acceptable adjustment to the relevant category of payment in respect of the Service Provider's costs and/or expenses,

provided that, if either Party alleges that the Service Notice or Protocol materially increases or decreases the Service Provider's costs and/or expenses (which are not in Required Services/scope of work and not already remunerated through the payments made or to be made to the Service Provider), such Party shall be obliged to submit to the other, reasonable proof of such material increase or decrease in the Service Provider's expenses, as the case may be and such material increase or decrease shall be dealt with in

accordance with the provisions of clauses 26.5.2 and 26.6. Parties are required to indicate such material increase or decrease ahead of execution/implementation.

- 26.6 If the Parties are unable to reach agreement through negotiations contemplated in clause 26.5.2 within seven (7) days of request by either Party to commence such negotiations, the matter shall be referred for dispute resolution in accordance with the provisions in clause 32.
- 26.7 For purposes of clause 26.5 above, a “material” increase or decrease in the Service Provider’s expenses shall mean an aggregate of all increases and decreases per year (calculated from the Commencement Date and for each ensuing year thereafter) exceeding two percent (2%) of the average Monthly payments to the Service Provider. The average Monthly payments to the Service Provider shall be calculated over the preceding twelve (12)-Month period or if within the first twelve (12)-Month period, then the average Monthly payments to the Service Provider shall be calculated based on the number of months from the Commencement Date until the date of calculation.

## **PART F – LIQUIDATED DAMAGES**

### **27. Liquidated Damages**

- 27.1 TPC shall be entitled to impose Liquidated Damages on the Service Provider in accordance with the provisions of this clause 27 and the Operational Specifications Schedule for the Service Provider’s failure to achieve certain KPIs as indicated in the Operational Specifications Schedule.
- 27.2 The Parties agree that the amounts specified in this clause 27.2 and the Operational Specifications Schedule for the Service Provider’s failure to achieve certain KPIs represent the likely loss to TPC as a result of any failure of the Service Provider to meet the KPIs and are reasonable and constitute liquidated damages and not a penalty. The Service Provider further waives, to the extent permitted by Applicable Law, any defence as to the validity and quantum of Liquidated Damages set out in this Agreement on the grounds that such Liquidated Damages are void as penalties or otherwise.
- 27.3 TPC shall be entitled to conduct audits of the Service Provider’s operations at any time without notice in order to ensure the continued compliance with this Agreement and that the Service Provider continues to achieve the various indicated KPIs. Such audits may be conducted in relation to the Equipment, the Services, Service Provider’s staff, Service Provider’s offices (including service and performance records) and any other place where any element of the Service is being performed.
- 27.4 To the extent that TPC discovered an instance of the Service Provider’s failure to achieve a particular KPI, TPC shall notify the Service Provider with details of the particular KPI, the details of the failure and the applicable Liquidated Damages as indicated in the Operational Specification Schedule. TPC may at its discretion specify period and type of certain failure which should be cured/rectified in specific period.
- 27.5 If Liquidated Damages are imposed, then TPC shall be entitled to withhold and/or deduct the imposed amounts from the Service Provider’s next payable invoice, any subsequent invoice or in increments from several subsequent invoices.
- 27.6 The maximum amount of Liquidated Damages that may be imposed on the Service Provider in any given month is as indicated in the Operational Specification Schedule.

## **PART G – WARRANTIES AND CHANGE IN OWNERSHIP**

### **28. Warranties, Undertakings and Indemnities**

- 28.1 Service Provider Warranties



- 28.1.1 The Service Provider acknowledges that TPC has entered into this Agreement relying on the strength of the warranties given to TPC by the Service Provider and that the warranties are given with the intention of inducing TPC (which has been so induced) to enter into this Agreement on the basis that such warranties are and shall be correct for the duration of this Agreement.
- 28.1.2 Each Service Provider Warranty shall be a separate Warranty and in no way limited or restricted by any reference to, or inference from, the terms of any other Warranty or by any other provision in this Agreement.
- 28.1.3 The Service Provider accordingly warrants and undertakes that:
- (a) it is properly constituted and incorporated in accordance with the Applicable Law;
  - (b) it has thorough knowledge of the Equipment, brand, model, performance and its quality and have did site inspection of all Equipment;
  - (c) It has examined the specification of Equipment and made all due diligence in estimation of all operation and maintenance costs of Equipment and services under the Agreement;
  - (d) Satisfied himself with all the economic, financial, environmental and legal variables including but not limited to foreign exchange rates, inflation rates, minimum wage rates, customs and tax rates (i.e. all taxes exclusive of sales tax on services are to be borne by the Service Provider) and all related labor and legal obligations;
  - (e) Satisfied himself of all conditions and circumstances affecting Contract price;
  - (f) it has the power, authority and legal capacity to enter into and exercise its rights and perform its obligations under this Agreement;
  - (g) it has taken all necessary action to authorise the execution, delivery and performance of this Agreement;
  - (h) the obligations expressed to be assumed by the Service Provider under this Agreement are legal, valid, binding and enforceable to the extent permitted by Applicable Law;
  - (i) it will on operation date hold, in cash, an amount equivalent to the acquisition cost of all required tools, equipment, furniture and other basic business materials required for the operating of its business, plus the necessary working capital required during the pre-operational and initial operational period;
  - (j) it is and will be in compliance with all Applicable Laws;
  - (k) the Service Provider and its shareholders, are not subject to any obligation, non-compliance with which is likely to cause a material breach of this Agreement;
  - (l) no claim is presently being assessed and no litigation, arbitration or administrative proceedings are presently in progress or, to the best of the knowledge of the Service Provider, pending or threatened against it (including its shareholders) or any of its assets which will or might have a material adverse effect on the ability of the Service Provider to perform its obligations under this Agreement;
  - (m) it is not the subject of any other obligation, compliance with which will or is likely to have a material adverse effect on the ability of the Service Provider to perform its obligations under this Agreement;

- (n) no proceedings or other steps have been taken and not discharged (nor threatened) for its winding-up or dissolution or for the appointment of a receiver, administrative receiver, administrator, liquidator, trustee or similar officer in relation to any of its assets or revenues;
- (o) all information disclosed by or on behalf of the Service Provider to TPC is true, complete and accurate in all material respects and the Service Provider is not aware of any material facts or circumstances not disclosed to TPC which would, if disclosed, be likely to have an adverse effect on TPC's decision (acting reasonably) to award this Agreement to the Service Provider;
- (p) it is not in breach of the provisions relating to Restricted Companies as set out in this Agreement; and
- (q) all insurance premiums in respect of insurance obligations placed on the Service Provider in accordance with this Agreement have been timely paid and none are in arrears.

## 28.2 Service Provider Undertakings

The Service Provider undertakes with TPC that:

- 28.2.1 it will give TPC immediate notice upon becoming aware that any judicial or court proceedings, mediation, litigation, arbitration, administrative or adjudication by or against the Service Provider before any court or Regulatory Authority may be threatened or pending;
- 28.2.2 it will not without the prior written consent of TPC (and whether by a single transaction or by a series of transactions whether related or not) sell, transfer, lend, encumber or otherwise dispose of the whole or any part of its business;
- 28.2.3 it will not cease to be lawfully registered in Islamic Republic of Pakistan or transfer in whole or in part its undertaking, business or trade outside the country;
- 28.2.4 it shall not without the written consent of TPC incorporate any company or purchase or acquire or subscribe for any shares in any company save where such company is involved in the provision of the Services and/or Services;
- 28.2.5 it shall not without the prior written consent of TPC make any loans or grant any credit or give any guarantee or indemnity to or for the benefit of any person or otherwise voluntarily or for consideration assume any liability (whether actual or contingent) in respect of any obligation of any other person except as contemplated by this Agreement;
- 28.2.6 it shall not change or cease its business or start any other business which is materially different from that to be carried on by it under this Agreement;
- 28.2.7 it shall immediately notify TPC of any discussions and/or negotiations that may result in a change in the ownership structure of the Service Provider or its ultimate parent company (if applicable).

## 28.3 TPC and Service Provider Indemnities

- 28.3.1 The Service Provider shall take steps to ensure the safety of property and all persons while they are being conveyed on the BRT System or while they are in, entering or leaving premises under the control of the Service Provider. In particular, the Service Provider shall be responsible for Passengers whilst they are on an Equipment and for Passengers whilst they are embarking on or disembarking off such Equipment.

- 28.3.2 The Service Provider shall be liable for any loss or damages resulting from damage to property including TPC property, or the death of or injury to any person which is caused directly or indirectly by an intentional or negligent act or omission of the Service Provider, its agents, Employees or sub-contractors.
- 28.3.3 The Service Provider indemnifies and agrees to hold TPC harmless against all claims, demands, suits, proceedings, judgments, damages, loss, costs, charges, fines, penalties, taxes and expenses, of whatsoever nature incurred by either of the Parties, or by any third party, in consequence of a failure by the Service Provider to comply with the terms of this Agreement or any Applicable Law.
- 28.3.4 Nothing contained in this clause 28.3 shall be deemed to render the Service Provider liable for, or require it to indemnify TPC against, any compensation or damages with respect to injuries or damage to persons or property resulting from any negligent act or omission of TPC or its agents or employees in respect of any claims, demands, lawsuits, damages, costs, charges and expenses in respect thereof or pertaining thereto and each Party hereby indemnifies the other against any claims, demands, lawsuits, damages, costs, charges and expenses incurred by such other Party in consequence of the negligent acts or omissions of the other Party's agents or employees.
- 28.4 All warranties, representations, undertakings, indemnities and other obligations made, given or undertaken by the Service Provider in this Agreement are cumulative and none shall be given a limited construction by reference to any other.

## **PART H - FORCE MAJEURE, NECESSARY ACTION, BREACH, TERMINATION AND DISPUTE RESOLUTION**

### **29. Force Majeure**

- 29.1 If either Party is prevented in whole or in part from discharging its obligations pursuant to this Agreement as a result of an Event of Force Majeure, such Party shall, as soon as reasonably practicable, notify the other Party accordingly. The aforementioned notice shall contain the following information:
- 29.1.1 the obligations which are affected and the extent to which the relevant Party cannot perform those obligations;
- 29.1.2 a detailed description of the Event of Force Majeure;
- 29.1.3 an estimate of the time period which the Event of Force Majeure is envisaged to continue; and
- 29.1.4 the measures proposed to be adopted to remedy or minimise the effects of and costs arising from the Event of Force Majeure. If the Service Provider is the Party prevented from discharging its obligations as a result of the Event of Force Majeure and TPC is of the opinion that the measures proposed are not adequate, it shall advise the Service Provider by Service Notice. Such Service Notice may propose alternate or additional measures which in the opinion of TPC may curtail the Event of Force Majeure and/or the costs arising therefrom. Notwithstanding the provisions of this clause 29.1.4, the Service Provider shall be obliged to take all proactive steps as may be reasonably possible in anticipation of Events of Force Majeure so as to enable the Service Provider to mitigate the financial effects thereof, including but not limited to, the entering into of appropriate contractual arrangements with its Employees.
- 29.2 The Party prevented from discharging its obligations pursuant to this Agreement as a result of an Event of Force Majeure shall:
- 29.2.1 use all reasonable endeavours to remedy or minimise the effects of the Event of Force Majeure; and

- 29.2.2 take all reasonable and necessary steps available to it as contemplated in clause 29.1.4 to mitigate any loss suffered by such Party or the other Party or any passengers as a result of that Party's failure to discharge its obligations pursuant to this Agreement.
- 29.3 In the event that an Event of Force Majeure affects the Service Provider's ability to perform any of its obligations under this Agreement and to the extent that the Services, or any part thereof, are suspended, the Service Provider shall not be entitled to claim payment from TPC for such suspended Services, or any additional costs incurred by the Service Provider as a result of the Event of Force Majeure or in relation to any steps taken by the Service Provider in mitigating the effects of the Event of Force Majeure.
- 29.4 In the event that the Service Provider is the Party affected by an Event of Force Majeure, TPC may, in response to the notice issued by the Service Provider in accordance with clause 29.1, issue a Service Notice to the Service Provider indicating any part of the Services which should nonetheless be performed by the Service Provider for the period during which the Event of Force Majeure subsists. TPC shall in such event make payment to the Service Provider for such Services in accordance with the Payment Calculation Schedule.
- 29.5 If an Event of Force Majeure no longer prevents the Service Provider from performing its obligations under this Agreement, the Service Provider shall be entitled to a reasonable period, taking into account the extent to which it has wound down its operations during the period of Force Majeure, to re-establish the Services in compliance with its obligations under this Agreement.
- 29.6 If an Event of Force Majeure continues uninterrupted for more than one hundred eighty (180) days and continues to prevent a Party from performing all of its obligations under this Agreement, either Party shall be entitled to terminate this Agreement upon fourteen (14) days' notice to the other Party, provided that before doing so the Parties shall first have met to find a mutually satisfactory solution for remedying such Event of Force Majeure and no Party shall terminate this Agreement unless the Parties are unable to agree on a solution.
- 29.7 Neither Party shall have any liability to the other in respect of the termination of this Agreement as a consequence of an Event of Force Majeure or as a result of any failure to carry out any of its obligations hereunder resulting from an Event of Force Majeure.

### **30. Step-in and Necessary Action**

- 30.1 If the Service Provider commits a material breach of this Agreement to such an extent that TPC is compelled to step in in order to ensure that the Services or any part thereof are continued seamlessly or if TPC reasonably believes that the Service Provider is unable to perform the Services or a substantial part thereof in the manner contemplated in this Agreement, TPC shall be entitled to give the Service Provider a notice.
- 30.2 The notice pursuant to clause 30.1 shall set out:
- 30.2.1 details of the material breach or reasons for TPC's belief (and shall refer to previous relevant notifications, if any) that the Service Provider is or will be unable to provide the Services or any part thereof;
  - 30.2.2 the remedial action which the Service Provider should take within the period specified by TPC; and
  - 30.2.3 the date upon which TPC intends to commence the Necessary Action in the event that the Service Provider fails to take remedial action.
- 30.3 In the event that the Service Provider fails to take such remedial action within the period specified in TPC's notice, TPC shall be entitled to proceed to take the Necessary Action at the Service Provider's cost and expense, and may, in its discretion, liquidate partially or fully the Performance Guarantee or pursue its reimbursement of costs and expenses by accessing the Reserve Fund.

- 30.4 The Service Provider hereby agrees that TPC, in taking the Necessary Action, shall be entitled unrestricted access to the Equipment and any other places where the Services (or any part of it) are being performed and the Service Provider undertakes to co-operate and do all such things as may be necessary to provide such access to TPC or any third party appointed by TPC and to ensure the seamless operation of the Services or any part thereof.
- 30.5 If TPC takes the Necessary Action, then without prejudice to any of TPC's remedies under the Agreement or the Applicable Law, for so long as and to the extent that such Necessary Action is taken and prevents the Service Provider from performing any of its obligations under this Agreement:
- 30.5.1 the Service Provider shall be relieved from such obligations for the duration of the period in which TPC is taking the Necessary Action; and
- 30.5.2 without prejudice to TPC's rights to claim damages, the payments due and payable by TPC to the Service Provider shall equal the amount the Service Provider would have received if it were performing the obligations affected by the Necessary Action in full over such period, less:
- (a) any outstanding Liquidated Damages imposed, but not yet deducted as calculated in accordance with the provisions of this Agreement; and
- (b) an amount equal to TPC's unrecovered costs and/or expenses incurred pursuant to taking such Necessary Action.

### **31. Breach and Termination**

- 31.1 If the Service Provider commits a material breach of this Agreement and fails to remedy the breach within ten (10) Business Days after receipt from TPC of a notice calling upon it to do so or such other time as specified by TPC then TPC shall be entitled, in addition to and without prejudice to any other right it may have under Applicable Law or in accordance with this Agreement, to seek specific performance of this Agreement or to terminate this Agreement forthwith on notice to the Service Provider and in either event, to recover such damages as it may have sustained.
- 31.2 For purposes of this Agreement, a material breach shall include but not be limited to the foregoing if the Service Provider:
- 31.2.1 fails to provide or maintain the Performance Guarantee; or
- 31.2.2 fails to provide or maintain the Reserve Fund; or
- 31.2.3 at any time, is Financially Distressed; or
- 31.2.4 in the opinion of TPC, commits a Prohibited Act; or
- 31.2.5 makes a compromise with its creditors or an assignment in favour of its creditors; or
- 31.2.6 agrees to carry out this Agreement under the supervision of a committee representing its creditors; or
- 31.2.7 goes into liquidation, whether provisionally or finally (other than a voluntary liquidation for the purpose of amalgamation or reconstruction to which TPC has given its prior written consent); or
- 31.2.8 sells, transfers or otherwise disposes of all or a substantial portion of its shares, assets or business, without the prior written consent of TPC; or
- 31.2.9 has judgment of a material nature taken against it likely to affect the Service Provider's status as a going concern and fails to satisfy or apply to have the same set aside within seven (7) days of becoming aware thereof; or
- 31.2.10 delegates, cedes or sub-contracts this Agreement or part thereof in contravention of the provisions hereof without having obtained TPC's prior written consent; or

- 31.2.11 contravenes the provisions of Operational Specifications Schedule; or
  - 31.2.12 fails to obtain or maintain as required any of the necessary Operating Licences/permits to be used in the rendering of the Services or has such necessary Operating Licences withdrawn, cancelled, suspended or revoked; or
  - 31.2.13 acts or attempts to act in a fraudulent or otherwise illegal manner in obtaining or executing a contract with any government department, provincial administration, municipality, public body, company or person; or
  - 31.2.14 violates or attempts to violate any Applicable Law or otherwise commits any criminal act; or
  - 31.2.15 enters into any agreement or arrangement, whether legally binding or not, with any other person, firm or company to refrain from formally responding to TPC's calls for proposals or the entering into of any negotiations with TPC in relation to this Agreement; or
  - 31.2.16 Abandons, suspend services or otherwise repudiates the Services or any of its obligations under this Agreement; or
  - 31.2.17 consistently fails to observe any provision of this Agreement or the Operational Specifications Schedule (despite being given notice in relation thereto), whether or not Liquidated Damages have been imposed, with the result that the Services may be regarded by TPC as being materially defective; or
  - 31.2.18 incurs Liquidated Damages equal to or exceeding the maximum amount of Liquidated Damages as indicated in the Operational Specifications Schedule consecutively for few months.
- 31.3 If TPC:
- 31.3.1 commits a material breach of this Agreement (other than a breach of payment obligations) and fails to remedy the breach within ten (10) Business Days after receipt from the Service Provider calling upon it to do so; or
  - 31.3.2 commits a breach of any payment obligation in accordance with this Agreement and fails without justification to make payment within thirty (30) Business Days after receipt from the Service Provider of a notice calling upon it to do so,
- then the Service Provider shall be entitled, in addition to and without prejudice to any other right it may have under Applicable Law or under the terms of this Agreement, to seek specific performance of the terms of this Agreement or to terminate this Agreement upon sixty (60) days' notice to TPC and in either event, to recover such costs, losses and damages as it may have sustained.
- 31.4 In the event of termination of this Agreement:
- 31.4.1 TPC shall be entitled to immediately take possession of all Equipment and Service Provider shall transfer other assets required for the performance of the Services to TPC; and
  - 31.4.2 TPC may immediately appoint auditors to check and verify all relevant books, records and other data of the Service Provider and the Service Provider shall give full cooperation in that regard and make all such information available to TPC on request.

## **32. Dispute resolution**

### **32.1 Disputes**



- 32.1.1 For the purposes of this clause 32, the term “dispute” shall be interpreted in its widest sense and shall include any dispute or difference in connection with or in respect of the conclusion or existence of this Agreement, the carrying into effect of this Agreement, the interpretation or application of the provisions of this Agreement, the Parties’ respective rights and obligations in accordance with and arising out of this Agreement or the validity, enforceability, rectification, termination or cancellation, whether in whole or in part, of this Agreement.
- 32.1.2 Save as otherwise provided for in this Agreement, any dispute between the Parties arising in connection with this Agreement shall be resolved in accordance with the provisions of this clause 32.
- 32.2 Resolution by Chief Executives
- 32.2.1 Any dispute arising in connection with this Agreement may be referred by either Party to the Chief Executive of the Service Provider and the Chief Executive of TPC (or such other senior executives as the relevant Parties may determine) who shall attempt to resolve the matter within ten (10) Business Days of the dispute being so referred to them or within such other time as may be agreed between the Parties.
- 32.3 Arbitration
- 32.3.1 If the Parties are unable to resolve the dispute pursuant to clause 32.2, either Party shall be entitled to refer a dispute to arbitration in accordance with this clause 32 by notifying the other Party in writing of its intention to do so.
- 32.3.2 The arbitration proceedings shall be carried out under the procedures, rules and regulations of Arbitration Act, 1940 and its successors, and such procedures, rules and regulations shall be deemed to be incorporated into this clause 32.3 by reference. Any such arbitration shall be subject to the Applicable Law.
- 32.3.3 The seat of the arbitration shall be Pakistan and all arbitration hearings shall be held in Peshawar unless otherwise agreed in writing by the Parties.
- 32.3.4 Unless otherwise required by TPC, such arbitration shall be conducted in the English language and the award of any arbitrator or arbitral panel, together with the reasons for the determination, shall be written in the English language.
- 32.3.5 Unless otherwise required by TPC, all evidence, submissions or documents presented at the arbitration in a language other than in the English language shall be accompanied by a simultaneous English language translation thereof, if oral, or if written, a certified English language translation.
- 32.3.6 The arbitrator or arbitral panel shall have full power to open up, review and revise any determinations, decisions or findings in relation to the dispute.
- 32.3.7 The obligations of the Parties shall not be altered by reason of the arbitration being conducted during the term of the Agreement.
- 32.3.8 Any monetary award in any arbitration shall be denominated and payable in PKR.
- 32.3.9 The Parties agree that all interim or final decisions and/or awards of the arbitrator or arbitral panel shall:
- (a) be binding on the Parties and shall be given effect and implemented forthwith by them; and
  - (b) be subject to the confidentiality restrictions in this Agreement and except as provided by agreement between the Parties, may not be publicised or otherwise disclosed provided always that nothing in this clause shall prevent either Party from applying to any court of competent jurisdiction to enforce the award.

- 32.3.10 The Parties hereby expressly agree irrevocably to waive all rights and recourse to appeal or challenge, and neither Party shall request the local courts to open up, revise or review, the final award of the arbitrator or arbitral panel save and except in the specific instances set out in Arbitration Act, 1940.
- 32.3.11 Reference of a dispute to arbitration shall not in any way vitiate nor invalidate the Agreement neither shall it be grounds for the Service Provider to cease performing its obligations nor for TPC to terminate the engagement of the Service Provider under the Agreement and the Service Provider shall proceed with its obligations with all due diligence.

## **PART I - MISCELLANEOUS MATTERS**

### **33. Transfer of employees**

- 33.1 Where TPC terminates this Agreement pursuant to clauses 29 or 31 or takes the Necessary Action contemplated by clause 30.2, TPC shall be entitled to have any and/or all contracts of employment held by the Service Provider for performance of the Services and the Service Provider hereby undertakes to do all things required and provide all such information in relation to such employees as may be required in order to operate the system subject to compliance with the Applicable Law.
- 33.2 The Service Provider shall be liable for any costs incurred by TPC in effecting the employee transfers contemplated in this clause 33, to the extent applicable and hereby indemnifies TPC in respect of such retrenchment costs.

### **34. Hazardous Substances**

- 34.1 The Service Provider shall ensure that any hazardous materials or equipment used or intended to be used in the provision of the Services are stored safely and in safe keeping in accordance with all Applicable Law, ensure that all such materials are properly and clearly labelled on their containers, promptly inform TPC of all such materials being used or stored and comply with any other reasonable requirement of TPC in respect of such materials and equipment.

### **35. Intellectual Property**

- 35.1 The Service Provider acknowledges that it shall not acquire any right, title or interest in or to the Intellectual Property of TPC and that all Intellectual Property developed pursuant to this Agreement (other than Intellectual Property belonging to the Service Provider or any third party) shall vest exclusively in TPC, save to the extent that the Parties otherwise agree in writing.
- 35.2 Should the Service Provider acquire title to any Intellectual Property of TPC or which is developed pursuant to this Agreement by operation of law (thus, where TPC in effect pays for its development) such Intellectual Property (other than Intellectual Property belonging to the Service Provider or any third party) shall be deemed to have been assigned by the Service Provider to TPC.

### **36. Insurance**

- 36.1 The Service Provider agree to, at their own costs, establish and maintain no less than the minimum types and levels of insurances that are required by Applicable Law. It is mandatory that the insurance with respect to public properties shall be effected only through the National Insurance Company Limited (NICL) of Pakistan.
- 36.2 The Service Provider shall arrange for all kinds of insurance of Spare Parts/E&M Equipment/Maintenance Equipment/Monitoring Tools according to this Contract. Any amounts related to Spare Parts/E&M Equipment/Maintenance Equipment/Monitoring not insured or not recovered from the insurers shall be borne by the Service Provider.



- 36.3 The Service Provider shall also effect and maintain passenger and public liability insurance in relation to the operation of the Equipment. Such insurance shall, among other things, provide cover in respect of loss or damage suffered by reason of damage to property or death of or injury to any person resulting from any act or omission by Service Provider, the Drivers or their agents or Employees in connection with the operation of the Equipment in the provision of the Services. The TPC shall be a co-insured party under such insurance and the Service Provider shall be liable for and payment of all premiums in respect of such insurance.
- 36.4 The Service Provider shall effect and maintain full comprehensive Equipment insurance (including passenger and public liability) in respect of the Equipment from insurance company having a minimum rating of AA in long term (Public property shall be through NICL) on behalf of TPC within 30 days from acceptance of Equipment, on terms and conditions to TPC's reasonable satisfaction. The Service Provider shall be liable for and pay all premiums in respect of such insurance which includes theft, damage, faults, burglary etc. The Service Provider shall ensure that TPC is registered as co-insured under such insurance policy and provide proof of the insurance to TPC on demand.
- 36.5 The Service Provider shall procure and submit evidence of insurance cover within twenty-eight (28) days from the effectiveness of the Contract. The effective date of the coverage shall be the Commencement Date of this Contract. Failure to procure Insurance for Equipment from NICL, TPC shall procure shall insurance from NICL at the cost and risk of Service Provider.
- 36.6 The Service Provider shall be liable for any claims for passenger liability or public liability which are repudiated by TPC's insurer's due to any act or omission of the Service Provider, its directors, agents or Employees in providing the Services.
- 37. Publication of compliance or non-compliance with required KPIs**
- 37.1 Notwithstanding anything to the contrary in this Agreement, particularly the provisions of clause 44 below, in order to ensure that the Services are rendered at a consistent and sustainably high level and to increase public awareness of the Services being rendered in accordance with this Agreement, TPC shall, for the duration of this Agreement, be entitled to:
- 37.1.1 conduct and publish customer satisfaction surveys as it, in its sole discretion, may deem appropriate which may include but not be limited to issues pertaining to availability and Equipment quality, safety and security and general customer satisfaction levels regarding performance of the Service Provider and its Employees; and
- 37.1.2 publish any statistics relating to the overachievement or material underachievement of KPIs by the Service Provider which may include but not be limited to financial and operational performance, compliance with health and safety obligations and the Service Provider's compliance with Employee training and/or labor law requirements.
- 37.2 TPC shall be entitled to formulate its own conclusion regarding the results of the customer satisfaction surveys and the interpretation of TPC's statistics relating to the Service Provider's performance and shall make such results available to the Service Provider upon request.
- 37.3 TPC shall be entitled to publish the results of the customer satisfaction surveys and the above-mentioned statistics together with such additional marketing information as it may deem necessary, in media campaigns designed, among other things, to encourage compliance with expected KPIs and to discourage non-compliance therewith.
- 37.4 The aforesaid media campaign may include but not be limited to campaigns in traditional print media and/or electronic/social media and may highlight any overachievement or material underachievement of expected KPIs by the Service Provider from time to time.

### **38. Periodic review of the Agreement**

38.1 In view of the long-term nature of this Agreement and in order to provide a continuous means for the assessment of:

38.1.1 TPC's contract management systems;

38.1.2 opportunities to improve the performance of the Service Provider in rendering the Services to the benefit of all stakeholders (including passengers utilising the Services); and

38.1.3 various aspects of the relationship between the Parties which would allow for inter alia an improvement in conflict resolution and the sharing of information between the Parties,

the Service Provider acknowledges that TPC will review the provisions of this Agreement every three (3) years for the duration of this Agreement.

38.2 To the extent that TPC wishes to propose any amendment to this Agreement pursuant to such review, such proposal shall be discussed and considered in good faith, but shall not be of any force or effect unless reduced to writing and signed by or on behalf of both Parties. For the avoidance of doubt, should the Parties fail to reach agreement as provided for in this clause 38, such failure shall not constitute a dispute as contemplated in clause 32 (Dispute Resolution).

### **39. Restricted Companies**

39.1 Restricted Companies and/or their shareholders shall not:

39.1.1 be a shareholder in the Service Provider; or

39.1.2 be subcontractors of the Service Provider, or

39.1.3 be a party to a partnership, company, joint venture, consortium, arrangement with the Service Provider regarding any other work relating to services provided by the System Control Service Provider.

### **40. System stability**

40.1 The Parties hereby agree to establish a joint task team comprising TPC, the Service Provider and the Other Service Providers to develop proposals for combatting piracy.

## **PART J - FINAL PROVISIONS**

### **41. Addresses and notices**

41.1 The Parties choose for the purposes of this Agreement the following addresses:

41.1.1 TPC: TransPeshawar (The Urban Mobility Company), KPUMA Building, Chamkani, GT Road Peshawar, Pakistan.

41.1.2 The Service Provider: [redacted]

41.2 Any legal process to be served on any of the Parties may be served on it at the physical address specified for it in clause 41.1 and it chooses that address for all purposes under this Agreement.

41.3 Any notice required by this Agreement to be given in writing shall, if given by telefax, email or cell phone-based short message service ("sms"), be regarded as having been given in writing for purposes of this Agreement, provided that the Parties may only utilise sms notification for operational authorisations in circumstances where operational action is required immediately and other changes to operations contemplated in this Agreement due to an emergency or such similar urgent operational matters.

41.4 Where operational authorisations are required, TPC will issue and log an authorisation number and any relevant notice in accordance with this clause 41 shall quote such authorisation number.

- 41.5 A notice to any of the Parties which is sent by registered post in a correctly addressed envelope to the address specified for it in clause 41.1 shall be deemed to have been received (unless the contrary is proved) within fourteen (14) days from the date it was posted, or which is delivered to the Party by hand at the physical address specified for it in clause 41.1, shall be deemed to have been received on the day of delivery, provided it was delivered to a responsible person during ordinary business hours.
- 41.6 Each notice by telefax to a Party at the telefax number specified for it in accordance with clause 41.1 shall be deemed to have been received (unless the contrary is proved) within four (4) hours of transmission if it is transmitted during normal business hours of the receiving Party or within four (4) hours of the beginning of the next Business Day after it is transmitted, if it is transmitted outside those business hours.
- 41.7 Any notice by email to a Party at the email addresses of its Authorised Representatives shall be deemed to have been received (unless the contrary is proved) within twenty (20) minutes of transmission if transmitted at any time during which the Services are ordinarily rendered and if transmitted outside such time, within ten (10) minutes of recommencement of the rendering of the Services.
- 41.8 Any notice by sms to a Party at the mobile numbers of its Authorised Representatives shall be deemed to have been received (unless the contrary is proved) within twenty (20) minutes of transmission if transmitted at any time during which the Services are ordinarily rendered and if transmitted outside such time, within twenty (20) minutes of recommencement of the rendering of the Services.
- 41.9 Any notice in accordance with this clause 41 given by sms shall be followed by a telefax or email confirming the contents and date of transmission of such sms.
- 41.10 Notwithstanding anything to the contrary in this clause 41, a notice or other communication actually received by any of the Parties (and for which written receipt has been obtained) shall be adequate notice or communication to it notwithstanding that the notice was not sent to or delivered at its chosen address.
- 41.11 Any Party may by a notice to the other Parties change its physical or postal address, telefax number, email address or mobile number for the purposes of this clause 41 to any other physical or postal address, telefax number, email address or mobile number provided that the change shall become effective on the seventh (7<sup>th</sup>) day after the receipt of the notice.

## **42. Change in Law**

- 42.1 The Service Provider acknowledges and agrees that it shall take full risk and responsibility for a Change in Law occurring. Notwithstanding the foregoing, if a Change in Law occurs or is imminent that affects the rights and obligations of the Service Provider under this Agreement, the Service Provider shall notify TPC within fourteen (14) days of the date of such Change in Law occurring or (if earlier) coming to the attention of the Service Provider and the Parties shall discuss the effects of the Change in Law and endeavour to arrive at a resolution.
- 42.2 Any resolution reached between the Parties shall be recorded in writing and such record shall be signed by both Parties. The Service Provider acknowledges and agrees that any decision to change the financial accordance with the Agreement or vary the scope of Services as a result of the Change in Law shall be adjusted with mutual consent of the parties.

## **43. Remedies**

- 43.1 No remedy conferred by this Agreement is intended to be exclusive of any other remedy which is otherwise available at law, by statute or otherwise. Each remedy shall be cumulative and in addition to every other remedy given hereunder or now or hereafter existing at law, by statute or otherwise. The election of any one or more remedy by any of the Parties shall not constitute a waiver by such Party of the right to pursue any other remedy.

#### **44. Confidentiality**

- 44.1 Each Party shall at all times keep in confidence the Confidential Information of the other Party which it may acquire for the purposes of or in connection with this Agreement (whether prior to or after the Commencement Date) and shall not use or permit the use of such Confidential Information and shall procure that its employees shall not use the Confidential Information, for any other purpose and shall not disclose such Confidential Information to any third party.
- 44.2 Notwithstanding clause 44.1, a Party may disclose the Confidential Information of the other Party to such former Party's employees or Authorised Representatives to the extent that such employees or Authorised Representatives need to know the Confidential Information and shall ensure that such employees or Authorised Representatives are aware of and comply with, the confidentiality obligations contained in this clause 44.2.
- 44.3 Each Party shall take all such steps as may be reasonably necessary to prevent the Confidential Information of the other Party from falling into the hands of an unauthorised third party.
- 44.4 The Service Provider shall not make any comments to the media relating to this Agreement and any related matter nor shall it respond to any queries from the media without the prior written approval of TPC.

#### **45. Severance**

- 45.1 In the event that any provision of the Agreement is held by any judicial or other competent authority to be illegal, invalid or unenforceable that provision shall be severed to the extent necessary to make the Agreement enforceable, and it shall not affect or impair the validity, legality or enforceability of any of the other provisions of the Agreement.

#### **46. No agency**

- 46.1 No provision of this Agreement shall be construed as constituting an agency, partnership, or joint venture between the Parties and neither Party shall have any express or implied TPC to bind the other Party in any way or to represent the other Party unless specifically provided to the contrary in this Agreement, and, for the avoidance of doubt, this clause 44.1 shall not affect or otherwise derogate from the obligations and powers of the Service Provider in relation to handing over of the Equipment to other authorised parties as contemplated in this Agreement.
- 46.2 The Service Provider is an independent contractor performing the Agreement. The Service Provider is not an employee or agent of TPC.

#### **47. Corruption and Fraud**

- 47.1 The Service Provider warrants that in entering into the Agreement it has not committed any Prohibited Act.
- 47.2 In the event that the Service Provider is contacted by a Public Official requesting or suggesting that the Service Provider act in a manner which would constitute a Prohibited Act, the Service Provider shall immediately provide TPC in writing with full details of the request (including the identity of the Public Official making the request).
- 47.3 Without prejudice to clause 47.2, the Service Provider shall ensure that its staff undertaking activities in connection with the Agreement are subject to similar obligations to those set out in this clause 47 and the Service Provider shall enforce such obligations.
- 47.4 In the event that the Service Provider fails to comply with the requirements of this clause 47 TPC shall be entitled to terminate the Agreement pursuant to clause 31.1.
- 47.5 The Service Provider shall sign affidavit of Integrity Pact attached as Schedule 8 in Request for Proposal.

**48. Entire Agreement**

48.1 This Agreement constitutes the entire agreement between the Parties in relation to all matters contained herein, including all understandings, rights, responsibilities, duties and obligations and supersedes all prior arrangements, representations, communications, negotiations, agreements and contracts (whether written or oral) made between or entered into by the Parties with respect thereto prior to the Effective Date. None of the Parties shall have any claim or right of action arising from any undertaking, representation or warranty not included in this Agreement.

**49. No stipulation for the benefit of a third person**

49.1 Save as is expressly provided for in this Agreement, no provision of this Agreement constitutes a stipulation for the benefit of a third person which, if accepted by the person, would bind any Party in favour of that person.

**50. No representations**

50.1 A Party may not rely on any representation which allegedly induced that Party to enter into this Agreement, unless the representation is provided in this Agreement.

**51. Amendment**

51.1 Except as set out elsewhere in this Agreement, no modification, amendment, addendum or variation to the Agreement shall be effective or binding, unless it:

51.1.1 is made in writing; and

51.1.2 expressly sets out the modification, amendment, addendum or variation to the accordance with the Agreement; and

51.1.3 refers to the Agreement; and

51.1.4 is signed and dated by a representative of each Party.

**52. Indulgences**

52.1 The grant of any indulgence, extension of time or relaxation of any provision by a Party under this Agreement shall not constitute a waiver of any right by the grantor or prevent or adversely affect the exercise by the grantor of any existing or future right of the grantor.

**53. General co-operation**

53.1 The Parties shall co-operate with each other and shall each execute and deliver to the other Party such other instruments and documents and take such other actions as may be reasonably requested from time to time in order to carry out, evidence and confirm their rights and the intended purpose of this Agreement.

53.2 Each of the Parties undertake at all times to do all such things, perform all such acts and take all such steps within its power and control, as may be necessary for and incidental to the putting into effect or maintenance of the terms, conditions and import of this Agreement and ensuring that the Services are rendered consistently at the highest possible standard expected by TPC.

53.3 Each Party agrees to provide all information reasonably requested by the other in the exercise of their respective rights and performance of their obligations under this Agreement, subject to the confidentiality provisions of clause 44 of this Agreement.

**54. Governing law**

54.1 This Agreement is to be governed, interpreted and construed in accordance with the laws of the Islamic Republic of Pakistan.

**55. Language**

55.1 Unless expressly notified in advance by TPC, the primary language of the Agreement shall be English. All documents and communications issued between the Parties shall be in English. Unless expressly notified in advance by TPC, all minutes of meetings shall be issued in English.

**56. Independent advice**

56.1 Each of the Parties hereby respectively agrees and acknowledges that:

56.1.1 it has been free to secure independent legal advice as to the nature and effect of each provision of this Agreement and that it has either taken such independent legal advice or has dispensed with the necessity of doing so; and

56.1.2 each provision of this Agreement (and each provision of the Annexes) is fair and reasonable in all the circumstances and is part of the overall intention of the Parties in connection with this Agreement.

**57. Good faith**

57.1 The Parties shall, at all times, act in good faith towards each other and shall not bring the other Party into disrepute.

**58. Survival of rights, duties and obligations**

58.1 The Surviving Provisions will survive termination or completion of the Agreement.

58.2 In the event that the Agreement is terminated or completed, neither Party shall be liable to the other Party except:

58.2.1 under the Surviving Provisions; or

58.2.2 in respect of any breach of the Agreement occurring before such termination or completion; or

58.2.3 any rights or liabilities between the Parties that were pre-existing as at the date of termination or completion.

**59. Assignment**

59.1 The Service Provider shall not cede, assign, delegate or transfer any of its rights or obligations under the Agreement, or any part of it, or any benefit or interest therein, to any third party or Entity without the prior written consent of TPC.

59.2 Notwithstanding anything to the contrary stated in this Agreement, TPC shall be entitled, without requiring the consent of the Service Provider, to cede, assign, delegate or transfer any rights and/or obligations under this Agreement to any third party.

**60. Waiver**

60.1 Subject to clause 60.2, no relaxation, forbearance or delay by a Party in enforcing the Agreement will prejudice, affect or restrict the rights, responsibilities, obligations, powers or remedies of that Party nor shall any waiver by either Party of any such rights, responsibilities, obligations, powers or remedies, or of any breach of the Agreement, be deemed to be a waiver of any other right, responsibility, obligation, power or remedy, or of any later or continuing breach of, the Agreement.

60.2 Any waiver of a Party's rights, responsibilities, obligations, power or remedies arising out of, under or in connection with the Agreement shall be in writing, dated and signed by the representative of the Party granting such waiver, and shall specify the right, responsibility, obligation, power or remedy and the extent to which it is being waived. No waiver of a breach of a term of the Agreement operates as a waiver of any other breach of that term, or of a breach of any other term, of the Agreement.

**61. Costs**

61.1 Any costs, including all legal costs of an attorney and own client basis and taxes, incurred by a Party arising out of or in connection with a breach by another Party shall be borne by the Party in breach.

Signed on ..... 2020

Witnesses

.....

for TransPeshawar (The Urban Mobility  
Company)

.....  
duly authorised and warranting such TPC

Name: .....

Position: \_\_\_\_\_

Signed on ..... 2020

Witnesses

.....

for [Service Provider Company]

.....  
duly authorised and warranting such [ ]

Name: .....

Position: \_\_\_\_\_

**ANNEX A**  
**DEFINITIONS AND INTERPRETATION**



## 1. Definitions

1.1 In the Agreement, the following words and expressions shall have the meanings set out below:

- 1.1.1 “**Abandon**” means wholly or substantially cease to carry out the Services for ten (10) consecutive days or during thirty (30) days (whether consecutive or not) in any year, except when relieved of the obligation to do so by the express provisions of this Agreement;
- 1.1.2 “**Agreement**” means this agreement as amended from time to time and including the Annexes;
- 1.1.3 “**Annexes**” means the annexes attached to this Agreement;
- 1.1.4 “**Applicable Law**” means any constitution, statute, ordinance, treaty, decree, proclamation, rules, regulations or subordinated legislation or other legislative measure, as amended from time to time, including all national and provincial statutes and legislation and all municipal by-laws, as well as the common law and customary law and any judgment, decision, order or rule of any court or tribunal with relevant jurisdiction and any decision made by judicial or administrative bodies in accordance with any of the foregoing;
- 1.1.5 “**Authorised Representatives**” means persons authorised in writing by TPC and the Service Provider respectively, as contemplated in accordance with clause 25;
- 1.1.6 “**BRT System**” means the bus rapid transit system in Peshawar known as Peshawar Sustainable BRT Corridor System or any other name that should be assigned to the Peshawar bus/transit system;
- 1.1.7 “**Business Day**” means any day other than weekend or public holiday in Pakistan as notified by Government of KPK;
- 1.1.8 “**Change in Law**” means:
- (c) the adoption of a new Law; or
  - (d) a change in or repeal of a existing Law,
- which after the Effective Date results in:
- (a) a change in the taxes, duties or levies payable by the Service Provider in respect of the Services; or
  - (b) a change in or the repeal of any other requirement for the performance of the Services;
- 1.1.9 “**Commencement Date**” means the date on which the Services shall commence as notified by TPC by way of a Service Notice referred to in clause 1.3.1;
- 1.1.10 “**Confidential Information**” means all information, without limitation, of whatsoever nature:
- (a) relating to the Disclosing Party’s business, operations, processes, drawings, sketches, plans, models, product information, know-how, market opportunities, customers and business affairs;

- (b) relating to the relationship of the Disclosing Party with its customers and suppliers; or
- (c) relating to the contents of this Agreement and any other information received pursuant to this Agreement,

but excludes information which:

- (a) constitutes an Operational Data; or
  - (b) is required to be disclosed under any law or regulation, or by any Regulatory Body, including any stock exchange on which a Receiving Party may be listed, provided that the Receiving Party in question shall first consult with the Disclosing Party before making any such disclosure, statement or announcement; or
  - (c) is in the public domain or enters into the public domain in any way, provided that the entry of such information into the public domain did not entail a breach of this Agreement by the Receiving Party; or
  - (d) the Receiving Party can show it was within its possession or knowledge, such information being in its use or having been recorded in its files, computers or other recording media, prior to receipt thereof from the Disclosing Party and which information was not previously acquired by the Receiving Party under any obligations of confidence or unlawfully; or
  - (e) is disclosed by the Receiving Party with the prior written approval of the Disclosing Party; or
  - (f) was disclosed by the Disclosing Party to a third party without restriction on disclosure or use, including without limitation, by way of a patent specification; or
  - (g) is hereafter disclosed or made available in good faith to the Receiving Party from a source other than the Disclosing Party, without breach by the Receiving Party of any obligation of confidentiality or non-use owed to the Disclosing Party or without breach by such other source who, to the knowledge of the Disclosing Party, is not subject to an obligation of confidentiality or non-use owed to the Disclosing Party; or
  - (h) is developed independently by the Receiving Party without reference to the Confidential Information;
- 1.1.11 “**Corridor**” means dedicated lane from Chamkani Station to Karkhano station which includes stations, roads turning points, terminals, feeder route ramp etc.;
- 1.1.12 “**Disclosing Party**” means the Party disclosing Confidential Information to the Receiving Party;
- 1.1.13 “**Dewatering Pumps**” means and includes pump control panels, float switches/sensors, connection pipes/hoses, valves, cables, ladders, Software and any other associated component required for intended purpose.
- 1.1.14 “**Technical Staff**” means those Employees who maintain and operate the Equipment;

- 1.1.15 **“Effective Date”** means when this Agreement has been signed by each Party, the latest of the dates upon which this Agreement was signed by any Party;
- 1.1.16 **“Employees”** means the employees of the Service Provider, or of any subcontractor contracted by the Service Provider to perform a part of the Service;
- 1.1.17 **“Encumbrance”** means:
- (i) any mortgage, pledge, lien, assignment or cession conferring security, hypothecation, security interest, preferential right or trust arrangement or other encumbrance securing any obligation of any person or any other charge (whether equitable or otherwise) of whatsoever nature or howsoever described; or
  - (j) any arrangement under which money or claims to, or for the benefit of, a bank or other account may be applied, set off or made subject to a combination of accounts so as to effect discharge of any sum owed or payable to any person; or
  - (k) any other type of preferential agreement or arrangement (including any title transfer and retention arrangement), the effect of which is the creation of a security interest;
- 1.1.18 **“Entity”** means association, business, close corporation, company, concern, enterprise, joint venture, trust, undertaking, voluntary association, body corporate and any similar entity;
- 1.1.19 **“EOP List”** means the list of employees allocated to be employed by the Service Provider under the Employment Opportunity Program led by TPC annexed hereto as Annex F (to be provided at agreement stage);
- 1.1.20 **“Event of Force Majeure”** means an act of God or public enemy, fire, explosion, earthquake, perils of the sea, flood, storm or other adverse weather conditions, war declared or undeclared, act of terrorism, civil war, revolution, civil commotion or other civil disorder, sabotage, riot, blockade, embargo, strikes (excluding strikes by Service Provider staff), lock-outs or other labour disputes, sanctions, epidemics, act of any Government, compliance with law, regulations or lawful demands of any Government or Governmental agency;
- 1.1.21 **“Equipment Handover Date”** means a date not less than seven (07) days prior to the “projected start-date of roll-out” of each Milestone as specified in clause 1.1.33 on which the Service Provider takes the Equipment, or such other date as may be agreed between the Parties;
- 1.1.22 **“Equipment Sale Agreement”** means the agreement of sale and/or supply entered into, or to be entered into, between Peshawar Development Authority, on the one hand, and an Equipment Supplier/manufacturer/Civil Work Contractor, on the other hand, in relation to Equipment;
- 1.1.23 **“Equipment Supplier”** means such entity which sells or otherwise supplies Equipment to TPC or supplied to Peshawar Development Authority (PDA) in accordance with an Equipment Sale Agreement;

- 1.1.24 “**Equipment**” means the Equipment purchased by Peshawar Development (machinery, apparatus, materials and all things procured, furnished, installed and commissioned) in accordance with the Equipment Sale Agreement(s), for purposes of rendering the Services and specified in the Operational Specifications Schedule; and Equipment includes all equipment and allied services required to provide the Services as contemplated in this Agreement (and for the avoidance of doubt shall include the Pump Control panel, UPS, Dewatering pumps, Generator);
- 1.1.25 “**Financially Distressed**” means that:
- (l) it appears to be reasonably unlikely that the Service Provider will be able to pay all of its debts as they become due and payable within the immediately ensuing 6 Months; or
  - (m) the Service Provider’s liabilities exceed its assets by more than fifteen percent (15%) at any time,
- and “**Financial Distress**” shall have a corresponding meaning;
- 1.1.26 “**Financial Year**” means, at any time, the financial year of the Service Provider starting on January and ending on 31 December;
- 1.1.27 “**Generators**” means complete assembly from Auxiliary tank (Inclusive) to and inclusive of ATS Panel, includes software’s, flow meter, electric motor, sensors, fitting, Generator base tank, connections etc. and their components which are required for its intended use and safe/ secure operation;
- 1.1.28 “**Intellectual Property**” means any and all intellectual property rights of any nature anywhere in the world whether registered, registerable or otherwise, including patents, utility models, trademarks, registered designs and domain names, applications for any of the foregoing, trade or business names, goodwill, copyright and rights in the nature of copyright, design rights, rights in databases, moral rights, know-how, trade secrets and any other intellectual property rights which subsist in computer software, computer programs, websites, documents, information, techniques, business methods, drawings, logos, instruction manuals, lists and procedures and particulars of customers, marketing methods and procedures and advertising literature, including the “look and feel” of any websites;
- 1.1.29 “**Invoice**” means a valid tax invoice as contemplated in clause 4;
- 1.1.30 “**KPI**” means the key performance indicator;
- 1.1.31 “**Liquidated Damages**” means the amounts to be deducted from the monthly payments for the Service Provider pursuant to particular service level failures as set out in the Operational Specifications Schedule and in accordance with clause 27 or otherwise paid by the Service Provider to TPC;
- 1.1.32 “**Lock-in Period**” means a period of six (6) years commencing from the Effective Date;
- 1.1.33 “**Milestone**” means each step envisaged for the roll-out of the Services during the term of this Agreement as described more fully in the Operational Specifications Schedule and execution of services with seven days of signing of Agreement;
- 1.1.34 “**Month**” or “**Monthly**” means a calendar month;

- 1.1.35 “**Necessary Action**” means any action that TPC deem necessary and appropriate in the event that the Service Provider failed to take remedial action pursuant to clause 30;
- 1.1.36 “**Operating Licence**” means any licence, consent or permit required by the Service Provider to enable it to provide the Services under this Agreement;
- 1.1.37 “**Operational Data**” means any operational data defined as such in the Operational Specifications Schedule or identified as “Operational Data” by TPC, which shall include, among others, location of Equipment, running hours, and which will be available to the Service Provider, Other Service Providers and the System Control Service Provider;
- 1.1.38 “**Operational Specifications Schedule**” means the schedule annexed hereto as Annex B;
- 1.1.39 “**Other Contractors**” means collectively, the System Control Service Provider or any subcontractor of the System Control Service Provider (or any member of the consortium making up the System Control Service Provider) (excluding Other Service Providers) appointed by TPC in connection with the BRT System;
- 1.1.40 “**Other Service Provider**” means any other Equipment Service Provider appointed by PDA to install Equipment or appointed by TPC to operate public transport services as a part of the BRT System or Service Provider of TPC;
- 1.1.41 “**Party**” means a party to this Agreement;
- 1.1.42 “**Payment Calculation Schedule**” means the payment calculation schedule attached hereto as Annex C;
- 1.1.43 “**Performance Guarantee**” means the unconditional, irrevocable on-demand performance guarantee in the specimen form attached hereto as Annex D provided to TPC by the Service Provider pursuant to clause 3;
- 1.1.44 “**PKR**” means Pakistani rupee;
- 1.1.45 “**Prohibited Act**” means:
- (a) offering, giving or agreeing to give to a Public Official a gift or consideration of any kind as an inducement or reward for:
    - (i) doing or not doing (or for having done or not having done) any act; or
    - (ii) showing or not showing (or for having shown or not shown) favour or disfavour to any person,in relation to the award or performance of the Agreement or any other agreement with TPC; or
  - (b) entering into an agreement for which commission has been paid or has been agreed to be paid by the Service Provider or on its behalf, or to its knowledge, unless before the relevant agreement is entered into, particulars of any such commission and of the terms of any such agreement for the payment thereof have been disclosed in writing to TPC; or
  - (c) committing any offence under the Applicable Law creating offences in respect of fraudulent acts; or
  - (d) defrauding, attempting to defraud or conspiring to defraud TPC;

- 1.1.46 “**Project**” means the Peshawar Sustainable BRT Corridor System project carried out by TPC;
- 1.1.47 “**Protocol**” means a protocol and/or a standard operating procedure issued from time to time by TPC indicating how, among other things, Services are to be rendered, the manner in which the Service Provider and Other Service Providers should work together, the exact procedures to be followed in order to comply with service level requirements set out in the Operational Specifications Schedule and any other ancillary matters;
- 1.1.48 “**Public Official**” means an official or employee of a government owned or controlled enterprise or any Regulatory Body and shall include any individual defined as a public official in an Applicable Law;
- 1.1.49 “**Quarter**” or “**Quarterly**” means a consecutive period of three (3) Months commencing from the start of a Financial Year or calendar year, as the case may be;
- 1.1.50 “**Receiving Party**” means the Party receiving Confidential Information from the Disclosing Party;
- 1.1.51 “**Regulatory Body**” means any governmental, semi-governmental, administrative, fiscal or judicial ministry, department, commission, authority, tribunal, agency, municipality or body, and shall include the provider of electricity, gas, water, wastewater, telecoms and other such public services, and anybody with a regulatory function under the Applicable Law;
- 1.1.52 “**Reserve Fund**” means the fund to be established as a security in accordance with clause 22;
- 1.1.53 “**Restricted Companies**” means Other Contractors;
- 1.1.54 “**Service Notice**” means a notice given to the Service Provider by TPC in accordance with this Agreement;
- 1.1.55 “**Stations**” means the stations described in the Operational Specifications Schedule; and which are intended as passenger embarkation and disembarkation points and Station means any one of them;
- 1.1.56 “**Surviving Provisions**” means clauses 1 (Preliminary Matters); 31 (*Breach and Termination*); 32 (*Dispute resolution*); 35 (*Intellectual Property*); 41 - 61 (*Part J - Final Provisions*) and this Annex A;
- 1.1.57 “**Termination Date**” means the fifth (5<sup>th</sup>) anniversary of the Commencement Date or the date on which an earlier termination pursuant to the terms of the Agreement takes effect;
- 1.1.58 “**UPS**” means and includes Invertor, Battery Chargers, batteries, Connection cables, Isolators, Manual Bypass Switches, DB-UPS and any other associated component required for intended purpose.
- 1.1.59 “**Uniform**” means the uniform to be worn by those Employees of the Service Provider required to fulfil their duties in view of members of the public, as prescribed in the Operational Specifications Schedule or approved by TPC and includes the name tag issued to each Employee by Service Provider;
- 1.1.60 “**Warranty**” means the warranties and undertakings given to TPC by the Service Provider, set out in clause 28;

1.1.61 “**Week**” or “**Weekly**” means the period commencing at 00h00 on Monday and ending at 24h00 on Sunday each calendar week.

## **2. Interpretation**

### **2.1 In the Agreement:**

- 2.1.1 in the event of conflict between the Annexes and the provisions of this Agreement (excluding the Annexes), the provisions of the Agreement shall prevail;
- 2.1.2 any definition in this Agreement, shall bear the same meaning and apply throughout this Agreement including Annexes hereto, unless otherwise stated or inconsistent with the context in which it appears;
- 2.1.3 the singular includes the plural and vice versa;
- 2.1.4 a reference to a statutory provision includes any subordinate legislation made from time to time under that provision and includes those provisions as amended, consolidated, re-enacted or replaced from time to time;
- 2.1.5 a reference to a document includes the document as modified from time to time and any document replacing it, in each case in the manner permitted by the Agreement;
- 2.1.6 a reference to a gender includes the other genders;
- 2.1.7 a reference to any government agency or body, if that agency or body ceases to exist or is reconstituted, renamed or replaced or has its powers or functions removed (“defunct body”), means the agency or body that performs most closely the functions of the defunct body;
- 2.1.8 a reference to an “agent” shall mean any person with a contractual relationship with a Party and carrying out activities or obligations on behalf of that Party;
- 2.1.9 a reference to a “subsidiary” shall be a reference to a subsidiary as defined in the Companies Act, 2017;
- 2.1.10 references in this Agreement to “clauses” or to “Annexes”, are to clauses of and Annexes to this Agreement;
- 2.1.11 references to notices or requests made or received by any of the Parties shall, unless expressly provided otherwise in this Agreement, refer to notices or requests in writing;
- 2.1.12 references to “agree” or “agreed” shall require the agreement to be recorded in writing and signed by the authorised representatives of the Parties;
- 2.1.13 no rule of construction shall be applied to the disadvantage of a Party to this Agreement because that Party was responsible for or participated in the preparation of this Agreement or any part of it;
- 2.1.14 unless otherwise provided, any number of days prescribed shall be determined by excluding the first and including the last day or, where the last day falls on a day that is not a Business Day, the next succeeding Business Day;
- 2.1.15 references to day/s, month/s or year/s shall be construed as Gregorian calendar day/s, month/s or year/s, as the case may be;

- 2.1.16 if a definition imposes substantive rights and obligations on a Party, such rights and obligations shall be given effect to and shall be enforceable, notwithstanding that they are contained in a definition;
- 2.1.17 a reference to a Party includes that Party's successors and permitted assigns;
- 2.1.18 the use of the word "including" followed by a specific example/s shall not be construed as limiting the meaning of the general wording preceding it and it shall be construed as if it were followed by "without being limited to".



## Annex B

# OPERATIONAL SPECIFICATIONS SCHEDULE

### OPERATOR/SERVICE PROVIDER RESPONSIBILITIES FOR OPERATION AND MAINTENANCE OF GENERATORS, UPS, DEWATERING PUMPS AT UNDERPASSES AND ALLIED SERVICES IN PESHAWAR BUS RAPID TRANSIT SYSTEM

This RFP/ Operational Specification Schedule specify the operation and maintenance obligations of Equipment in jurisdiction of TransPeshawar / Peshawar BRT which includes 30 number of Bus rapid transit stations, BRT Corridor and KPUMA Building (From outer boundary of depot and railway track). The Service Provider shall be responsible for all costs of required services mentioned in RFP, Agreement, Operational Specifications Schedule and their annexures/ attachments. The operation and maintenance services are required for following Equipment:

- a) **Generators** included but not limited to Engine, Alternator, Canopy, Auxiliary tank (approximate 500-liter capacity), ATS Panel, flow meter, electric motor, automation sensors, base tank, connection pipes/cable, software's and any other components required for successful operations. The scope of this contract covers Generators installed at stations along the corridor, and at KPUMA Building.
- b) **Dewatering Pumps** included but not limited to Pumps, Control Panels, Float Switches/Sensors, Connection Pipes/Hoses, Valves, Cables, Ladders, Software or any other associated component required for intended purpose.
- c) **UPS** Included but not Limited to Inverter, Battery Charger, Batteries, connection cables, Isolators switch, Manual Bypass switch, DC Breaker and DB-UPS.
- d) **Fuel Supply** for Generators Fuel including transportation to site, filling and fuel testing related services as required by TPC.

Detailed scope for Generators, Dewatering Pumps, and Fuelling of Generators are explained in following sections. The details of these Equipment are provided in following Annexures: -

- a. Details of Generators showing location, capacity and number (Appendix-A)
- b. Specification of Generators (Appendix-B)
- c. Specification of Dewatering Pumps (Appendix-C)
- d. Details of Dewatering Pumps showing locations & number (Appendix-D)
- e. Specifications of High-Speed Diesel (Appendix-E)
- f. Specification of UPS and Batteries (Appendix-F)
- g. Details of UPS and Batteries showing locations and number (Appendix-G)

## **1.1 Handing Over of Equipment for Operation and maintenance**

- 1.1.1 The Equipment as mentioned in Section 1 of this document will be handed over to Service Provider in the state handed over by Peshawar Development Authority and Service provider will take-over these Equipment for required operation and maintenance in accordance with scope of this Contract/Agreement. The Equipment includes Generator, Station's Pump Control Panel, UPS and Dewatering Pumps along with Control Panels at BRT Underpasses (hereafter called "**Equipment**"). The Functional Specification of these Equipment is attached, however, these Functional specifications are descriptive and not restrictive in nature and deviations by TPC from these specifications shall not be considered as violation of the Agreement.
- 1.1.2 Provided that both parties do not agree to extend the Contract, the Service Provider shall seek in writing a Handing Back Certificate (HBC) from the TPC at least 60 days before the expiry of the Contract. The TPC will issue such a certificate within 45 days provided that the equipment handed back is in good condition. Upon obtaining the HBC, the Service Provide shall be deemed clear of all obligations. However, until issuance of HBC which does not affect liability of Service Provider to keep System in fully operational condition even after expiry of contract, the Service Provider shall be bound to continue rendering O&M services, and the TPC shall continue to pay for such additional O&M Services. In addition, during this period, TPC and the Service Provider shall work jointly to solve any pending issues (if any). The final Invoice from the Service Provider shall include any such period of Services, which in any case shall not exceed 45 days.

## **1.2 General Maintenance Obligations of Equipment**

The Service Provider shall: -

- 1.2.1 Ensure that all Equipment are in satisfactory operational condition (fair wear and tear excluded) so that they conform to the operational standards of first class bus rapid transit system and/or building/ stations requirements. This means, in particular, that all Equipment should be clean, tidy, well-maintained, in running conditions and meeting all health and safety requirements;
- 1.2.2 Take responsibility for provision of all replacement parts and supplies for all maintenance issues of Equipment. The Service Provider shall procure any future spare parts and supplies (lubricants, wires etc.) pursuant to documentation provided by the manufacturer, their agent, supplier or required for maintenance and / or operation of Equipment. The spare parts shall be genuine, brand new, non-refurbished, un-altered and imported through proper channel and incorporate all recent improvements in design and material. Service Provider shall provide proof of genuine and/or imported item/spare parts to TPC on demand;
- 1.2.3 Be responsible for all material and associated costs for repair actions of Equipment caused by theft or other scheduled / unscheduled incidents;
- 1.2.4 Keep record of each spare part used, reason for replacement, total spare used, remaining spare parts etc. and follow Protocol issued by TPC for use, record and

inventory of the same. The Service Provider shall provide to TPC such record in prescribed time;

- 1.2.5 Arrange maintenance workshops/labs which must be fully functional within the vicinity of BRT system containing all necessary tools/equipment's required for proper testing, troubleshooting, repair & maintenance of all items described in para 1.
- 1.2.6 Arrange spare parts store within the vicinity of BRT containing all necessary items / parts required for the maintenance of the said system. Besides this, service provider shall maintain the inventory for each month which should be at least 5 % of the recommended critical spare parts (covers in the scope of work) and critical items separately in order to avoid any system failure in future. The list of critical items and their consumption per month shall be maintained.
- 1.2.7 Ensure that the critical spare part which may hinder the operation for prolonged duration are in stock in sufficient quantity to ensure the smooth operations. TPC may notify such spare parts and their quantity to be always available in stock during period of the Contract.
- 1.2.8 Procure, transport and maintain any tools, software and diagnostic equipment, lifting equipment, machinery (boom buckets, lifters & cranes), calibrated test equipment, which it deems necessary to carry out the Services in accordance with the Agreement;
- 1.2.9 Coordinate with authorized agent of Equipment and /or Original Equipment Manufacturer (OEM) on behalf of TPC for defects / software issues, items in claims under Defect Liability Period (If any) or any other purpose to perform the required services at its own cost and risk. Service Provider shall bear the cost of such coordination;
- 1.2.10 Follow direction / Protocol of TPC regarding cleaning of Equipment, and submission of weekly, monthly and half-year maintenance schedule regarding Equipment;
- 1.2.11 Maintain and provide tags to all electrical and mechanical equipment including tags on cables;
- 1.2.12 Maintain all conduits /pipes relevant to the scope of work;
- 1.2.13 Maintain, protect and provide replacement (where required) for all types of wires and cables (both data and power cables) connecting to Equipment;
- 1.2.14 Maintain Asset register having details of all Equipment in his custody with asset number;
- 1.2.15 Prepare code of conduct for its staff and obtain approval of TPC;
- 1.2.16 Get additional information or missing information at its own cost about equipment, or its maintenance and operations requirements, if required; and
- 1.2.17 Ensure and maintain protective devices and earthing systems are operated and maintained to reduce the risk of passengers and operations/maintenance personnel from hazardous voltages or currents. Maintenance for each earth pit consists of

checking of earth connection / continuity from equipment's end to earth pit end, fixing of earth plate and measuring of earth resistance with the help of standard earth resistance test meter. Proper cleaning of earth pit. Maintain standard earth resistance by providing standard moisture level deep inside earth pit. Detail earthing maintenance activity are required for Generator and connection of UPS and Dewatering Pumps.

### **1.3 Operation and Control Obligations of Equipment**

The Service Provider shall: -

- 1.3.1 Operate reliably Equipment to meet the operational requirements of bus operations, stations and buildings. The Equipment operational hours are 24 hours/day, 7 days a week and 365 days a year;
- 1.3.2 Engage suitable, skilled and appropriate number of human resource to carry out all services and for safety of public, security of Equipment, and operation and maintenance of Equipment;
- 1.3.3 Be responsible for all costs including human resource regarding operation and maintenance of Equipment which includes replacement of parts for preventive, corrective, and operational maintenance and /or defective/damaged goods/Equipment due to whatever reason. These includes costs of all services mentioned in the Operational Specification Schedule and Agreement/Contract;
- 1.3.4 Ensure that the spare parts supplied under this contract are authorized by manufacturer, and are genuine, brand new, non- refurbished, un-altered in any way, of the most recent or current model, imported through proper channel, and incorporate all recent improvements in design and materials, unless provided otherwise in the Agreement/ Contract;
- 1.3.5 Ensure safety tool in working condition and checked periodically as recommended by manufacturer. Provide safety equipment, personal protection equipment and other necessary materials as required for the execution of services under the contract;
- 1.3.6 Follow instructions / Protocol of TPC regarding procedure of operation, duration of operation of all Equipment, Energy plan and schedule for operation of such Equipment; and
- 1.3.7 Coordinate all hardware and software maintenance activities as well as routine maintenance activities in advance with TPC. Maintenance activities shall be conducted at night time during non-operational hours of buses.

### **1.4 Detailed Maintenance Obligations Regarding Software / SCADA System**

SCADA system / software is provisioned in the Equipment for Generators. The Service Provider shall maintain SCADA / Remote Monitoring System, and integrate all equipment which has the compatibility with the system. The Service Provider shall: -

- 1.4.1 Be responsible for transmission of data from Equipment to Ticket office established at BRT stations through communication cable or other communication mechanism for building and stations duly approved by TransPeshawar. The cost of wired or wireless communication shall be the responsibility of Service Provider.
- 1.4.2 Procure 31 number of 8-port switch (POE) for integration with each data centre/ticket office at each station and KPUMA. One switch shall consist of layer 3 switch and other layer 2 switch compatible with existing system and approved by TPC.
- 1.4.3 The Service Provider shall provide all facilities, material, cable, hub, support or any software which are required at ticket office for integration with other systems.
- 1.4.4 Provide live display of SCADA to the TPC for monitoring of the system and generating reports in the Control Centre. Service Provider shall generate real time reports/raw data from SCADA. SCADA shall include reports but not limited to the following: -
  - a. Operational Status (ON/OFF)
  - b. Alarms
  - c. Duration of running/day or hour
  - d. Error Numbers
- 1.4.5 TPC may require additional reports based on his requirements. In case of partial or complete failure of SCADA, TPC shall decide alternate procedure or evidence available from the Service Provider for estimating running time of Equipment in hours for the purpose of processing the monthly invoices of the Service Provider, which shall be acceptable to Service Provider.
- 1.4.6 Provide mechanism to download report directly from the Equipment.

## **1.5 Detailed Maintenance Obligations of Equipment**

The Service Provider maintenance and repair obligations shall include but not be limited to: -

- a) Supply and top-up of lubricants, supplies (wires, cables, switches, electronic/mechanical gadgets, electronic/mechanical material, etc.), spare parts, filters, consumables (e.g. oil, grease, coolant, filter, relays, batteries, switches, breaker, detergents, lubricants, cleaners, preservative, cotton waster etc.), safety facilities/jackets, personal protection equipment and other necessary materials as required for the execution of duties as required by this contract/Agreement and replace/provide new upon completion of useful life of any equipment/spare parts, batteries etc.;
- b) Preventive, corrective and operational maintenance including minor and major overhaul in accordance with the manufacturer's recommendation/O&M Manual;
- c) Rectify all faults occurred in relevant Equipment i.e. short circuit, open circuit, phase sequence, change, under / over voltage, phase missing, leakage current and earth faults etc.
- d) Any repair or replacement required, necessitated or caused as a result of, or generally resulting from, or in connection with, the following;

- i) Accidental or intentional damage to Equipment;
  - ii) Labour disturbances attributed to the Service Provider's employee;
  - iii) Improper or negligent use of the Equipment;
  - iv) Use of Equipment in breach of the terms and conditions of the Agreement;
  - v) Incompetence's of the Service Provider or the employees, subcontractors or any third party in operating, handling, working, or otherwise dealing with the Equipment;
  - vi) Servicing, maintenance or repairs to the Equipment by any third party other than in accordance with the OEM recommendations;
  - vii) Minor repairs strictly necessary and carried out in an emergency situation or breakdown;
  - viii) Theft of Equipment or their components;
  - ix) Failure to comply with the manuals applicable to Equipment,
  - x) Failure or malfunction of any component or equipment which is not provided by a OEM or TPC;
  - xi) Use of contaminated or non-OEM approved lubricants, additives or spare parts;
  - xii) Maintenance, repair or replacement, as the case may be, of or to the paintwork, side railing, approaches to Equipment, structure, stone damage, accident damage, etc. where Equipment are installed and handed over for operation and maintenance;
  - xiii) Attending to breakdowns and generally delivery to or collection or transportation from the point of service, salvage or breakdown;
  - xiv) Non- compliance by the Service Provider with any other obligations under the maintenance provisions specified in the Agreement;
  - xv) Tempering with the Equipment or its parts, controls and any specialised Equipment;
  - xvi) Operating the Equipment in a manner that may harm the Equipment, electrical and other components;
  - xvii) Equipment component damage due to Service Provider negligence during maintenance and in checking and maintaining oil, lubricants and fluid levels as applicable in the applicable OEM operating manual.
- e) In addition to above, the Service Provider shall, among other things:
- i) Protect the work area to ensure passengers/general public safety prior to start of any Equipment maintenance work;
  - ii) Perform the required regular checks, in accordance with the manuals and including the checking of coolant levels, lubricant levels, alignment etc.;
  - iii) Replace lost parts, and safety tool of Equipment or components of Equipment;
  - iv) Keep reserve parts, material etc. available in enough number to keep system operational during claim period under Defect Liability Period, if any. The Service

Provider shall make good the Defects or damage as soon as practicable and at his own cost during Defect Liability Period;

- v) Protection and removal of accumulated water facility area of Generators;
- vi) Attend to the fitment, service or repair of any parts or equipment necessary pursuant to any applicable law which may come into force after the Signature Date;
- vii) Carry out maintenance and repairs of the Equipment in accordance with industry best practices to maintain Technical Specification and meet functional Specifications;
- viii) Keep and use the Equipment in a proper and prudent manner and ensure that only duly qualified and competent persons are allowed to operate the Equipment;
- ix) Ensure that the OEM running-in instructions and proper responses to systems warnings are fully understood and properly observed;
- x) Not use Equipment for any purpose for which it is not designed or its use is specified;
- xi) Ensure that no components of the Equipment are removed or exchanged except where defective and in the course of normal service, repair or replacement and generally ensure that the Equipment are operated in complete condition;
- xii) Take all reasonable steps and precautions to minimise damage to the Equipment and in particular, but without limitation, in the event of any defect or failure occurring in the Equipment.
- xiii) Service the Equipment at relevant intervals in accordance with the relevant Equipment manual, best industry practices and/ or TPC's instructions;
- xiv) Promptly repair the Equipment in accordance with the relevant Equipment Manual and instructions. The service provider shall provide feasible solution for repeatedly occurring faults resulting operational loss;
- xv) Ensure that only fuel and additive as prescribed by the OEM/TPC are used. In the event that the Service Provider proposes to use any alternative to the additive as prescribed by the OEM, first obtain authorisation from TPC and reasonable conditions may be imposed;
- xvi) Be responsible for maintenance and repair of all subsystems and equipment and recoup missing or theft items;
- xvii) Allow TPC's Authorised Representative to inspect the Equipment, have access to and be entitled to, download, all information available from the Equipment (whether directly or indirectly);
- xviii) Execute required improvements (holes, piping, welding, cutting, replacement, railing etc.), clear the site from all debris and restore the structure to original condition during the performance of his duties; and
- xix) Responsible for all daily checks.

## **1.6 Special Obligation Regarding Generators**

The Service Provider Shall: -

- 1.6.1 Ensure 99.99 % availability (in running hour conditions) of Generators measure/evaluated in a month;
- 1.6.2 Allocate at least one Generator Operator (24x7) at each location where Generators are placed. The Operator shall:
  - Monitor Generator performance;
  - Perform security function in surrounding facility area;
  - Report incidents at station due to whatever reason and Service Provider;
  - Operate wall between Auxiliary tank and Generator;
  - Resolve and report issues related to electric supply from Generator to ATS Output;
  - Keep security of fuel in Generator and Auxiliary tank;
  - Operate Escalator, Elevator, station water pumps, DB's, Station lights;
  - Implement energy plan; and
  - Perform such other functions/duties as assigned by TPC.

Operator shall be expert technician to handle day to day issues and these include but not limited to under voltage, over voltage, timers, load shifting, and frequency deviation. Report immediately in case of abnormal PESCO power load shedding;

- 1.6.3 Detailed maintenance, repair, or replacement (partial or as a whole) of ATS panels installed with each Generator.
- 1.6.4 Maintain the automatic switching/ emergency cut-off of power between Generator and PESCO supply. Service provider shall ensure to effectively maintain interface with other systems;
- 1.6.5 Be responsible for the security of all equipment's of Generator system, fuel and manual restart of Generator in case of power shutdown or other similar situations. Service provider shall be responsible for the safety of staff and to secure/restrict the area from general public/ passengers and other needs/facilities required for their staff at Generator location;
- 1.6.6 Promptly alert TPC in case of malfunctioning issues pertaining to Generators functioning and/ or Generator running for more than 2 hours continuously or any other accident/incident;
- 1.6.7 Clean the facilities area including Equipment (which covers from emergency gate to nose of station and where other TPC equipment is also positioned) on regular/daily basis. Clean exterior of Generator, Auxiliary tank, flow meters, panels, trenches, sensors, gauges, surrounding areas and platform of diesel generators system which also includes other electrical facilities in the area;
- 1.6.8 Stock & maintain Three (03) No. trolley mounted mobile diesel Generators for emergency back-up in case of failure of any Generator or PESCO power failure or whatever reasons of rated capacities as below:

I. 455 KVA Prime rating Diesel Generator Set: 1 No.



II. 110 KVA Prime rating Diesel Generator Set: 2 No.'s

The mobile diesel Generators shall be made available within two months of agreement signature. Mobile Generator shall be moved throughout the BRT corridor, Control centre and Stations along with allied accessories for successful restoration of the power at affected facility. The Service Provider shall move mobile Generator to the required location within 2 hours. The trolley mounted mobile Diesel Generator shall always be positioned (24 x 7) in KPUMA or other location identified by TPC. Service Provider shall also be responsible for service, maintenance, transportation of these Generators, interconnection of cable at location where mobile diesel Generator is required.

- 1.6.9 Provide fence around facility area/ Generator at Station 01 (Chamkani) for protection of Equipment and Fuel;
- 1.6.10 Ensure that regular checks are made by the Service Provider of all oils, coolants, additives and electrolyte level and that such levels are correctly maintained in accordance with the manuals. Health checks of battery electrolyte (in case of led acid battery), connections, rusting on battery terminal and battery voltage (for proper crank of Generators); and
- 1.6.11 Dispose-Off left over or burnt fuel/lubricant after approval / inspection of TPC.

#### **1.7 Special Obligation Regarding Dewatering Pumps and Wet Wells**

The Service Provider Shall: -

- 1.7.1 Ensure 100 % availability of dewatering pumps installed;
- 1.7.2 be responsible for routine preventive and corrective maintenance as per the manufacturer recommendations/TPC instruction and Partial or as a whole replacement of dewatering pumps installed;
- 1.7.3 be responsible for the maintenance/rectification/ replacement (partial or as a whole) of associated control panel;
- 1.7.4 facilitate TPC/ Other service providers to integrate both equipment with RMS/SCADA System;
- 1.7.5 Be responsible to arrange Mobile Dewatering pump along with all required accessories for dewatering of BRT underpasses in case of installed dewatering pumps failure during the rain/flood. The pump shall have the ability to pass sludge water containing up to 1 cubic inch solid particles, shoppers and other solid waste.
- 1.7.6 Be responsible to regularly maintain the wet well ladders, covers and associated components.
- 1.7.7 Be responsible to depute Generator operator at Dewatering control panel to check/operate pump and also physically verify water level in underpass at every 5 minutes' interval in event of rain. The operator shall wear reflective coat to facilitate bus operation.

- 1.7.8 Cleaning of Water well pump from debris, plastic etc. after every two months and before rain;
- 1.7.9 Connect dewatering pump with ticket office through wire (communication/power cable) for SCADA/RMS. Provide all equipments, cables, switches, connector etc. required for such purpose.
- 1.7.10 be responsible to maintain and replace conduits/MS pipes, valves, supports structure.
- 1.7.11 be responsible for dismantling, uplifting, repair and reinstalling the pumps in case of failure.

## **1.8 Special Obligation Regarding UPS & Batteries**

The Service Provider shall: -

- 1.8.1 Ensure that UPS remain functional for at least 98% of the running time.
- 1.8.2 Operate, maintain, and rectify the all the issues related to UPS including software and hardware components.
- 1.8.3 Ensure the availability & stocking of the recommended spare part & batteries (at Least 5%).
- 1.8.4 Periodically inspect the UPS and Battery Bank for any wear & tear, loose connection, rusting of battery terminals and melted cables; and take corrective measures accordingly.
- 1.8.5 Procure, transport and replace batteries associated with UPS in case found faulty or damaged with same as existing capacity and specifications as per requirement.

## **1.9 Special Obligation Regarding Supply of Fuel**

The Service Provider shall: -

- 1.9.1 Provide fuelling in Diesel Generators in non-operational hours (11:00 PM to 5 AM) in time duration allowed and approved by TPC. In routine, generators will be refuelled at night in non-operational hours on need basis as scheduled by Service Provider and approved by TransPeshawar to meet the requirements of bus operations. TPC may also allow fuelling of generator's during bus operational hours (6:00 AM to 11:00 PM) in emergency situation or at a time directed by TPC. In case of emergency, TPC may direct with 6 hours' notice to service provider for fuelling in generators and service provider is required to fuel the generators/auxiliary tank. Entry to corridor in operational hours will be in accordance with SOP defined by TPC. Schedule for fuelling of Generators/ auxiliary tank will be provided by Service Provider and approved by TPC;
- 1.9.2 Make available at least two tank lorries/ vehicles of sufficient storage capacity to smoothly undertake and perform the fuelling activity. The resources and vehicles shall be sufficient to fuel all Generators/ auxiliary tank in one night during non-operational hours. The tank lorries must be in good condition and be equipped with

sealed digital dispensing units, flow meter and a power supply/ source (e.g. generator) to effectively carry out the decanting process including providing power to the flow-meter to be installed by Service Provider;

1.9.3 Supply, install, test, commission, operate & maintain and replace as and when required for smooth functioning of operation, a high quality, digital, branded, sealed, flow-meter on Auxiliary fuel tank with following specifications: -

- III. Power Supply 12 or 24 VDC
- IV. Count Scope 1- 9999.99 Litres
- V. Flow Range 05-90 Litres/Min
- VI. Range of Operation Temperature 0-50 C
- VII. Accuracy  $\pm 1\%$
- VIII. Backlit liquid crystal display (LCD) of digital meter
- IX. Paint Powder coating
- X. Fuel Intake socket of flow meter, designed such that fuel nozzle of dispensing unit should fit into the socket properly and there should be no leakage during fuelling.
- XI. Counter Reset button
- XII. Water proofing
- XIII. Lid/lock to secure the display unit and interface of the flow meter.
- XIV. To avoid from unauthorized access, the flow meter should be encapsulated in steel casing with locking arrangement. The arrangement should be such that it can be opened and closed for inlet of flow meter during fuelling. Furthermore, the size of steel casing should be greater than flow meter, so that flow meter can easily be dismantled and installed again if required for maintenance/ replace / repair / restore.
- XV. A system to measure fuel level in auxiliary tank by graduated dip rod.
- XVI. A backup battery in the meter to ensure safety of filling data if there is any power disconnection/failure during the fuel filing process.

Flow meter once installed on Auxiliary tank will be the property of TPC. Flow meter shall be installed within one month of contract signing along with proper seal/ security.

1.9.4 Ensure accurate recording of fuel quantity supplied/decanted. The flow-meters shall be used to monitor the quantity decanted into the Auxiliary tank at each delivery; therefore, the flow-meters must be of such quality/specifications that their readings, after calibration, should match those displayed by the dispensing unit attached on the delivery vehicle. In case of difference of reading in flow meter of delivery vehicle and auxiliary tank, lowest of the two will be taken for payment of fuel. If required, the service provider shall be responsible for levelling of Auxiliary tank to measure / read the dip chart already fixed on the tank;

1.9.5 Ensure timely calibration of both the dispensing units installed on the delivery vehicles, and the flow-meters installed on the auxiliary fuel tanks, through a recognized agency/firm, as approved by TPC;

- 1.9.6 Within 30 days of the award of the Contract, ensure calibration of all auxiliary tanks installed on sites and provide calibration reports and Dip charts. The Service Provider shall also provide dip chart for base tank. At the minimum, the calibration shall be conducted on a quarterly basis or earlier as may be needed. The calibration reports shall be submitted to TPC within one week of the end of the quarter. Under no circumstances shall the flow-meters be removed / replaced without prior approval of TPC;
- 1.9.7 Maintain on-site as well as off-site record (e.g. log book) of all re-fuelling activity. (Generator readings, quantity delivered at each supply, flow meter and graduated material dip rod readings etc.). Graduated dip rods must be made available at each station and shall be handed over and kept under the custody of Security Manager or other representative of TPC at the initiation of the Contract;
- 1.9.8 Guard against dispensing of impure or substandard Diesel to protect warranty rights of TransPeshawar by performing basic quality tests (Graduated Cylinder (1 L) Fuel Test, water test and flash point test) at each delivery on-site at location identified by TPC;
- 1.9.9 Ensure security of fuel present in Generators and auxiliary tanks, on 24-hour basis, 7 days per week (including public holidays), by implementing a system of theft prevention duly approved by the TPC. The theft prevention mechanism may encapsulate flow meter through steel and locking arrangement;
- 1.9.10 Control unauthorized access to flow meters, auxiliary tanks, fuel delivery pipes from auxiliary tank to base tank, base tank, and control valves;
- 1.9.11 Recognize, respond and take necessary actions to security threats or breaches (during fuelling process) of fuelling handling system at sites;
- 1.9.12 Develop detailed Standard Operating Procedures (SOPs) for the following, to the satisfaction of TransPeshawar, and strictly abide by them. SOP for decanting of fuel and lab testing shall be notified by TPC to Service Provider and amended from time to time by TransPeshawar: -
- a. Lab testing of delivered fuel: i) The Service Provider shall arrange lab test report, of a randomly drawn sample of fuel taken on-site at location identified by TPC in presence of representative(s) from both TransPeshawar and the Service provider, twice a month. ii) Two samples shall be taken at the cost of Service provider from each sample; one by Service Provider for testing and other by TPC. The Services of a company (lab) of repute and approved by TransPeshawar shall be utilized for lab tests. The specifications of Pakistan Standards Institute (PSI) for High Speed Diesel shall be treated as benchmark for quality.
  - b. TransPeshawar can also conduct three test in a six-month period from a randomly taken sample, the cost of which shall be borne by Service Provider. Additional test if conducted by TransPeshawar shall be at the cost of TransPeshawar.
- 1.9.13 Conduct activities including fuelling, collection of readings (including but not limited to graduated dip rod readings for auxiliary tank and base tank, engine running hours, percentage fuel level), maintain and provide fuel consumption and supply trends reports and submission of other reports as per schedule defined by the TPC. The

reports shall be as per prescribed format of the TPC. The number and format of the reports are subject to change as need arises, decided by the TPC.

- 1.9.14 Maintain and replace flow meters as notified by TPC. In case service provider does not provide equipment within seven (07) working days, TPC will replace or maintain the required equipment and will deduct the invoice price from service provider monthly payment or reserve fund.
- 1.9.15 For the duration of the Agreement, irrespective of actual or anticipated fuel delivery stoppages or shortage of fuel and electricity supply, ensure that it maintains, at its own cost, at all times adequate levels of fuel, in order to ensure a seamless and uninterrupted delivery of the Services.
- 1.9.16 Authorize TPC to inspect decanting of fuel, condition of tank lorries, use of a Digital Testing Kit, or arrange testing of calibration of dispensing units or the flow meters in light of SOPs provided by the Service Provider as and when it so desires. This includes existing fuel assembly which will be handed over to Service Provider in working condition.
- 1.9.17 Provide complete operation and maintenance of fuel supply assembly owned by TPC till base tank of Generator in complete working condition and in accordance with the specifications, requirement and/or recommendations of service provider. The assembly includes flow meters, auxiliary tanks, graduated dip rods, fuel delivery pipes from auxiliary tank to base tank, electric motor, control valves, locking arrangement and other allied equipment / parts. Operation and Maintenance shall also include periodic painting of Auxiliary tank, locking arrangement and repair / replacement / restoration of equipment/ parts of assembly without any effect to TPC ownership rights and levelling of auxiliary tanks if required. This also includes calibration, repair and maintenance of flow meters already installed by TPC between auxiliary and Generator sets;
- 1.9.18 Explain discrepancies (termed as "Deficient Fuel") identified by TPC, based on data trends of diesel consumption using generator operating hours, delivered quantity and generator levels data provided by the Service provider, with adequate justification, below 95% statistical confidence level. Upon identification of such discrepancies established between and within generators, the TPC shall require the Service Provider to investigate and explain such discrepancies. The cost of Deficient Fuel as established by TPC shall be replenished by the Service Provider as a deduction from proceeding invoice. Decision of TPC in this regard shall be final and binding on the Service Provider.

#### **1.10 Monthly Operation Report**

No later than 17:00 PM on the 3rd Business Day of each month, starting on the last Business Day of the first Calendar month after the Commencement Date, the Service Provider shall submit to TPC a report on the Performance of its obligations under the Agreement during the previous month, covering at a minimum:

- a) Report on regarding spare parts usage & balance in warehouse;
- b) Details of issues during Defect Liability Period (if any), feedback and status;

- c) Detail record of all service, repair and maintenance;
- d) List of tools, software, diagnostic equipment etc. maintained;
- e) Full details on any Severe Defect maintenance / operations on Equipment;
- f) List of Staff /Operator working and updated on monthly basis for the duration of the Agreement by the way of an exception report indicating the incoming and exiting staff/Operator for implementation in attendance system of TPC;
- g) Report regarding Fuelling in Generators;
- h) Performance on KPIs;
- i) Items required by TPC for monitoring and performance evaluations; and
- j) Other indicator as agreed between the Service Provider and TPC.

### **1.11 KEY PERFORMANCE INDICATORS**

- i. The Service Provider's performance of operation, maintenance and services shall be evaluated by means of key performance indicators ("**KPIs**"). Failure to comply with KPIs ("**Failure Events**") shall lead to the application of performance deduction as per the below table ("**Performance Deduction**"):
- ii. The Service Provider shall, pay the Liquidated Damages depending on its performance in achieving the agreed performance regime as measure during course of the Contract.
- iii. The Liquidated Damages for failure to achieve Key Performance Indicators (KPI) parameters will be implemented in accordance with Key Performance Indicators.
- iv. Except for information available through SCADA system /Software, Network Monitoring System or complaint management system, or other system generated reports known to the Service Provider; any other information, if any, used by the TP to evaluate KPI will be transferred to the Service Provide once a week on request. The Service Provide will have the right to justify through concrete evidence the outcome of the aforesaid systems, on as-and-when basis, that are subject to Liquidated Damages as per KPI, prior to settlement of monthly payments, but in any case no later than one week from the submission of the Invoice.
- v. The Liquidated Damages is the final and full remedy of the TPC for the Service Provider failure to achieve the KPI targets, and such Liquidated Damages shall be deemed to have offset any breach whatsoever due to the lapses/deficiencies in performance.
- vi. Any breach of defined service levels will entail Liquidated Damages which shall not exceed 10% of the monthly payments to be paid under the Agreement/Contract to Service Provider.

#### **1.11.1 General Violations and Their Liquidated Damages applicable to the Agreement**

Sr. No	KPI	Failure Event	Performance Deduction Percentage
1	Prevention of Severe Accidents	Accident involving Equipment and software due to the Service Provider fault or malfunctioning of equipment resulting in death or severe physical injury of a passenger or other person ( <b>Severe Accident</b> )	10% per occurrence
2	Prevention of Material Accidents	Accident involving Equipment and software due to the Service Provider fault or malfunctioning of equipment resulting in minor physical injury of a passenger or other person or material damage to the TPC assets ( <b>Material Accident</b> )	5% per occurrence
3	Prevention of strikes	Number of operating minutes in which the Service Provider or its staff did strike and shutdown system partially or fully	5 % per incident which continue for more than 20 minutes plus loss of passenger revenue (if any)
4	Safeguarding of operational data	Some operational data irrecoverably lost	1% per occurrence
5	Repetition of issues	Occurrence of same issues by more than 10 times in the same month in same or multiple equipment	3 % per occurrence
6	Transparent self-reporting	False or misreporting of monthly operations report	2 % per occurrence
7	Dragnet clause	Any act/instance that is non-conforming or a violation of Contract , Operation Specification Schedule, Rules or Regulations of TPC, Instructions given by the TPC or violation of Protocol unless covered by another KPI	1 % per occurrence
8	Frequently occurred violations	Occurrence per violation listed in table below (Failure Event), unless covered by another KPI  Note: This Liquidated Damages will be only applicable, if any other Liquidated Damages is not applicable under the Agreement/Contract	0.5% per occurrence

a) Frequently occurred violations. The table below defines the frequently occurred violations that are covered in the KPIs.

Sr. No	Failure Event
1	Late arrival of staff at stations/ control centre as defined by TPC (calculated per person)

Sr. No	Failure Event
2	UPS or Generator not functional (irrespective of power failure) (calculated per device)
3	Live video of specific camera is not available (calculated per camera)
4	Late opening or early closing of Equipment
5	Staff not available in the Control Centre (Per person per day)
6	Lazy work by staff/smoking at stations (per occurrence per person )
7	Staff seen spitting (per occurrence)
8	Not attending/responding complaints received on complaint management system or share through other mechanism devised by TPC (calculated per day)
9	Reports in required format are not provided (calculated per month per report)
10	Late or non-submission of required report at start of the month (calculated per day) or date specified by TPC
11	Absence of the staff at designated points for more than 20 minutes (calculated per occurrence)
12	Failed to inform malfunctioning Equipment (per occurrence)
13	Failed to facilitate physically disabled person (calculated per instance)
14	Lack of policies that promote environment for female employee (calculated per instance)
15	Service Provider office in location that is not accessible by specially challenged persons (calculated per month)
16	Delay of repair to TPC property in TPC prescribed time caused by Service Provider (In addition to cost recovery of asset) (calculated per day)
17	Misuse of TPC infrastructure (per instance). LD may be multiplied by factor 1 to 5 upon discretion of TPC based on severity
18	Allowing passengers to BRT without security check or fare (per instance)
19	Non-availability of online attendance of staff assigned to stations (calculated per day)
20	Non-availability of insurance or late renewal of insurances (calculated per day)
21	Failure of any equipment or subsystem or fail to maintain system accordance with standards and specification (calculated per day per equipment)
22	Failure to carry personal or vehicle identification by staff per day
23	Refusal or failing to provide information prescribed in the Agreement (per instance)



Sr. No	Failure Event
24	To refuse to accept the visits of the TPC inspectors to station, to hide information or to provide partial or erroneous information(per instance).
25	Disruption of, or negative impacts on, the BRT Vehicle Services due to any conduct of the Service Provider such as sitting in stairs, on floor, or obstructing passage way (per instance)
26	Accumulation of water in any Equipment pits or any other location where there is a likelihood of damage to any equipment, or likelihood of mosquito infestation. (per instance)
27	Misuse of Utility Connections or their wastage (In addition to cost recovery from Service Provider)
28	Emergency not reported to TPC within 15 (fifteen) minutes of its occurrence
29	Parts/equipment installed are of inferior quality/ noncompliant to technical specifications of those under specification per instance. The LD may be multiplied from factor 1 to 5 based on discretion of TPC and severity of violation.
30	Log book for fueling of gen-set not maintained as per requirements defined in the scope of work per instance.
31	Failure to disclose or inform the TPC about operational issues and/or safety incidents that have subsequent impact on operation and such information is not available through information systems, such as SCADA etc. (per instance)
32	Personnel does not adhere to code of conduct or misbehaves with TPC staff, other Service Provider Staff, its own staff or passengers  (TPC can suggest the Service Provider to take punitive actions or terminate the employment of such responsible employees in addition to Liquidated Damages)
33	Execute works without precautionary measures for passengers/general public safety or without permission of TPC (per instance)
34	Non-compliance to Gender Action Plan and / or Employment Opportunity Program (per instance)
35	The Asset Register is not maintained, not up-to-date or incomplete or RFID tags missing (per instance)
36	Failure to remove broken-down fuel delivery vehicle or staff vehicle from the BRT corridor before commencement of Operations or failure to arrange or failure to arrange backup delivery vehicle within one hour in case of breakdown

### 1.11.2 Dewatering Pumps KPI's

Sr. NO	KPI-1: Dewatering System Fault Rectification (FR)
	<p>Fault shall be considered based on number of units effected: -</p> <p>1. <b>Critical Category Fault (CCF):</b> Complete shutdown of Dewatering Pump during bus operations hours at station leading to shutdown of bus operation. OR There is a situation in which operations of Dewatering Pump may lead to shutdown of bus operation. Resolution time is 15 minutes in case no parts are required; 30 minutes in case mobile dewatering pumps are required and available. In case of</p>

	<p>damage/fault out of normal use, timelines to rectify are to be justified, conveyed in writing in 30 minutes and shall be adhered to.</p> <p>2. <b>High Category Fault (HCF):</b> The Dewatering Pump can operate but not as per designed and intended functional use or within acceptable limits specified and there is likelihood of service loss. Resolution time is 12 hours.</p> <p>3. <b>Low Category Fault (LCF):</b> The Dewatering Pump can operate but not as per designed and intended functional use or within acceptable limits specified. There is no likelihood of service loss or safety issue and a possible workaround exists. Resolution time is 24 hours.</p> <p>TF = Total Faults Considered for KPI-1: = A + B x (C/ D)  A = No of Faults Responded above the assigned resolution time but within 2 times the Assigned Resolution Time for a Particular Category;  B = No of Faults Responded in more than 2 times the Assigned Resolution Time for a Particular Category  C = Average Actual Resolution Time of 'B' expressed in units of Assigned Resolution Time of the Category under Consideration  D = Assigned Resolution Time of the Category under Consideration</p>		
	<b>FR</b>	<b>Threshold of FR</b>	<b>Performance Deduction Percentage (PDP)</b>
1	CCF= (Critical Fault solved within assigned resolution time ) / (Critical Fault solved within assigned resolution time +TF Critical) x 100	More than 100 %	1 x TF <sub>Critical</sub>
2	HCF= (High Fault solved within assigned resolution time ) / (High Fault solved within assigned resolution time +TF High) x 100	More than 95 %	0.5 x TF <sub>High</sub>
3	LCF= (Low Faults solved within assigned resolution time ) / (Low faults solved within assigned resolution time +TF Low) x 100	More than 90 %	0.2 x TF <sub>Low</sub>

<b>FAULT CATEGORY IDENTIFICATION FOR KPI-1 AND OPERATIONAL PENALTY ON OCCURANCE</b>		
<b>Sr. No</b>	<b>INCIDENT</b>	<b>FAULT CATEGORY</b>
1	Non-Functioning of Dewatering Pump.	Critical
2	Dewatering Pump is functioning but not to the designed / intended value.	High
3	Dewatering pump generating mechanical rubbing sound, leakage in valves, pipes.	High
4	Incorrect / delayed response of sensors/accumulation of water in underpass.	High

5	Dewatering Pump is manually Operational but auto start stop is not working.	High
6	<ul style="list-style-type: none"> <li>i- Pump is functional but Electrical Panel is damaged of any component is faulty.</li> <li>ii- Pump is Functional but remote monitoring &amp; control feature is inactive due to fault/lost connection in control panel.</li> </ul>	Low
6	Others.	Category to be decided by the TPC under fault categories defined

### 1.11.3 Generators KPI's

Sr. No	<b>KPI-2: Generators Fault Rectification (FR)</b>		
	<p>Fault shall be considered based on number of units effected: -</p> <ol style="list-style-type: none"> <li><b>Critical Category Fault:</b> Complete shutdown of Generator either due to fuel shortage or other reasons during bus operations hours at station/KPUMA leading to service loss. OR There is a situation in which operations of Generator may lead to safety issues for passengers. Resolution time is 2 hours in case no parts are required; 4 hours in case parts are required and available, and damage/fault are arisen under normal use. In case of damage/fault out of normal use, timelines to rectify are to be justified, conveyed in writing in 90 minutes and shall be adhered to.</li> <li><b>High Category Fault:</b> The Generator can operate but not as per designed and intended functional use or within acceptable limits specified and there is likelihood of service loss. Resolution time is 12 hours.</li> <li><b>Low Category Fault:</b> The Generator can operate but not as per designed and intended functional use or within acceptable limits specified. There is no likelihood of service loss or safety issue and a possible workaround exists. Resolution time is 24 hours.</li> </ol> <p>TF = Total Faults Considered for KPI-1: = <math>A + B \times (C / D)</math>  A = No of Faults Responded above the assigned resolution time but within 2 times the Assigned Resolution Time for a Particular Category;  B = No of Faults Responded in more than 2 times the Assigned Resolution Time for a Particular Category  C = Average Actual Resolution Time of 'B' expressed in units of Assigned Resolution Time of the Category under Consideration  D = Assigned Resolution Time of the Category under Consideration</p>		
Sr. No	FR	Threshold of FR	Performance Deduction Percentage (PDP)
1	CCF= (Critical Fault solved within assigned resolution time ) /	More than 98 %	

	(Critical Fault solved within assigned resolution time +TF Critical) x 100		1 x TF <sub>Critical</sub>
2	HCF= (High Fault solved within assigned resolution time ) / (High Fault solved within assigned resolution time +TF High) x 100	More than 95 %	0.5 x TF <sub>High</sub>
3	LCF= (Low Faults solved within assigned resolution time) / (Low faults solved within assigned resolution time +TF Low) x 100	More than 90 %	0.2 x TF <sub>Low</sub>

**FAULT CATEGORY IDENTIFICATION FOR KPI-3 AND OPERATIONAL PENALTY ON OCCURANCE**

Sr. No	INCIDENT	FAULT CATEGORY
1	Electrical failure due to leakage current, improper wire connection causing Generator to malfunction	Critical
2	Switching between PESCO and Generator not within 30 seconds under normal conditions	High
3	Generator generating Mechanical rubbing sound	High
4	Generator did not response to Emergency Push Buttons stop.	High
5	Under/over voltage and under/over Frequency protection failed.	Critical
6	Generator is Operational but damaged / with missing parts / in dilapidated condition.	Critical
7	Any component (Volt meter, Ampere meter, Indication lights, Circuit Breakers, Timers, Relays and Auxiliary Tanks etc. ) not maintained as part of EDG system operation	High
8	Others.	Category to be decided by the TPC under fault categories defined

**1.11.4 UPS KPI's**

Sr. No	KPI-4: UPS Fault Rectification (FR)
	<p>Fault shall be considered based on number of units effected: -</p> <p>4. <b>Critical Category Fault:</b> Complete shutdown of UPS during bus operations hours at station leading to service loss. OR There is a situation in which operations of UPS may lead to safety issues for passengers. Resolution time is 2 hours in case no parts are required; 4 hours in case parts are required and available, and damage/fault are arisen under normal use. In case of damage/fault arise out of</p>

	<p>normal use, timelines to rectify are to be justified, conveyed in writing in 90 minutes and shall be adhered to.</p> <p>5. <b>High Category Fault:</b> The UPS can operate but not as per designed and intended functional use or within acceptable limits specified and there is likelihood of service loss. Resolution time is 12 hours.</p> <p>6. <b>Low Category Fault:</b> The UPS can operate but not as per designed and intended functional use or within acceptable limits specified. There is no likelihood of service loss or safety issue and a possible workaround exists. Resolution time is 24 hours.</p> <p>TF = Total Faults Considered for KPI-1: = A + B x (C/ D)  A = No of Faults Responded above the assigned resolution time but within 2 times the Assigned Resolution Time for a Particular Category;  B = No of Faults Responded in more than 2 times the Assigned Resolution Time for a Particular Category  C = Average Actual Resolution Time of 'B' expressed in units of Assigned Resolution Time of the Category under Consideration  D = Assigned Resolution Time of the Category under Consideration</p>		
Sr. No	FR	Threshold of FR	Performance Deduction Percentage (PDP)
1	CCF= (Critical Fault solved within assigned resolution time ) / (Critical Fault solved within assigned resolution time +TF Critical) x 100	More than 98 %	1 x TF <sub>Critical</sub>
2	HCF= (High Fault solved within assigned resolution time ) / (High Fault solved within assigned resolution time +TF High) x 100	More than 95 %	0.5 x TF <sub>High</sub>
3	LCF= (Low Faults solved within assigned resolution time ) / (Low faults solved within assigned resolution time +TF Low) x 100	More than 90 %	0.2 x TF <sub>Low</sub>

FAULT CATEGORY IDENTIFICATION FOR KPI-3 AND OPERATIONAL PENALTY ON OCCURANCE		
Sr. No	INCIDENT	FAULT CATEGORY
1	Complete failure due to short circuit, leakage current, improper wire connection collapsing the critical equipment connected.	Critical
2	Failed to withstand switching time of 30 seconds between PESCO and Generator under normal conditions	Critical
3	UPS running on bypass showing fault alarm.	Critical

4	UPS running normal showing fault alarm with interrupting the critical equipment connected.	High
5	Under/over voltage and under/over Frequency protection failed.	High
6	UPS is Operational but damaged / with missing parts / in dilapidated condition not providing the designed back-up.	High
7	Any component not maintained as part of system operation	Low
8	Others.	Category to be decided by the TPC under fault categories defined

### 1.11.5 Fuelling KPI's

Sr. No.	Description of Infraction	Performance Deduction Percentage (PDP) or other Liquidated Damages
1	Disruption in Operation of BRT Service due to failure of Service Provider to timely refuel the generators (within the allocated time slot) or in sufficient quantities.	Revenue loss in passenger estimated by TPC from automated fare collection system
2	Ensure security of fuel present in auxiliary tanks, on 24-hour basis, 7 days per week (including public holidays), by implementing a system of theft prevention.	The Service Provider shall be liable to bear the actual cost of established stolen quantity estimated by the TPC in last 30 days.
3	Failure to perform basic quality testing (Graduated Cylinder Fuel Test, water test and flash point test) at each delivery, as may be reported by TPC representative/inspector.	10% of Cost of Diesel Delivery (for that particular day) upon 1 <sup>st</sup> occurrence. 25% of Cost of Diesel Delivery (for that particular day) upon 2 <sup>nd</sup> occurrence. 50% of Cost of Diesel Delivery (for that particular day) upon 3 <sup>rd</sup> occurrence. 75% of Cost of Diesel Delivery (for that particular day) upon 4 <sup>th</sup> occurrence and onwards.
4	Failure to ensure accurate recording of fuel quantity supplied/decanted as may be reported by TPC representative/inspector.	10% of Cost of Diesel Delivery (for that particular day) upon 1 <sup>st</sup> occurrence. 25% of Cost of Diesel Delivery (for that particular day) upon 2 <sup>nd</sup> occurrence. 50% of Cost of Diesel Delivery (for that particular day) upon 3 <sup>rd</sup> occurrence. 75% of Cost of Diesel Delivery (for that particular day) upon 4 <sup>th</sup> occurrence and onwards.

5	Failure to contain spillage within acceptable fuel spillage levels as may be ascertained/reported by TPC representative/inspector along with a photographic evidence.	0.3 % Plus cost of fuel spillage
6	Failure to calibrate the dispensing units (installed on delivery vehicles), flow-meters (installed on fuel tanks) and auxiliary tanks or failure to provide calibration reports as per scope of the contract	0.5 % per month
7	Voidance of Warranty due to supply and use of sub-standard fuel as described in scope of the contract	Up to10% of the replacement Cost of Generator by accessing to Reserve Funds
8	Failure to arrange lab test as per scope of the contract.	1 % per occurrence

## ANNEXURE-C. PAYMENT CALCULATION SCHEDULE

The TPC shall pay the Service Provider according to the manner specified below.

For each Month (m) following Services Commencement Notice, the Service Provider shall be entitled to a payment (**Monthly Payment**) calculated in accordance with the following formula:

Monthly Payment<sub>m</sub> = (**Stations<sub>m</sub> / Stations<sub>Total</sub>**) x **Fixed Fee** x (**CPI<sub>y</sub> / CPI<sub>2021</sub>**) (**1- Performance Payout Percentage** x **Performance Deduction Percentage<sub>m</sub>**) - **RF**

Where:

**Stations<sub>m</sub>** means the number of Stations at which Services were provided on the first day of Month (m).

**Stations<sub>Total</sub>** means the total number of Stations, which shall be thirty (30) including sub-station 08.

**Fixed Fee** means the monthly fee/bid value as updated from time to time.

**CPI<sub>y</sub>** means the Consumer Price Index applicable for the specific year, which shall be the average general Consumer Price Index for the month of January (year-on-year basis) of the preceding year as published by the Pakistan Bureau of Statistics, or in case it ceases to be published any equivalent index as agreed by the Parties. For the first adjustment, **CPI<sub>y</sub>** will be accounted for January 01, 2022. Base value for adjustment will be that of January 01, 2021 i.e. **CPI<sub>2021</sub>**.

**CPI<sub>2021</sub>** means the Consumer Price Index applicable for the year 2021, which shall be the average general Consumer Price Index for the month of January 2021 as published by the Pakistan Bureau of Statistics. For subsequent years, **CPI<sub>y</sub>** and **CPI<sub>2021</sub>** will change accordingly i.e. **CPI<sub>2021</sub>** will change to **CPI<sub>2022</sub>** for next year and so on. Subject to above, adjustment will be made only once in a year in month of January.

**Performance Payout Percentage** means ten percent (10%).

**Performance Deduction Percentage<sub>m</sub>** means the Performance Deduction Percentage applicable to the Service Provider for Month (m).

**RF** means any amount to be retained in relation to the provisioning of the Reserve Fund.

Adjustment in monthly fee will be calculated once in a year and first adjustment will be effected in January to be paid in February based on year-on-year basis.

The Service Provider shall raise an invoice to the TPC for an amount equivalent to the Monthly Payment for Month (m) (plus any applicable Sales Tax on Services). The Monthly Payment for Month (m) shall be made by the TPC within twenty (20) Business Days of receiving such copy. TPC will notify Performance Deduction Percentage for Month (m) in accordance with the provisions of Operation Specification Schedule to the Service Provider for deduction from the Monthly payment in first 10 Business days of the Month. Service Provider will have right to defend the Performance Deduction Percentage to TPC. Monthly payment will be paid in local currency only.

The adjustments in the monthly fee will be in accordance with General Consumer Price Index variation and procedures laid down in above sections. The parameters established for calculating the cost basket are estimates and therefore, failure to actually meet the same will not entitle any party to request adjustments in the calculation procedure of monthly fee nor in the economic compensation of any kind.



**Annex D**  
**PERFORMANCE GUARANTEE**

**[TO BE ISSUED ON JUDICIAL PAPER OF PRESCRIBED FEE BY BANK LICENSED TO CONDUCT BUSINESS IN THE ISLAMIC REPUBLIC OF PAKISTAN]**

This **Performance Guarantee No.** <Insert No.> is made on <Insert date> 2020 (the “**Guarantee**”)

**Ref:** Letter of Award for **Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply Services in Peshawar BRT System** dated <Insert date> 2020 (the “**Agreement**”)

**Beneficiary:** **TRANSPESHAWAR (THE URBAN MOBILITY COMPANY)**, a Public Limited Company incorporated with Security Exchange Commission of Pakistan in February 09, 2017, with company registration No.0105691 and whose registered address is at Ali Tower, Second Floor, University Road, Peshawar, KPK. (“**employer**”)

**1. GUARANTEE**

We <Insert name of Bank> Bank (the “**Guarantor**”) have been informed that <Insert name of the Company> (the “**Service Provider**”) has been awarded the Agreement relating to **Operation and Maintenance of Generators, Dewatering Pumps & Fuel Supply Services in Peshawar BRT System** (the “**Project**”).

- 1.1 The Guarantor hereby irrevocably and unconditionally undertakes to pay to employer on its first demand for payment, without regard to any objections or defences to employer’s demand from the Service Provider or any other person, an amount or amounts not exceeding in total **PKR ----- (in words)**.

**2 TIME FOR PAYMENT**

- 2.1 Any amount demanded by employer shall be paid by Guarantor to employer within seven (07) days of receipt of the employer’s demand for payment stating that the Service Provider is in breach of its obligations arising under, out of or in connection with the Agreement and the Guarantor shall have neither the right nor the duty or obligation to challenge the accuracy or sufficiency of such statement or the amount specified in the demand.

**3 VALIDITY OF GUARANTEE**

- 3.1 This Guarantee shall come into force on the date hereof and shall remain valid until <insert date> whereupon this Guarantee shall expire and be returned to the Guarantor.

**4 PAYMENT FREE OF DEDUCTIONS AND WITHHOLDINGS**

- 4.1 Any payment under this Guarantee shall be made free and clear of, and without deduction for or on account of, any present or future taxes, levies, imposts, duties, charges, fees, deductions or withholdings of any nature whatsoever and by whomsoever imposed.

**5 Notices and Demands for Payment**

- 5.1 Any demand for payment made under this Guarantee shall be delivered by hand or registered courier and be deemed to be duly made at the time of, and on the date of, delivery.
- 5.2 Any notice given under this Guarantee shall be deemed to be duly given:
  - A. in the case of facsimile transmission, on the date and at the time shown on the transmission report by the machine from which the facsimile was sent, subject to the machine producing a report that the facsimile was sent in its entirety to the contact details of the addressee stated in Schedule 1 (the “**Contact Details**”); and
  - B. in the case of email:
    - (A) at the time of receipt by the sender of an email acknowledgement from the intended addressee’s information system showing that the email has been delivered to the email address of that addressee; or
    - (B) if no email acknowledgement is received, then at the time the email enters an information system which is under the control of the intended addressee (and the addressee shall make available at the request of the sender, evidence of such time); and
  - C. in the case of delivery by hand or registered courier, at the time of and on the date of delivery.
- 5.3 Any notice or demand given or made by employer or the Guarantor relating to this Guarantee shall be in English.

**6 ASSIGNMENT**

- 6.1 Employer shall have the right to assign the rights and benefits under this Guarantee.

**7 DISPUTE RESOLUTION**

- 7.1 This Guarantee shall be governed by, interpreted and construed in accordance with the laws of the Islamic Republic of Pakistan. Each Party consents to the jurisdiction of the courts in the Islamic Republic of Pakistan.

**EXECUTED** for and on behalf of  
[**GUARANTOR**]

.....

(signed)

.....

Name

**Witnesses:**

## SCHEDULE TO THE PERFORMANCE GUARANTEE

For employer:

Transpeshawar Company

<Address line1>

<Address line2>

<Address line3>

Tel: <Insert employer's telephone number>

Fax: <Insert employer's fax number>

Email: <Insert employer's email address>

For the Attention of <\_\_\_\_\_>

For the Guarantor:

<Insert Guarantor's Name>

<Address line1>

<Address line2>

<Address line3>

Tel: <Insert Guarantor's telephone number>

Fax: <Insert Guarantor's fax number>

Email: <Insert Guarantor's email address>

For the Attention of <\_\_\_\_\_>

<b>Details of Generators showing location, capacity and number</b>				
<b>S.No</b>	<b>Location</b>	<b>Names</b>	<b>Quantity</b>	<b>Capacity (KVA)</b>
1	KPUMA	KPUMA Building	1	455
2	KPUMA	KPUMA Building	1	65
3	KPUMA	KPUMA Building	1	110
4	BS-00	Chamkani	1	110
5	BS-01	Sardar Ghari	1	110
6	BS-02	Chughal Pura	1	110
7	BS-03	Faisal Colony	1	110
8	BS-04	Old Haji Camp	1	110
9	BS-05	Lahore Adda	1	110
10	BS-06	Gulbahar Chowk	1	110
11	BS-07	Hashnagri	1	110
12	BS-08	Malak Saad Shaheed	1	110
13	BS-10	Khyber Bazar	1	110
14	BS-11	Shoba Bazar	1	110
15	BS-12	Dabgari Gardens	1	110
16	BS-13	Railway Station	1	110
17	BS-14	FC Chowk	1	110
18	BS-15	Saddar Bazar	1	110
19	BS-16	Mall Road	1	110
20		Aman Chowk	1	110
21	BS-19	Tehkal Payyan	1	110
22	BS-20	Tehkal Bala	1	88
23	BS-21	Abdara Road	1	88
24	BS-22	University Town	1	110
25	BS-23	Peshawar University	1	110
26	BS-24	Islamia College	1	110
27	BS-25	Board Bazar	1	110
28	BS-26	Mall of Hayatabad	1	110
29	BS-27	Bab-e-Pashawar	1	88
30	BS-28	Hayatabad Phase 3	1	88
31	BS-29	Tatara Park	1	88
32	BS-30	PDA	1	88
33	BS-31	Hospital Chowk	1	88
34	BS-32	Karkhano Market	1	110
<b>Total Number of Generators to be installed - A</b>				<b>34</b>
Total number of 455 KVA Generators - B				1
Total number of 110 KVA Generators - C				25
Total number of 88 KVA Generators - D				7
Total number of 65 KVA Generators - D				1

## SUMMARY/ GENERAL SPECIFICATIONS OF GENERATORS

	DE88E0	DE110E2	455
Manufacturer	Caterpillar	Caterpillar	Caterpillar
Engine Model	Cat C4.4	Cat C4.4	C15
Gross Engine Power kW (hp)			
Standby 50Hz	80.7 (108.0)	103.0 (138.0)	400 (536.4)
Standby 60Hz	93.0 (125.0)	117.5 (158.0)	
Prime 50Hz	73.4 (98.0)	93.6 (126.0)	360 (482.76)
Prime 60Hz	84.5 (113.0)	106.8 (143.0)	
Tank Capacity: Liters (US gal)	219 (57.9)	250 (66.0)	839 (222)
Governing type	Mechanical	Electronic	Elec
Compression Ratio	17.25:1	18.3:1	16.1:1
Bore/Stroke: mm (in)	105.0 (4.1) / 127.0 (5.0)	105.0 (4.1) / 127.0 (5.0)	137 (5.4) /171 (6.8)
Speed (RPM) – 50 Hz	1500	1500	1500
Estimated Fuel Consumption @ 110% load: L/hr (US gal/hr)			
50 Hz	20.1 (5.3)	23.9 (6.3)	
60 Hz	23.2 (6.1)	29.0 (7.7)	
Estimated Fuel Consumption @ 100% load: L/hr (US gal/hr)			
50 Hz	18.2 (4.8)	21.7 (5.7)	94.5 (25)
60 Hz	21.0 (5.5)	26.1 (6.9)	
Estimated Fuel Consumption @75% load: L/hr (US gal/hr)			
50 Hz	13.6 (3.6)	16.5 (4.4)	71.8 (19)
60 Hz	16.0 (4.2)	19.7 (5.2)	
Estimated Fuel Consumption @50% load: L/hr (US gal/hr)			
50 Hz	9.5 (2.5)	11.6 (3.1)	51.5 (13.6)
60 Hz	11.4 (3.0)	14.1 (3.7)	

Standby & Prime: 50Hz; 380, 400V & 415V



Image shown might not reflect actual configuration

Engine Model	Cat® C15 ACERT In-line 6, 4-cycle diesel
Bore x Stroke	137mm x 171mm (5.4in x 6.8in)
Displacement	15.2 L (928 in³)
Compression Ratio	16.1:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	MEUI
Governor	Electronic ADEM™ A4

## PACKAGE PERFORMANCE

Model	Standby	Prime	Emission Strategy
DE500E0	500 kVA, 400 ekW	450 kVA, 360 ekW	Non-Certified Emissions

Performance	Standby	Prime
Frequency	50 Hz	50 Hz
Genset Power Rating	500 kVA	450 kVA
Gen set power rating with fan @ 0.8 power factor	400 ekW	360 ekW
Fuelling strategy	Non-Certified Emissions	Non-Certified Emissions
Performance Number	DM8491	DM8490
Fuel Consumption		
100% load with fan	103.7 L/hr 27.4 gal/hr	94.5 L/hr 25.0 gal/hr
75% load with fan	77.9 L/hr 20.6 gal/hr	71.8 L/hr 19.0 gal/hr
50% load with fan	55.3 L/hr 14.6 gal/hr	51.5 L/hr 13.6 gal/hr
25% load with fan	33.4 L/hr 8.8 gal/hr	31.6 L/hr 8.3 gal/hr
Cooling System <sup>1</sup>		
Radiator air flow restriction (system)	0.12 kPa, 0.48 in. Water	0.12 kPa, 0.48 in. Water
Radiator air flow	476 m³/min, 16809 cfm	476 m³/min, 16809 cfm
Engine coolant capacity	20.8 L, 5.5 gal	20.8 L, 5.5 gal
Radiator coolant capacity	37 L, 9.7 gal	37 L, 9.7 gal
Total coolant capacity	57.8 L, 15.2 gal	57.8 L, 15.2 gal
Inlet Air		
Combustion air inlet flow rate	29.3 m³/min 1036.4 cfm	27.3 m³/min 965.0 cfm
Max. Allowable Combustion Air Inlet Temp	48 °C 118 °F	46 °C 114 °F
Exhaust System		
Exhaust stack gas temperature	523.6 °C 974.4 °F	515.3 °C 959.5 °F
Exhaust gas flow rate	79.4 m³/min 2802.2 cfm	73.1 m³/min 2580.2 cfm
Exhaust system backpressure (maximum allowable)	10.0 kPa, 40.0 in. water	10.0 kPa, 40.0 in. water
Heat Rejection		
Heat rejection to jacket water	151 kW 8583 Btu/min	139 kW 7923 Btu/min
Heat rejection to exhaust (total)	377 kW 21425 Btu/min	344 kW 19561 Btu/min
Heat rejection to aftercooler	71 kW 4053 Btu/min	61 kW 3450 Btu/min
Heat rejection to atmosphere from engine	44 kW 2477 Btu/min	42 kW 2396 Btu/min
Heat Rejection to Atmosphere from Generator	28 kW 1592 Btu/min	22 kW 1251 Btu/min

Emissions (Nominal) <sup>2</sup>						
NOx	3458.8 mg/Nm <sup>3</sup> 6.8 g/hp-hr		3357.6 mg/Nm <sup>3</sup> 6.6 g/hp-hr			
CO	171.2 mg/Nm <sup>3</sup> 0.3 g/hp-hr		159.3 mg/Nm <sup>3</sup> 0.3 g/hp-hr			
HC	5.2 mg/Nm <sup>3</sup> 0.0 g/hp-hr		6.6 mg/Nm <sup>3</sup> 0.0 g/hp-hr			
PM	7.8 mg/Nm <sup>3</sup> 0.0 g/hp-hr		8.8 mg/Nm <sup>3</sup> 0.0 g/hp-hr			
Alternator <sup>3</sup>						
Voltages	<b>415V</b>		<b>400V</b>		<b>380V</b>	
Motor Starting Capability @ 30% Voltage Dip	1439 skVA		1066 skVA		1207 skVA	
Current	Standby: 695A   Prime: 626A		Standby: 722A   Prime: 650A		Standby: 747A   Prime: 650A	
Frame Size	A2975L4		A2975L4		A2975L4	
Excitation	SE		SE		SE	
Temperature Rise	SB:163°C, 325°F	PP: 125°C, 257°F	SB:163°C, 325°F	PP: 125°C, 257°F	SB:163°C, 325°F	PP: 125°C, 257°F

SB: Standby PP: Prime Power

## DEFINITIONS AND CONDITIONS

<sup>1</sup> For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

<sup>2</sup> Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77° F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 BTU/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.

<sup>3</sup> UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° C ambient per NEMA MG1-32.

## APPLICABLE CODES AND STANDARDS:

AS1359, CSA C22.2 No100-04, UL142, UL489, UL869, UL2200, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-33, 2006/95/EC, 2006/42/EC, 2004/108/EC.

Note: Codes may not be available in all model configurations. Please consult your local Cat Dealer representative for availability.

**STANDBY:** Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

**PRIME:** Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year

**RATINGS:** Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

Fuel Rates are based on fuel oil of 35° API [16° C (60° F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/litre (7.001 lbs/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Caterpillar representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

Media Number: LEHE1637-00

## BUILT FOR IT.™

[www.Cat.com/electricpower](http://www.Cat.com/electricpower)

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# DIESEL GENERATOR SET



## DE110E2

EU stage II emissions compliant.

Image shown may not reflect actual package

Output Ratings		
Generator Set Model - 3 Phase	Prime*	Standby*
400/230 V, 50 Hz	100.0 kVA 80.0 kW	110.0 kVA 88.0 kW
480/277 V, 60 Hz	113.0 kVA 90.4 kW	125.0 kVA 100.0 kW

\* Refer to ratings definitions on page 4.  
Ratings at 0.8 power factor.

Technical Data		
Engine Make & Model:	Cat® C4.4	
Generator Model:	R2253L4	
Control Panel:	EMCP 4.1	
Base Frame Type:	Heavy Duty Fabricated Steel	
Circuit Breaker Type:	3 Pole MCCB	
Frequency:	50 Hz	60 Hz
Engine Speed: RPM	1500	1800
Fuel Tank Capacity: litres (US gal)	250 (66.0)	
Fuel Consumption, Prime: l/hr (US gal/hr)	21.7 (5.7)	26.1 (6.9)
Fuel Consumption, Standby : l/hr (US gal/hr)	23.9 (6.3)	29.0 (7.7)



# DIESEL GENERATOR SET



## Engine Technical Data

Physical Data	
<b>Manufacturer:</b>	Caterpillar
<b>Model:</b>	C4.4
<b>No. of Cylinders/Alignment:</b>	4 / In Line
<b>Cycle:</b>	4 Stroke
<b>Induction:</b>	Turbocharged Air To Air Charge Cooled
<b>Cooling Method:</b>	Water
<b>Governing Type:</b>	Electronic
<b>Governing Class:</b>	ISO 8528 G2
<b>Compression Ratio:</b>	18.3:1
<b>Displacement:</b> l (cu.in)	4.4 (268.5)
<b>Bore/Stroke:</b> mm (in)	105.0 (4.1)/127.0 (5.0)
<b>Moment of Inertia:</b> kg m <sup>2</sup> (lb. in <sup>2</sup> )	1.51 (5160)
<b>Engine Electrical System:</b>	
-Voltage/Ground:	12/Negative
-Battery Charger Amps:	65
<b>Weight:</b> kg (lb) - Dry:	401 (884)
- Wet:	414 (912)

Air System	50 Hz	60 Hz
<b>Air Filter Type:</b>	Replaceable Element	
<b>Combustion Air Flow:</b>		
m <sup>3</sup> /min (cfm)	<b>-Standby:</b> 6.3 (221)	7.8 (275)
	<b>-Prime:</b> 6.0 (212)	7.8 (274)
<b>Max. Combustion Air Intake</b>		
<b>Restriction:</b> kPa (in H <sub>2</sub> O)	8.0 (32.1)	8.0 (32.1)
<b>Radiator Cooling Air Flow:</b>		
m <sup>3</sup> /min (cfm)	187.8 (6632)	244.2 (8624)
<b>External Restriction to</b>		
<b>Cooling Air Flow:</b> Pa (in H <sub>2</sub> O)	125 (0.5)	125 (0.5)

Cooling System	50 Hz	60 Hz
<b>Cooling System Capacity:</b>		
l (US gal)	17.5 (4.6)	17.5 (4.6)
<b>Water Pump Type:</b>	Centrifugal	
<b>Heat Rejected to Water &amp; Lube Oil:</b> kW (Btu/min)		
<b>-Standby:</b>	50.7 (2883)	64.0 (3640)
<b>-Prime:</b>	46.1 (2622)	57.7 (3281)
<b>Heat Radiation to Room:</b> Heat radiated from engine and alternator		
kW (Btu/min)	<b>-Standby:</b> 16.2 (921)	19.3 (1098)
	<b>-Prime:</b> 13.9 (790)	17.2 (978)
<b>Radiator Fan Load:</b> kW (hp)	2.8 (3.8)	4.8 (6.4)
Cooling system designed to operate in ambient conditions up to 50°C (122°F). Contact your local Cat dealer for power ratings at specific site conditions.		

Lubrication System	
<b>Oil Filter Type:</b>	Spin-On, Full Flow
<b>Total Oil Capacity I (US gal):</b>	8.0 (2.1)
<b>Oil Pan I (US gal):</b>	7.0 (1.8)
<b>Oil Type:</b>	API CC/SE
<b>Cooling Method:</b>	Water

Performance	50 Hz	60 Hz
<b>Engine Speed:</b> RPM	1500	1800
<b>Gross Engine Power:</b> kW (hp)		
<b>-Standby:</b>	103.0 (138.0)	117.5 (158.0)
<b>-Prime:</b>	93.6 (126.0)	106.8 (143.0)
<b>BMEP:</b> kPa (psi)		
<b>-Standby:</b>	1873.0 (271.7)	1781.0 (258.3)
<b>-Prime:</b>	1702.0 (246.9)	1619.0 (234.8)
<b>Regenerative Power:</b> kW	8.2	13.8

Fuel System				
<b>Fuel Filter Type:</b>	Replaceable Element			
<b>Recommended Fuel:</b>	Class A2 Diesel or BSEN590			
<b>Fuel Consumption:</b> l/hr (US gal/hr)				
	<b>110% Load</b>	<b>100% Load</b>	<b>75% Load</b>	<b>50% Load</b>
<b>Prime</b>				
50 Hz	23.9 (6.3)	21.7 (5.7)	16.5 (4.4)	11.6 (3.1)
60 Hz	29.0 (7.7)	26.1 (6.9)	19.7 (5.2)	14.1 (3.7)
<b>Standby</b>				
50 Hz	23.9 (6.3)	18.0 (4.8)	12.6 (3.3)	
60 Hz	29.0 (7.7)	21.6 (5.7)	15.3 (4.0)	
(based on diesel fuel with a specific gravity of 0.85 and conforming to BS2869, Class A2)				

Exhaust System	50 Hz	60 Hz
<b>Silencer Type:</b>	Industrial	
<b>Silencer Model &amp; Quantity:</b>	EXSY1 (1)	
<b>Pressure Drop Across</b>		
<b>Silencer System:</b> kPa (in Hg)	2.10 (0.620)	3.56 (1.051)
<b>Silencer Noise Reduction</b>		
<b>Level:</b> dB	22	17
<b>Max. Allowable Back</b>		
<b>Pressure:</b> kPa (in. Hg)	18.0 (5.3)	15.0 (4.4)
<b>Exhaust Gas Flow:</b>		
m <sup>3</sup> /min (cfm)	<b>-Standby:</b> 16.3 (576)	20.4 (720)
	<b>-Prime:</b> 15.2 (537)	18.4 (650)
<b>Exhaust Gas Temperature:</b> °C (°F)		
<b>-Standby:</b>	543 (1009)	574 (1065)
<b>-Prime:</b>	514 (957)	517 (963)

# DIESEL GENERATOR SET



## Generator Performance Data

Data Item	50 Hz				60 Hz				
	415/240V	400/230V 230/115V 200/115V	380/220V 220/110V	220/127V	480/277V 240/139V	380/220V 220/110V	240/120V 208/120V		440/254V 220/127V
Motor Starting Capability* kVA	189	168	168	210	168	126	126		147
Short Circuit Capacity** %	300	300	300	300	300	300	300		300
Reactances: Per Unit									
Xd	2.430	2.620	2.900	2.160	2.470	2.860	3.290		2.930
X'd	0.190	0.200	0.220	0.170	0.190	0.290	0.250		0.220
X''d	0.088	0.094	0.104	0.078	0.089	0.138	0.119		0.106

Reactances shown are applicable to prime ratings.

\*Based on 30% voltage dip at 0 power factor and SHUNT excitation system.

\*\*With optional Auxiliary Winding.

## Generator Technical Data

Physical Data	
R Frame	
Model:	R2253L4
No. of Bearings:	1
Insulation Class:	H
Winding Pitch - Code:	2/3 - M0
Wires:	12
Ingress Protection Rating:	IP23
Excitation System:	SHUNT
AVR Model:	Mark V

Operating Data	
Overspeed: RPM	2250
Voltage Regulation: (steady state)	+/- 0.5%
Wave Form NEMA = TIF:	50
Wave Form IEC = THF:	2.0%
Total Harmonic Content LL/LN:	2.0%
Radio Interference:	Suppression is in line with European Standard EN61000-6
Radiant Heat: kW (Btu/min)	
-50 Hz:	8.7 (495)
-60 Hz:	9.9 (563)

# DIESEL GENERATOR SET



## Technical Data

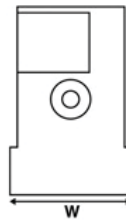
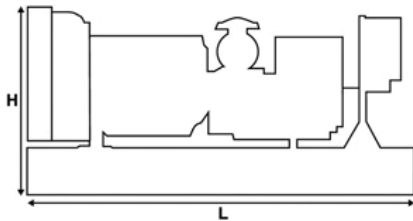
Voltage 50 Hz	Prime		Standby	
	kVA	kW	kVA	kW
415/240V	100.0	80.0	110.0	88.0
400/230V	100.0	80.0	110.0	88.0
380/220V	100.0	80.0	110.0	88.0
230/115V	100.0	80.0	110.0	88.0
220/127V	100.0	80.0	110.0	88.0
220/110V	100.0	80.0	110.0	88.0
200/115V	100.0	80.0	110.0	88.0

Voltage 60 Hz	Prime		Standby	
	kVA	kW	kVA	kW
480/277V	113.0	90.4	125.0	100.0
220/127V	113.0	90.4	125.0	100.0
380/220V	110.0	88.0	121.0	96.8
240/120V	113.0	90.4	125.0	100.0
440/254V	-	-	-	-
220/110V	110.0	88.0	121.0	96.8
208/120V	113.0	90.4	125.0	100.0
240/139V	113.0	90.4	125.0	100.0

## Weights & Dimensions

Weights: kg (lb)	
Net (+ lube oil)	1198 (2641)
Wet (+ lube oil & coolant)	1215 (2679)
Fuel, lube oil & coolant	1427 (3145)

Dimensions: mm (in)	
Length	2089 (82.2)
Width	1120 (44.1)
Height	1375 (54.1)



**Note:** General configuration not to be used for installation. See general dimension drawings for detail.

## Definitions

### Standby Rating

Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

### Prime Rating

Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year.

### Standard Reference Conditions

Note: Standard reference conditions 25°C (77°F) air inlet temp, 100m (328ft) A.S.L. 30% relative humidity. Fuel consumption data at full load with diesel fuel with specific gravity of 0.85 and conforming to BS2869: 1998, Class A2.

## General Data

### Documents

A full set of operation and maintenance manuals and circuit wiring diagrams.

### Quality Standards

The equipment meets the following standards: **IEC60034-1, IEC60034-22, ISO3046, ISO8528, NEMA MG 1-32, NEMA MG 1-33, 2004/108/EC, 2006/42/EC, 2006/95/EC.**

# DIESEL GENERATOR SET



## DE88E0

Image shown may not reflect actual package

Output Ratings		
Generator Set Model - 3 Phase	Prime*	Standby*
400/230 V, 50 Hz	80.0 kVA 64.0 kW	88.0 kVA 70.4 kW
480/277 V, 60 Hz	90.0 kVA 72.0 kW	100.0 kVA 80.0 kW

\* Refer to ratings definitions on page 4.  
Ratings at 0.8 power factor.

Technical Data		
Engine Make & Model:	Cat® C4.4	
Generator Model:	R1973L4	
Control Panel:	EMCP 4.1	
Base Frame Type:	Heavy Duty Fabricated Steel	
Circuit Breaker Type:	3 Pole MCCB	
Frequency:	50 Hz	60 Hz
Engine Speed: RPM	1500	1800
Fuel Tank Capacity: litres (US gal)	219 (57.9)	
Fuel Consumption, Prime: l/hr (US gal/hr)	18.2 (4.8)	21.0 (5.5)
Fuel Consumption, Standby : l/hr (US gal/hr)	20.1 (5.3)	23.2 (6.1)

# DIESEL GENERATOR SET



## Engine Technical Data

Physical Data	
<b>Manufacturer:</b>	Caterpillar
<b>Model:</b>	C4.4
<b>No. of Cylinders/Alignment:</b>	4 / In Line
<b>Cycle:</b>	4 Stroke
<b>Induction:</b>	Turbocharged
<b>Cooling Method:</b>	Water
<b>Governing Type:</b>	Mechanical
<b>Governing Class:</b>	ISO 8528 G2
<b>Compression Ratio:</b>	17.25:1
<b>Displacement:</b> l (cu.in)	4.4 (268.5)
<b>Bore/Stroke:</b> mm (in)	105.0 (4.1)/127.0 (5.0)
<b>Moment of Inertia:</b> kg m <sup>2</sup> (lb. in <sup>2</sup> )	1.14 (3896)
<b>Engine Electrical System:</b>	
-Voltage/Ground:	12/Negative
-Battery Charger Amps:	65
<b>Weight:</b> kg (lb) - Dry:	463 (1021)
- Wet:	485 (1069)

Air System	50 Hz	60 Hz
<b>Air Filter Type:</b>	Replaceable Element	
<b>Combustion Air Flow:</b>		
m <sup>3</sup> /min (cfm)		
-Standby:	5.1 (180)	6.5 (230)
-Prime:	4.8 (170)	6.2 (219)
<b>Max. Combustion Air Intake</b>		
<b>Restriction:</b> kPa (in H <sub>2</sub> O)	8.0 (32.1)	8.0 (32.1)
<b>Radiator Cooling Air Flow:</b>		
m <sup>3</sup> /min (cfm)	121.2 (4280)	140.4 (4958)
<b>External Restriction to</b>		
<b>Cooling Air Flow:</b> Pa (in H <sub>2</sub> O)	120 (0.5)	120 (0.5)

Cooling System	50 Hz	60 Hz
<b>Cooling System Capacity:</b>		
l (US gal)	13.0 (3.4)	13.0 (3.4)
<b>Water Pump Type:</b>	Centrifugal	
<b>Heat Rejected to Water &amp; Lube Oil:</b> kW (Btu/min)		
-Standby:	51.0 (2900)	57.0 (3242)
-Prime:	46.0 (2616)	53.0 (3014)
<b>Heat Radiation to Room:</b> Heat radiated from engine and alternator		
kW (Btu/min)		
-Standby:	21.6 (1228)	24.0 (1365)
-Prime:	19.6 (1115)	21.7 (1234)
<b>Radiator Fan Load:</b> kW (hp)	1.0 (1.3)	1.7 (2.3)
Cooling system designed to operate in ambient conditions up to 50°C (122°F). Contact your local Cat dealer for power ratings at specific site conditions.		

Lubrication System	
<b>Oil Filter Type:</b>	Spin-On, Full Flow
<b>Total Oil Capacity I (US gal):</b>	8.0 (2.1)
<b>Oil Pan I (US gal):</b>	7.0 (1.8)
<b>Oil Type:</b>	API CG4 / CH4 15W-40
<b>Cooling Method:</b>	Water

Performance	50 Hz	60 Hz
<b>Engine Speed:</b> RPM	1500	1800
<b>Gross Engine Power:</b> kW (hp)		
-Standby:	80.7 (108.0)	93.0 (125.0)
-Prime:	73.4 (98.0)	84.5 (113.0)
<b>BMEP:</b> kPa (psi)		
-Standby:	1468.0 (212.9)	1409.0 (204.4)
-Prime:	1335.0 (193.6)	1280.0 (185.7)
<b>Regenerative Power:</b> kW	7.0	9.0

Fuel System				
<b>Fuel Filter Type:</b>	Replaceable Element			
<b>Recommended Fuel:</b>	Class A2 Diesel or BSEN590			
<b>Fuel Consumption:</b> l/hr (US gal/hr)				
	<b>110% Load</b>	<b>100% Load</b>	<b>75% Load</b>	<b>50% Load</b>
<b>Prime</b>				
50 Hz	20.1 (5.3)	18.2 (4.8)	13.6 (3.6)	9.5 (2.5)
60 Hz	23.2 (6.1)	21.0 (5.5)	16.0 (4.2)	11.4 (3.0)
<b>Standby</b>				
50 Hz		20.1 (5.3)	14.9 (3.9)	10.3 (2.7)
60 Hz		23.2 (6.1)	17.4 (4.6)	12.3 (3.3)
(based on diesel fuel with a specific gravity of 0.85 and conforming to BS2869, Class A2)				

Exhaust System	50 Hz	60 Hz
<b>Silencer Type:</b>	Industrial	
<b>Silencer Model &amp; Quantity:</b>	EXSY1 (1)	
<b>Pressure Drop Across</b>		
<b>Silencer System:</b> kPa (in Hg)	1.17 (0.345)	1.97 (0.581)
<b>Silencer Noise Reduction</b>		
<b>Level:</b> dB	16	16
<b>Max. Allowable Back</b>		
<b>Pressure:</b> kPa (in. Hg)	10.0 (3.0)	15.0 (4.4)
<b>Exhaust Gas Flow:</b>		
m <sup>3</sup> /min (cfm)		
-Standby:	13.3 (470)	15.9 (560)
-Prime:	12.5 (441)	15.0 (530)
<b>Exhaust Gas Temperature:</b> °C (°F)		
-Standby:	580 (1076)	560 (1040)
-Prime:	555 (1031)	535 (995)

# DIESEL GENERATOR SET



## Generator Performance Data

Data Item	50 Hz				60 Hz				
	415/240V	400/230V 230/115V 200/115V	380/220V 220/110V	220/127V	480/277V 240/139V	380/220V 220/110V	240/120V 208/120V		440/254V 220/127V
Motor Starting Capability* kVA	125	116	105	140	139	87	105		117
Short Circuit Capacity** %	300	300	300	300	300	300	300		300
Reactances: Per Unit									
Xd	2.880	3.100	3.430	2.560	2.910	3.100	3.780		3.380
X'd	0.240	0.260	0.290	0.214	0.240	0.350	0.320		0.280
X''d	0.092	0.099	0.110	0.082	0.093	0.135	0.121		0.108

Reactances shown are applicable to prime ratings.

\*Based on 30% voltage dip at 0 power factor and SHUNT excitation system.

\*\*With optional Auxiliary Winding.

## Generator Technical Data

Physical Data	
R Frame	
Model:	R1973L4
No. of Bearings:	1
Insulation Class:	H
Winding Pitch - Code:	2/3 - M0
Wires:	12
Ingress Protection Rating:	IP23
Excitation System:	SHUNT
AVR Model:	Mark V

Operating Data	
Overspeed: RPM	2250
Voltage Regulation: (steady state)	+/- 0.5%
Wave Form NEMA = TIF:	50
Wave Form IEC = THF:	2.0%
Total Harmonic Content LL/LN:	2.0%
Radio Interference:	Suppression is in line with European Standard EN61000-6
Radiant Heat: kW (Btu/min)	
-50 Hz:	7.6 (432)
-60 Hz:	9.0 (512)

# DIESEL GENERATOR SET



## Technical Data

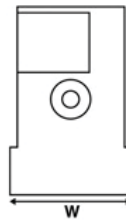
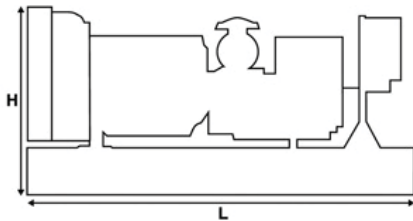
Voltage 50 Hz	Prime		Standby	
	kVA	kW	kVA	kW
415/240V	80.0	64.0	88.0	70.4
400/230V	80.0	64.0	88.0	70.4
380/220V	80.0	64.0	88.0	70.4
230/115V	80.0	64.0	88.0	70.4
220/127V	80.0	64.0	86.0	68.8
220/110V	80.0	64.0	88.0	70.4
200/115V	80.0	64.0	88.0	70.4

Voltage 60 Hz	Prime		Standby	
	kVA	kW	kVA	kW
480/277V	90.0	72.0	100.0	80.0
220/127V	88.0	70.4	96.8	77.4
380/220V	82.0	65.6	90.0	72.0
240/120V	88.0	70.4	96.8	77.4
440/254V	-	-	-	-
220/110V	82.0	65.6	90.0	72.0
208/120V	88.0	70.4	96.8	77.4
240/139V	88.0	70.4	96.8	77.4

## Weights & Dimensions

Weights: kg (lb)	
Net (+ lube oil)	1083 (2388)
Wet (+ lube oil & coolant)	1096 (2416)
Fuel, lube oil & coolant	1281 (2825)

Dimensions: mm (in)	
Length	1925 (75.8)
Width	1120 (44.1)
Height	1361 (53.6)



**Note:** General configuration not to be used for installation. See general dimension drawings for detail.

## Definitions

### Standby Rating

Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

### Prime Rating

Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year.

### Standard Reference Conditions

Note: Standard reference conditions 25°C (77°F) air inlet temp, 100m (328ft) A.S.L. 30% relative humidity. Fuel consumption data at full load with diesel fuel with specific gravity of 0.85 and conforming to BS2869: 1998, Class A2.

## General Data

### Documents

A full set of operation and maintenance manuals and circuit wiring diagrams.

### Quality Standards

The equipment meets the following standards: **IEC60034-1, IEC60034-22, ISO3046, ISO8528, NEMA MG 1-32, NEMA MG 1-33, 2004/108/EC, 2006/42/EC, 2006/95/EC.**

Price List: C4.4PGBI, C4.4PGBT

Gen. Arr. Number: 507-7324

Source: China, Europe

LEHE1112-00 (0616)

www.Cat-ElectricPower.com

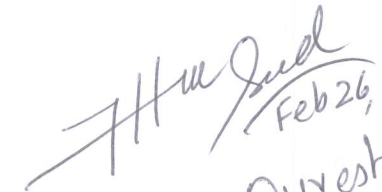
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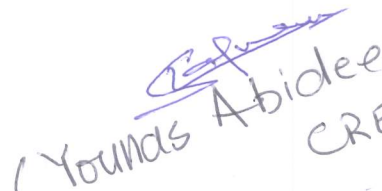
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## Pump's Specifications &amp; Compliance

Pump's Information	Specifications	Compliance	Deviation (If Any)	Remarks
Number of pumps	02 per underpass/ per site			
Pump Type	Submersible			
Country of Origin	German preferably OR any European			
Power Input-P1	4-5 KW OR Fit for the purpose			
Power Input-P2	4 KW			
Main Frequency	50 Hz			
Liquid Type	Muddy Water/Drainage Water/ Stingy Water			
Flow Rate/ Discharge Rate	> 260 GPM(US)			
Maximum Head (TDH)	11-12 METER			
Type Of Impeller	Super Vortex/S- Tube Impeller (*Which is Suitable)			
Treatment of All Cast Iron Parts	Cataphoresis Treatment			
Approvals	CE, EN12050-1			
Pump Inlet	100 mm			
Discharge Pipe size	100 mm			
Maximum Particle Size	3 1/8 inch			
Pump Housing	Cast Iron (EN-GJL-250)EN-GJL-250			
Impeller Housing	Cast Iron (EN-GJL-250)EN-GJL-250			
Motor Housing	Cast Iron (EN-GJL-250)EN-GJL-250			
Primary Shaft Seal	SIC			
Secondary Shaft Seal	Carbon/ Ceramics			
Rated Voltages	3 X 380-415 Volts			
Voltages Tolerance	+10/-10%			
Maximum Starts Per Hour	≥ 20			
Rated Current	10.1 - 10.1 Amps			
Rated Current at 3/4 load	Specified by the manufacturer			
Rated Current at 1/2 load	Specified by the manufacturer			
Starting Current	< 70 Amps			
Cos Phi-Power Factor	0.72			
Cos phi - p.f. at 3/4 load	0.63			
Cos phi - p.f. at 1/2 load	0.5			
Rated Speed	1400-1500 RPM			
Locked-rotor torque	Specified by the manufacturer			
Breakdown torque	Specified by the manufacturer			
Moment of inertia	Specified by the manufacturer			
Motor Efficiency at Full Load	87.40%			
Motor Efficiency at 3/4 Load	87.10%			
Motor Efficiency at 1/2 Load	85.00%			
Number of Poles	4			
Start Method	Star/Delta OR Direct Online			
Enclosure Class (IEC 34-5)	IP68			
Insulation Class (IEC 85)	H			
Motor Protection	THERMAL SWITCH			
Thermal Protection Internal	Yes			
Length of Cable	As per site requirement			
Cable Type	LYNIFLEX			
Max Hydraulic Efficiency	59%			
Max Ambient Temperature	104 °F			
Max Operating Pressure	87 psi			
Flange Standard	DN			
Pump Outlet	DN 80			
Pressure Stage	PN 10			
Max Installation Depth	65.6 Feet			
Density	62.29 lb per cubic feet			
Pump Liquid	Muddy water, stringy solids and debris-laden liquids			
Liquid Temp Range	32 °F - 104 °F			
Remote Monitoring through SCADA	Interface with SCADA			
Discharge Pipe Type	HDPE type/UPVC			
Discharge Pipe dia	100 mm inner dia			
SCADA Interface	Remote Monitoring and Control with CIM Module			
Level Sensors	Automatic "ON and OFF"			
Protection	Dry Run Protection			
Accessories Schedule	As per Drawing			
Discharge Pipe dia	100 mm			
Long Radius Bends 90 Degree	As per Drawing/Requirement at site			
Dismantling Joints	As per requirement			
Non Return Valves(NRV)	As per requirement			
Gate Valves(GV)	As per requirement			
Tees	As per requirement			
Guide Rails	As per requirement			
Lifting Chain	As per requirement on site			
Complete from all aspects till operational including softwares interface with SCADA, CIM Module, cables & their terminations AND including accessories/pipes, NRVs, Joints, GVs, all plumbing Work PLUS Fault Self Diagnostic	Contractor's Scope			
Provision, Installation & Commissioning of all pumps as per agreed terms	Contractor's Scope			
FAT/Pre shipment Inspection at manufacturer's facility	FAT/Pre shipment Inspection for Two Officials (ONE Client & ONE Consultant) including boarding, lodging, TADA & Return Ticket at contractor's cost			
Complete O&M for TWO years & training to the Owner's technical team.	Contractor's Scope			
Provision of O&M Manuals & relevant pumping software	Contractor's Scope			

  
 Feb 26, 2018  
 (Nadeem Qureshi)  
 E & M Expert  
 BRT, EPCM, MNT

  
 (Younas Abideem)  
 CRE



**Appendix-D****Details of Dewatering Pumps**

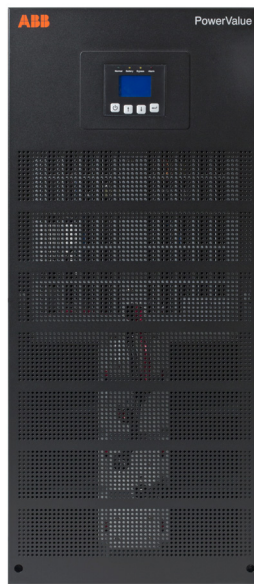
<b>Sr No</b>	<b>Underpass</b>	<b>Location</b>	<b>No. Of Dewatering Pumps Installed</b>
1	<b>Underpass No. 01</b>	Between BS-02 & BS-03	2
2	<b>Underpass No. 02</b>	Between BS-04 & BS-05	2
3	<b>Underpass No. 03</b>	Between BS-08 & BS-09	2
4	<b>Underpass No. 04</b>	Between BS-16 & BS-18	3
5	<b>Underpass No. 05</b>	Between BS-02 & BS-07	2
6	<b>Underpass No. 06</b>	Between BS-19 & BS-20	2
7	<b>Underpass No. 07</b>	Between BS-21 & BS-22	2
8	<b>Underpass No. 08</b>	Between BS-22 & BS-23	2
9	<b>Underpass No. 09</b>	Between BS-29 & BS-30	2
	<b>Total Installed Dewatering Pumps</b>		<b>19</b>

## SPECIFICATIONS OF HIGH SPEED DIESEL

Sr. No.	Test Description	Units	Test Method ASTM/IP	Specs	Max/Min
1	Specific gravity @ 15.6°C, 60°F	-	D-1298	0.8250 – 0.8350	-
2	Color	-	D1500	3	Max
3	Flash Point	°C	D-93	54	Min
4	Cloud Point a) Summer (March-Oct) b) Winter (Nov-Feb)	°C	D-2500	9 6	Max
5	Pour point a) Summer (March-Oct) b) Winter (Nov-Feb)	°C	D-97	6 3	Max
6	Cetane Index (calculated)	-	D-976	45	Min
7	Sulfur	wt %	IP-63	1.0	Max
8	Copper strip 3 hrs. corrosion at 100°C	-	D-130	1	Max
9	Conradson carbon % wt of 10% residue	wt %	D-189	0.20	Max
10	Sediments	% wt	D-473	0.01	Max
11	Water	% Vol	D-95	0.05	Max
12	Ash contents	% wt	D-482	0.01	Max
13	Neutralization Value a) Total Acid No. b) Strong Acid No.	mg KOH/g	D-974/664	0.5 NIL	Max
14	Kinematic viscosity @40°C	Cst	D-445	1.5 6.5	Min Max
15	Distillation a) 50% Vol. Rec. b) 90% Vol. Rec.	°C	D-86	290 365	Max Max

# PowerValue 11 / 31 T

The single-phase UPS for IT rooms, networks and other critical applications



The PowerValue 11/31 T UPS delivers reliable power, low running costs, long battery life, easy maintenance and high levels of flexibility. Featuring double-conversion, voltage and frequency independent (VFI) topology, the PowerValue 11/31 T is available in both 10 and 20 kVA versions, with the option to configure up to four units in parallel to boost power capability or provide redundancy.

Three-phase or single-phase inputs can also be accommodated, as well as single- or dual-supply inputs – allowing the customer to manage two independent power sources. Simple to install and with a small footprint, the PowerValue 11/31 T provides stable, regulated, transient-free, pure sine wave AC power with extremely tight output voltage regulation.

## High reliability

- Online double conversion topology
- Parallelable up to four units to provide system redundancy
- Programmed and automated battery tests ensure optimized battery management

## Low cost of ownership

- Simple power increase by paralleling up to four units
- High operating efficiency, regardless of loading
- Reduced installation costs
- Compact design

## Flexible design

- Different autonomy variations with inbuilt batteries or additional battery cabinets
- Long backup models available
- Single- or three-phase input – adaptable to installation requirements (field configurable)
- Single- or dual-input power source compatible (field configurable)

## Efficient service concept

- Integrated manual bypass switch
- Easy to install and maintain
- User-friendly display
- User-replaceable batteries
- Remote monitoring and connectivity options

# PowerValue 11 / 31 T

## Product features

### Compact power protection up to 80kVA

PowerValue 11/31T 10 and 20kVA UPS can be installed in parallel to increase the total system power up to 80kVA or to add redundancy to the system. The UPSs are delivered with an inbuilt parallel board and paralleling cables. No additional hardware is required for this installation.

PowerValue 11/31T can be configured with up to two matching battery cabinets to satisfy extended runtime demands. Easily accessible and replaceable batteries increase availability and reduce mean time to repair (MTTR).

Up to  
**4**  
UPSs in parallel



Up to  
**2**  
battery cabinets in parallel

### Battery runtime at full/half nominal load

	10kVA		10kVA S		10kVA B		10kVA B2		20kVA		20kVA S		20kVA B	
	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%
UPS internal battery	-	-	-	-	4	12	12	30	-	-	-	-	4	12
UPS + A*	12	30	-	-	21	49	30	69	4	12	-	-	12	29
UPS + B**	30	69	30	69	39	87	49	109	12	29	12	29	21	49
UPS + A + B*/**	49	109	49	109	58	130	69	151	21	49	21	49	29	69
UPS + 2B**	69	151	69	151	79	176	87	208	29	69	29	69	39	97

in minutes at full/half load

Battery cabinet	Batteries
Configuration A*	2 × 24 × 9 Ah
Configuration B**	4 × 24 × 9 Ah

### Frequency conversion

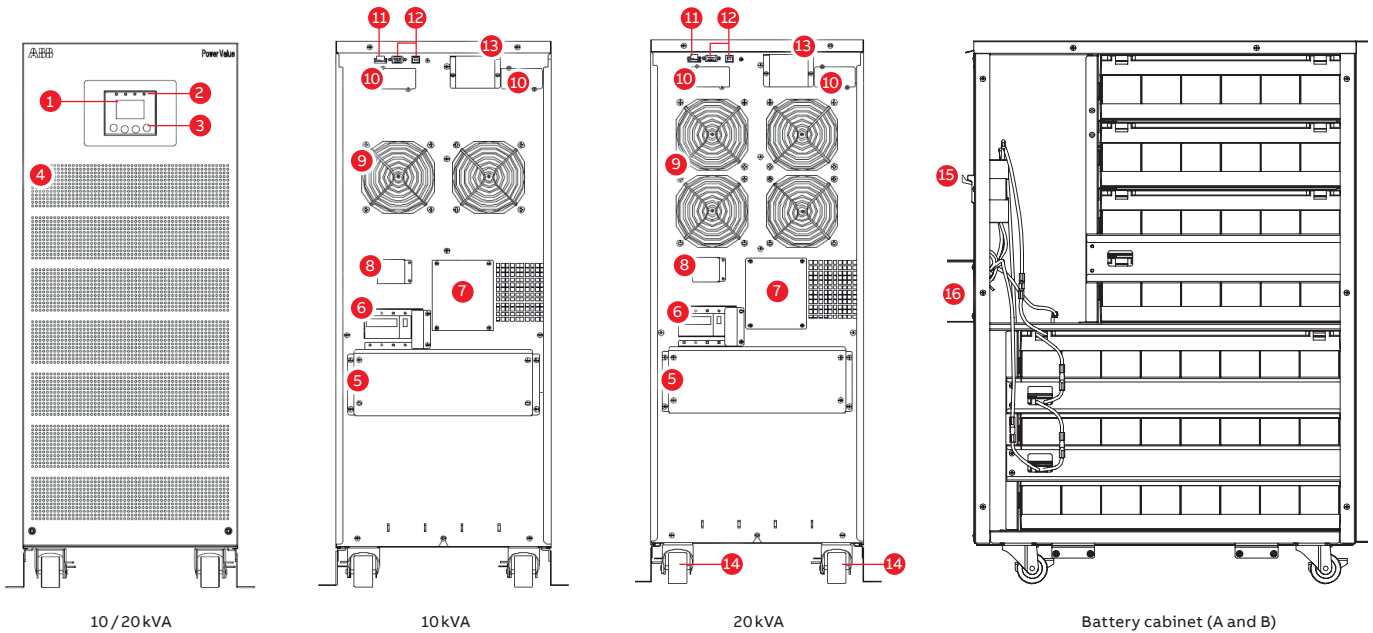
Operating as a frequency converter, PowerValue 11/31T not only converts the power supply frequency (50Hz to/from 60Hz), but it also protects the load from power disturbances and guarantees additional battery power in case of mains failure.

The operation and installation is simple and consists merely of correctly wiring the UPS and selecting the frequency conversion mode in the LCD.

- Input frequency range: 40–70 Hz
- Output frequency: 50 Hz or 60 Hz
- Output derating:
  - Single-phase input: 60%
  - Three-phase input: no derating

# PowerValue 11 / 31 T

## Available models



1 LCD	5 Connection terminals	9 Fans	13 Parallel port
2 LEDs	6 Input breaker	10 Network interface / AS400 slot	14 Wheels / support and brakes
3 Control keys	7 Manual bypass	11 EPO contact	15 Fuse holder
4 Ventilation inlets	8 Back-feed protection terminals	12 RS-232 port / USB port	16 Battery connection terminals

### UPS cabinet configuration

- Online double conversion UPS
- Efficiency in online mode up to 93.9%
- Efficiency in eco-mode up to 97%
- Paralleling up to four units allows for increase of capacity or redundancy
- Same model supports different wiring schemes
- Three-phase and single-phase input
- Single- and dual-input feed
- LCD
- Frequency converter operation (50Hz or 60Hz)
- Interfaces: USB, RS-232, ModBus, potential-free contacts, EPO contact inputs
- Emergency power-off for remote shutdown

### Options

- Dry-contact card – relay interface card enables advanced communication between the UPS systems
- Network interface cards – control and monitoring of the UPS via a web browser
- Sensors – combined with the network interface card, humidity and temperature sensors can be integrated into the system and monitored remotely
- Additional battery cabinets that match perfectly with the UPS for scaling autonomy time

# PowerValue 11 / 31 T

## Technical specification

General data	10kVA	10kVA S	10kVA B	10kVA B2	20kVA	20kVA S	20kVA B
Output rated power	9 kW				18 kW		
Output power factor	0.9						
Topology	Online double conversion						
Parallel configuration	Up to 4 units						
Inbuilt batteries	No	No	Yes	Yes	No	No	Yes
<b>Input</b>							
Nominal input voltage	1 ph + N: 220 / 230 / 240 VAC 3 ph + N: 380 / 400 / 415 VAC						
Input voltage tolerance	1 ph + N: 110–276 VAC 3 ph + N: 190–486 VAC						
Input current THDi	<5% linear load, <7% non linear load						
Frequency range	45–55 Hz for 50 Hz systems / 55–65 Hz for 60 Hz system						
Power factor	≥0.99						
<b>Output</b>							
Rated output voltage	220 / 230 / 240 VAC						
Voltage tolerance	±2%						
Voltage distortion	≤2% linear load, ≤5% non linear load						
Overload capability (linear load)	1 min: 110–130% / 5 min: 105–110% 100ms: >150% / 10s: 130–150%						
Nominal frequency	50 Hz or 60 Hz						
Crest factor	3:1 (load supported)						
<b>Efficiency</b>							
Overall efficiency	Up to 93.1%				Up to 93.9%		
In eco-mode	≥97%						
<b>Environment</b>							
Protection rating	IP20						
Storage temperature	–15 °C to +60 °C for UPS, 0 °C to approx. +35 °C for battery						
Operating temperature	0 °C to +40 °C						
Relative humidity	0% to 95% (Non-condensing)						
Altitude (above sea level)	1000m without derating						
<b>Battery</b>							
Type	VRLA (vented lead-acid)						
Inbuilt batteries	–	–	1×24	2×24	–	–	2×24
Battery capacity	–	–	9Ah	9Ah	–	–	9Ah
Charging current	4A	8A	4A	4A	4A	8A	4A
Recharge time	–	–	3 h to 90%	8 h to 90%	–	–	8 h to 90%
<b>Communications</b>							
User interface	LCD						
Communication cards (option)	Network interface (SNMP card), dry-contact card (AS400)						
<b>Standards</b>							
Safety	IEC / EN 62040-1						
EMC	IEC / EN 62040-2						
Performance	IEC / EN 62040-3						
Manufacturing	ISO 9001:2015, ISO 14001:2015, OHSAS18001						
<b>Weight, dimensions</b>							
Weight	56 kg	65 kg	116 kg	178 kg	67 kg	68 kg	190 kg
Dimensions w × h × d	350 × 890 × 715 mm	350 × 890 × 715 mm	350 × 890 × 715 mm	350 × 890 × 715 mm	350 × 890 × 715 mm	350 × 890 × 715 mm	350 × 890 × 715 mm

**Annexure-G****Details of Uninterrupted Power Supply (UPS)**

Sr No	Location	UPS Details		Batteries Details	
		Rating	Quantity	Rating	Quantity
1	Bus-Station-01	20 KVA	1 No.	12V/100mAh	20 No.'s
2	Bus-Station-02	10 KVA	1 No.	12V/40mAh	20 No.'s
3	Bus-Station-03	10 KVA	1 No.	12V/40mAh	20 No.'s
4	Bus-Station-04	10 KVA	1 No.	12V/40mAh	20 No.'s
5	Bus-Station-05	10 KVA	1 No.	12V/40mAh	20 No.'s
6	Bus-Station-06	10 KVA	1 No.	12V/40mAh	20 No.'s
7	Bus-Station-07	10 KVA	1 No.	12V/40mAh	20 No.'s
8	Bus-Station-08	10 KVA	1 No.	12V/40mAh	20 No.'s
9	Bus-Station-09	10 KVA	1 No.	12V/40mAh	20 No.'s
10	Bus-Station-10	10 KVA	1 No.	12V/40mAh	20 No.'s
11	Bus-Station-11	10 KVA	1 No.	12V/40mAh	20 No.'s
12	Bus-Station-12	10 KVA	1 No.	12V/40mAh	20 No.'s
13	Bus-Station-13	10 KVA	1 No.	12V/40mAh	20 No.'s
14	Bus-Station-14	10 KVA	1 No.	12V/40mAh	20 No.'s
15	Bus-Station-15	10 KVA	1 No.	12V/40mAh	20 No.'s
16	Bus-Station-16	10 KVA	1 No.	12V/40mAh	20 No.'s
17	Bus-Station-18	10 KVA	1 No.	12V/40mAh	20 No.'s
18	Bus-Station-19	10 KVA	1 No.	12V/40mAh	20 No.'s
19	Bus-Station-20	10 KVA	1 No.	12V/40mAh	20 No.'s
20	Bus-Station-21	10 KVA	1 No.	12V/40mAh	20 No.'s
21	Bus-Station-22	10 KVA	1 No.	12V/40mAh	20 No.'s
22	Bus-Station-23	10 KVA	1 No.	12V/40mAh	20 No.'s
23	Bus-Station-24	10 KVA	1 No.	12V/40mAh	20 No.'s
24	Bus-Station-25	10 KVA	1 No.	12V/40mAh	20 No.'s
25	Bus-Station-26	10 KVA	1 No.	12V/40mAh	20 No.'s
26	Bus-Station-27	10 KVA	1 No.	12V/40mAh	20 No.'s
27	Bus-Station-28	10 KVA	1 No.	12V/40mAh	20 No.'s
28	Bus-Station-29	10 KVA	1 No.	12V/40mAh	20 No.'s
29	Bus-Station-30	10 KVA	1 No.	12V/40mAh	20 No.'s
30	Bus-Station-31	10 KVA	1 No.	12V/40mAh	20 No.'s
	<b>Total</b>		<b>30 No.'s</b>		<b>600 No.'s</b>