**Purchase Order** 

Page: 1 of 3

Printed at : 21-SEP-21 10:11 AM

Supplier No: 2523

Name: Cross World Power Ltd.

Address: House # 15, Road # 27 Block-J Banani Dhaka,

Bangladesh

PO Number :	63186
Revision :	0
Created By :	Md Fahmid Islam
PR # :	29312
PO Delivery Date :	

Ship To/Bill To: Banglalink Digital Communications Limited

Requestor: Md. Mozahid Morshed

Confirm To: Monjorul

Reference: Supply of Diesel Generator

Line	Item Code	Description	Quantity	UOM	Unit Price (BDT)	Amount (BDT)	VAT	Agreed Delivery Date
1	POWER.Supplies.Technical.30011050	Supply of 30 KVA (Prime rating & Super sound proof) generatorat site (proposed site location : Around the Bangladesh)	6	Nos	129,000.00	774,000.00	0.00	31-DEC-2021
2	POWER.Supplies.Technical.30011026	Auto-Transfer Switch (ATS) for single generator + Commercial power Operation for 20 KVA Generator	10	Nos	11,553.025	115,530.25	0.00	31-DEC-2021
3	POWER.Supplies.Technical.30011043	Supply of 30 KVA (Prime rating & Standard sound proof) generatorat site (proposed site location : Around the Bangladesh)	6	Nos	797,163.025	4,782,978.15	0.00	31-DEC-2021
4	POWER.Supplies.Technical.30011048	Auto-Transfer Switch (ATS) for single generator + Commercial power Operation	6	Nos	20,538.95	123,233.70	0.00	31-DEC-2021
5	POWER.Supplies.Technical.30011024	Installation Material/accessories excluding power cable for 20KVA(Prime rating & Standard sound proof)	10	Nos	19,574.675	195,746.75	0.00	31-DEC-2021
6	POWER.Supplies.Technical.30011025	Installation & comissioning fee of 20 KVA new DG (Prime rating & Standard sound proof) & existing DG swap including loading, unloading, delivery to WH/Any sites	10	Nos	58,573.525	585,735.25	0.00	31-DEC-2021
8	POWER.Supplies.Technical.30011029	Supply of 20 KVA (Prime rating & Standard sound proof) generatorat site (proposed site location : Around the Bangladesh)	10	Nos	670,078.675	6,700,786.75	0.00	31-DEC-2021
9	POWER.Supplies.Technical.30011031	Supply of Sound Proof Canopy, sound level : (75-85) dBA @ 1 meter for 20 KVA Generator respectively	10	Nos	107,500.00	1,075,000.00	0.00	31-DEC-2021
10	POWER.Supplies.Technical.30011039	Installation Material/accessories excluding power cable for 30 KVA(Prime rating & Standard sound proof)	6	Nos	21,513.975	129,083.85	0.00	31-DEC-2021
11	POWER.Supplies.Technical.30011040	Installation & comissioning fee of 30 KVA new DG (Prime rating & Standard sound proof) & existing DG swap including loading, unloading, delivery to WH/Any sites	6	Nos	59,662.50	357,975.00	0.00	31-DEC-2021
12	POWER.Supplies.Technical.30011028	One unit Generator Grounding with concrete slab (Civil work) for Different capacity of Generator	6	Nos	29,677.167	178,063.00	0.00	31-DEC-2021
13	POWER.Supplies.Technical.30011028	One unit Generator Grounding with concrete slab (Civil work) for Different capacity of Generator 20 KVA	10	Nos	29,677.525	296,775.25	0.00	31-DEC-2021
					Total (BDT) :	15,314,907.95	0.00	



**Purchase Order** 

Page: 2 of 3

Printed at: 21-SEP-21 10:11 AM

Supplier No: 2523

Name : Cross World Power Ltd.

Address: House # 15, Road # 27 Block-J Banani Dhaka,

Bangladesh

PO Number :	63186
Revision :	0
Created By :	Md Fahmid Islam
PR # :	29312
PO Delivery Date :	

Ship To/Bill To: Banglalink Digital Communications Limited

Requestor: Md. Mozahid Morshed

Confirm To: Monjorul

Reference: Supply of Diesel Generator

Line	Description	Quantity	UOM	Unit Price (BDT)	Amount (BDT)	VAT	Agreed Delivery Date
( Fifteen Million Three Hundred Fourteen Thousand	Nine Hundred Seven Taka 95 Paisa Only.)			Grand Total (BDT) :	15,314,907.95		

<sup>\*</sup> Payment Terms: 100% payment will be made within 90 (Ninety) days after submission of correct commercial invoice along with complete acceptance from Banglalink, PO Delivery Challan, Copy of VAT challan to Banglalink e-invoice portal.

- \*Liquidated Damages for Delivery delay: Liquidated damages will be imposed at 0.5% of PO value of delayed portion for per calendar day delay from the date of delivery upto 20% of the PO value.
- \* All prices and amount on this order are expressed in (BDT)
- \* Applicable VAT & Taxes (if any) will be deducted as per Govn't rules & regulations. Original VAT Challan (Mushuk-6.3) must be provided to Banglalink Tax Department within 2 working days of Goods or Service Delivery with PO reference (if applicable).
- \* Supplier needs to submit invoice/bill along with all necessary documents to Banglalink invoice portal along with PO Copy. Payment instruments will be handed over in next available payment date after the end of credit period.
- \* Any demurrage or penalty paid for supplier's fault will be deducted from their invoice.
- \* If supplier fails to comply with the terms and conditions of this Purchase Order Banglalink Digital Communications Limited reserves the right to cancel it.
- \* Supplier Tax Identification Number: 287375911315 and VAT Registration Number: 18131072640.

Procurement	

## **Banglalink**

Purchase Order (PO) General Terms & Conditions (T&C)

The acknowledgement of the receipt of the PO shall bind the Supplier to the specific T&C of the PO and to the General T&C set out herein.

### i. Invoicing

VAT & Taxes (if any) will be deducted as per Govn't rules & regulations. Original VAT Challan (Mushuk-11) must be provided to Banglalink Tax Department/BL Dispatch within 2 working days of Goods or Service Delivery with PO reference (if applicable).

All invoices should be emailed to:

Supplier shall send the invoice referencing the Purchase Order number along with required documents including mushok-11 (receiving copy of BL dispatch/Tax Dept) through email addressing 'apinvoices@banglalink.net' Banglalink shall not be liable to pay any interest for any late payment.

The invoices should be accompanied by the original Shipping/ Consignment notes, showing proper description, weights and rates, the amount of freight/ rail age/ delivery note/ Acceptance Certificate, if any. BL shall not be held responsible for any delays in payments if the invoice does not comply with General T&C.

#### ii. Payment

The Supplier's invoice shall only be paid after the goods and/ or services have been delivered by the vendor and accepted by BL.In case of any error in the invoice BL reserves the right to pay only the portion of the invoice which is undisputed.

No payment shall be made to Supplier unless the invoice is accompanied by a copy of the PO, a copy of the delivery note duly signed by the respective department acknowledging the receipt of the goods/ services and the GRN number.

All invoices, shipping consignment, delivery notes and correspondence must reference the PO number.

### iii. Pricing

The price quoted on the PO is the final agreed price. All discounts shall be shown in the invoice. The price stated is inclusive of insurance and transport costs of the goods to the agreed delivery point, the cost of packaging as is necessary for the safe handling of the material ordered during transport and subsequent storage.

The Supplier shall remain responsible for all payment of all and any dues, levies, taxes and duties of whatever nature applicable to the goods. Payment to the Supplier shall be made net of any taxes to be deducted at source.

### iv. Confirmation of PO

BL reserves the right to cancel the PO in whole or in part if it does not receive an acknowledgment of receipt of PO from Supplier within 2 working days from the date of the issuance of the PO.

BL also reserves the right to cancel the PO where any of the specific or the general terms and conditions of the PO are not performed by the Supplier.

### v. Prior engagements

The acknowledgment of the receipt of the PO by the Supplier does not relieve the Supplier from any prior engagement that it has already contracted with BL.

The acknowledgment of the receipt of the PO shall signify the Supplier's acceptance of the PO but does not create a special relationship between the Supplier and BL.

That the Supplier, it's employees or agents shall not make, provide or offer any gifts, entertainments, loans or other considerations to any BL employee or any of the employees relatives and confirm that no BL employee or any relative of any BL employee shall have any undisclosed interests in the Supplier's business with the Supplier's knowledge. The Supplier must disclose such relationships to BL immediately once information of such relationship comes to Supplier's knowledge.

### vi. Acts

The Supplier shall not act or represent itself to act in the name of BL.

### vii. Products Quality

The Supplier shall provide and exercise the reasonable care and skill of a competent and reputable Supplier of similar products when delivering the goods and services in accordance with the specification and the quality levels provided therein and in accordance with the necessary criteria pursuant to the laws and regulations of Bangladesh. The products shall be new, free from

defects in materials, production, design and construction and be manufactured from new and sound materials and be free from any third party lien, claim, title or interest.

The Supplier declares that the products shall comply with the requirements pursuant to any applicable law and shall not contain any substances prohibited pursuant to any applicable law, nor shall the products contain any substances that cannot be disposed of by means of a normal waste processing method.

### viii. Guarantees and Warrantees

This warranty extents to replacing defective goods or equipment, labour as well as compensating for delivery cost and for any loss caused to BL, directly or indirectly, as result of defective goods or equipment.

The Supplier on acknowledging receipt of the PO from BL shall be deemed to warrant that the good supplied shall be free from inherent defects for a period of one year from the date of acceptance or delivery, whichever is the later. In particular the goods supplied shall be fit for the purpose for which they are intended.

In the instance where the Supplier has before placing of the PO provided a sample which has been approved by BL, the goods supplied shall be in accordance with the sample so supplied and approved.

Defective goods shall be returned by BL for repair or replacement and the cost for transport and insurance shall be recovered from the Supplier.

If a consignment or part of a consignment or product is rejected, the Supplier shall, within 2 weeks of being notified of the rejection and in accordance with the request of BL:

- Deliver the missing product, or
- Collect the rejected consignment or product and subsequently repair or, if so required by BL, replace it and finally deliver it after repair or replacement. Rejected consignments or products not collected may be returned at the Supplier's expenses and risk.

### ix. Product Liability Insurance and Unfair competition

The Supplier agrees to indemnify, compensate and hold BL harmless in full against any loss or claim that may arise from defective goods or equipment.

The Supplier hereby agrees that it shall not whether alone or in conjunction with others unfairly compete with BL in its line of business or do anything which would amount to unfair competition and in particular the Supplier shall not poach any of BL's clients.

BL is exonerated from any liability whatsoever regarding any liability that may arise from the execution of this PO. The Supplier further guarantees to BL that it has in place the necessary insurance coverage to ensure that BL is protected from any claims.

### x. Transfer of risk and Ownership

Unless otherwise expressly agreed in writing between the parties, risk in the goods or services shall be transferred upon delivery of the goods or services, and transfer of ownership shall take effect upon acceptance of the goods or services by BL, which shall be accepted by way of issuing a Certificate of Acceptance or a signed delivery note.

### xi. Delivery and Acceptance of goods and services

All deliveries shall be accompanied by a delivery note. The delivery note should be signed on behalf of BL as confirmation of receipt of goods and services.

Upon delivery of the goods or services BL shall examine and inspect the goods delivered or the services performed to establish that they are in accordance with the PO as well as carry out tests to establish that the goods are fit for purpose for which they are intended. BL shall then issue the Supplier with a Certificate of Acceptance/ signed delivery note certifying BL's acceptance of the goods or services. This certificate/delivery note shall establish the date on which BL takes ownership.

No delivery may be made prior to the date agreed with BL.

In the event of late delivery, where such delay in delivery exceeds one working day, a daily penalty of 0.5% of the invoice value, before VAT, may be imposed by BL. Further, BL reserves the right, at no cost to itself, to cancel the PO in whole or in part.

### xii. Intellectual Property

Suppler grants to BL a perpetual, irrevocable, nonexclusive license to use and exploit intellectual property rights related to any products/services without restriction. BL shall be entitled to grant a sub-license in respect to such rights to its customers or authorized persons.

Supplier indemnifies BL against any liability, damage, loss, costs and expenses (including legal expenses)

awarded against, incurred or paid by BL arising out of or relating to the exercise of the license rights and as a result of any claim that a product or its use infringes any intellectual property right of any person. This indemnity shall remain in force after the termination of these General Terms and Conditions.

Intellectual property rights shall not by virtue of this PO be passed from BL to Supplier or vice versa and such rights shall only be transferred, licensed or passed with the express written agreement of the parties.

In particular unless otherwise expressly agreed in writing all software, inventions, drawings, models or know-how, generally all intellectual property of whatever nature that would either be communicated by BL to the Supplier, or result from work carried out in the performance of an order, shall be property of BL, and on license or transfer of such intellectual property is hereby either granted or implied.

#### xiii. Confidentiality

The Supplier binds himself not to make available to any third party any information that it may have obtained following the execution of this PO without the prior written authorization of BI

### xiv. Subcontracting work

All rights and obligations arising from this PO may not be ceded, assigned, subcontracted nor transferred in whole or in part, without the prior written authorization by BL.

### xv. Cancellation

Should a Supplier not meet its contractual obligation in whichever manner, or appears to be incapable to fulfill its obligations, BL reserves the right to cancel the PO in whole or in part, without any judicial formality and without any indemnity. The cancellation shall be advised/communicated by registered letter or email.

The Supplier shall in such case be responsible for compensating BL for all costs, expenses, loss of earnings and losses suffered as a result of the Supplier's failure to deliver including but not limited to the costs and expenses of contracting another Supplier.

Cancellation of a PO shall not prejudice BL's right to take any actions concerning penalties for late/ no delivery, refund or deposits and advances, claims for compensation for losses suffered, and the additional cost of using another Supplier and delays occasioned. BL reserves the right to rescind any PO in part or in whole before the PO is executed.

### xvi. Waiver

No delay or omission by BL to enforce any right under these General Terms and Conditions against the Supplier shall be deemed a waiver of such rights.

If all or any part of any provision of these General Terms and Conditions shall be or become illegal, invalid or unenforceable in any respect, the remainder of that provision and/ or all other provisions hereof shall remain valid and enforceable, and the illegal, invalid or unenforceable provision shall be deemed replaced by the valid and enforceable provision having the closest possible legal and economic effect.

### xvii. Overriding Considerations

The above General conditions take precedence over the terms of sale of Supplier unless specifically waived by BL in writing. Should there be a contradiction between the general conditions expressed herein and the specific term appearing on the face of the PO, the specific terms of PO appearing on the face shall prevail.

In the event of conflict between these general terms and conditions and the terms of the agreement executed between the parties, the terms of the agreement shall prevail. Should BL receive an official request for information from the government, any local authority of court of competent jurisdiction, the Supplier expressly authorizes BL to respond to the request in regards to the goods or services it shall have supplied to BL concerning their nature and the amount said.

### xviii. Dispute Resolution

Any dispute that may arise in respect of the subject matter of the PO and/or on the interpretation thereof, shall be subject to the Laws of Bangladesh notwithstanding the country where the order, delivery or execution took place.



# SCOPE OF WORK (SOW) FOR GENERATOR



# **CONTENT**

- 1. Introduction
- 2. KEY FOCUS AREA
- 3. Scope of Work
- 4. SPECIFICATIONS
- 5. Scope of Services (RMS, EMS and Spare Parts)

## Introduction

Banglalink is one of the leading telecom operator with distributed footprint in Bangladesh. Bringing continuous changes, banglalink has established very efficient policies and processes which is one of its dominating strength. To keep services available to their customers we are focusing on energy domain. As part of continuous improvement and from better sourcing point of view, banglalink has decided to conduct a sourcing process which will cover some energy elements.

# **KEY FOCUS AREA**

Banglalink is highly focused on giving premium service to its customers and customer obsessed.

Banglalink is trying to ensure reliable and efficient power products with optimum cost and premium service.

# SCOPE OF WORK

Please note the following scopes and we are looking who have the capacity and experience of hot swap of DG within quickest possible time without interrupting AC power supply.

• Supply, Installation, testing and commissioning of different capacity of DG with Canopy and ATS



# Broad category deliverables:

SL	Site Type	Item Description	UoM
1		Supply of 200KVA genset	piece
2		Sound Proof Canopy for 200KVA	piece
3		Auto-Transfer Switch (ATS) - for 200KVA	piece
4		Installation Material package for 200 KVA	Set
5		Service fee: loading, unloading, delivery, Installation and commissioning of new Generator at site, for 200 KVA Generator and existing generator dismantle and returned to WH/any other site	Job
6		Supply of 300KVA genset	piece
7		Sound Proof Canopy for 300KVA	piece
8		Auto-Transfer Switch (ATS) - for 300KVA	piece
9	=	Installation Material package for 300 KVA	Set
10	Core Site	Service fee: loading, unloading, delivery, Installation and commissioning of new Generator at site, for 300 KVA Generator and existing generator dismantle and returned to WH/any other site	Job
11	Core site	Supply of 800KVA genset	piece
12		Sound Proof Canopy for 800KVA	piece
13		Auto-Transfer Switch (ATS) - for 800KVA	piece
14	=	Installation Material package for 800 KVA	Set
15		Service fee: loading, unloading, delivery, Installation and commissioning of new Generator at site, for 800 KVA Generator and existing generator swap	Job
16	-	Supply of 1000KVA genset	piece
17	-	Sound Proof Canopy for 1000KVA	piece
18	-	Auto-Transfer Switch (ATS) - for 1000KVA	piece
19	-	Installation Material package for 1000 KVA	Set
20		Service fee: loading, unloading, delivery, Installation and commissioning of new Generator at site, for 1000 KVA Generator and existing generator dismantle and returned to WH/any other site	Job
21		Supply of 20KVA genset	piece
22		Sound Proof Canopy for 20KVA	piece
23		Auto-Transfer Switch (ATS) - for 20KVA	piece
24		Installation Material package for 20 KVA	Set
25	RAN Site	Service fee: loading, unloading, delivery, Installation and commissioning of new Generator at site, for 20 KVA Generator and existing generator dismantle and returned to WH/any other site	Job
26		Supply of 30KVA genset	piece
27		Sound Proof Canopy for 30KVA	piece
28		Auto-Transfer Switch (ATS) - for 30KVA	piece
29		Installation Material package for 30 KVA	Set



30	Service fee: loading, unloading, delivery, Installation and commissioning of new Generator at site, for 30 KVA Generator and existing generator dismantle and returned to WH/any other site	Job
31	Supply of 50KVA genset	piece
32	Sound Proof Canopy for 50KVA	piece
33	Auto-Transfer Switch (ATS) - for 50KVA	piece
34	Installation Material package for 50 KVA	Set
35	Service fee: loading, unloading, delivery, Installation and commissioning of new Generator at site, for 50 KVA Generator and existing generator swap	Job
36	Supply of 60KVA genset	piece
37	Sound Proof Canopy for 60KVA	piece
38	Auto-Transfer Switch (ATS) - for 60KVA	piece
39	Installation Material package for 60 KVA	Set
40	Service fee: loading, unloading, delivery, Installation and commissioning of new Generator at site, for 60 KVA Generator and existing generator dismantle and returned to WH/any other site	Job
41	Generator Grounding PIT with concrete slab (Resistance <1 Ohm)	Job

# **SPECIFICATIONS:**

# **General terms and Conditions**

Supply, Installation	A. Experience and Capable to Hot Swap of Generator
and Commissioning	B. Experience with the Data Center/ Core and RAN Sites of Telco Operator
	A. 2 (Two) for Data Center and 1 (One) Years for RAN Sites from date of acceptance
	B. Acceptance will be held on within 45 days (30 days is stability period and 15 days for acceptance) from the date of commissioning and load connection (partial or full) done
Warranty	C. If any spare part faulty in warranty period, then supplier need to replace (Repair parts is not acceptable) this spare parts.
	D. 1 (One) Years after replacement/service of any faulty spare within warranty.
Payment term	A. 90% payment after delivery and acceptance (includes one-month stability period).
,	B. 10% SD will be paid after warranty period
Delivery time	A. 70 days from the date of Purchase Order
	A. 0.5% for per day delay from the date of delivery on invoice; max cap is 20%
	B. For wrong product max 90% of invoice or rejection of product
Penalty	C. For Critical and major SLA failure 0.5% for per day delay from the date of delivery; max cap is 20%
	D. For minor SLA failure 0.1% for per day delay from the date of delivery; max cap is 5%



# **Specifications (Core Site)**

Specification	Banglalink Requirement	Comply/Not Comply	CROSS WORLD POWER LTD.
Capacity	1000KVA, 800 KVA, 300 KVA and 200 KVA (Prime, Three Phase)		Comply
Brand	Caterpillar/ SDMO/ Tempest/ Kohler/ FG Wilson		Tempest
Model	Will be provided by vendors		PL800, PL1000, PL300, PL200
Country of Manufacturing	European/USA origin (required authentication with contact details).		UK
Country of origin	European/USA (required authentication with contact details)		UK
Port of Shipment	European/USA (required authentication with contact details)		UK
Fuel Consumption	<ul> <li>160 liters/hr at 75% load (for 1000 KVA)</li> <li>130 liters/hr at 75% load (for 800 KVA)</li> </ul>		Comply
Auto load transfer panel:	Auto load transfer panel of 1600A (Foreign-Made by DG Supplier)		Comply
Efficiency with variable load	More than 90%. The Generator set should capable to take variable load		Comply
Minimum load utilization	Should be specified by the bidder along with manufacturer authentication		50%
Maximum phase imbalance	Should be specified by the bidder		
International Standard requirements	National Electric Code, IEE, IEC, VDE, UL and all applicable local codes and regulations.		As per IEC
Declaration of Assembly	All equipment shall be new, unused and of current production by a firm that has its final assembly located in the European country or United States.		Comply
Availability of spare parts	For at least 15 years beyond date of installation		Comply
Local representative authentication	Certificate along with email address		Attached
Engine Part:	The User manual shall be submitted with technical offer		
Туре	Diesel Engine (with turbo charger is preferred)		Diesel engine
Brand	PERKINS / John Deere/CAT		Perkins
RPM	1500 rpm		1500 rpm
Governor type	Electronic governor capable of regulating the no load to full load frequency to a .25% maximum, steady state regulation shall be .25%.		Comply
Cylinder arrangement	Inline		Inline
Engine load bearing capacity	Variable load with 100% starting capacity within 10 second (engine load bearing graph from the manufacturer required)		Comply



Maximum Power at rated rpm, kW	Specified by the bidder	
Cooling	Water Cooling	Water cooling
Protection	Over speed, under speed, Low Oil pressure, over heating etc.	Comply
Fuel tank	Built in min 200 L for 200KVA, 400L for 300KVA and 1400L for 800KVA Capacity)	Comply
Alternator Part:	The User manual shall be submitted with technical offer	
Brand	LEROY-SOMER (FRANCE), STAMFORD (UK), MECCALTE (UK)	Comply
Frequency	50 HZ	50 Hz
Phase	3-phase 4 Wire	3-phase 4 Wire
Туре	4-pole revolving field type with 12 reconnect able leads, self- ventilated and of drip-proof construction	Comply
Insulation	The insulation material shall meet the NEMA standard (MGI-22.40 and 16.40) for Class H. The excitation system shall be of brushless construction controlled by a solid-state voltage regulator with adjustable volts-per-hertz tracking	Comply
Load bearing capability	The alternator shall be capable of accepting the full loads 100% during starting and instantaneous voltage (Load bearing graph from the manufacturer required)	Comply
Voltage regulation	1%	0.5%
Frequency regulation	0.25%	Comply
Output	(380 - 440) volt (Phase – Phase)	400 V
Circuit Breaker rating & Breaking Capacity	Mentioned by the bidder	Adequate rating
Circuit Breaker Brand	ABB, Italy; Merlin Gerin, France; Siemens, Germany	ABB/ Terasaki
GENERATOR, CONTROLLER	The User manual shall be submitted with technical offer	
Brand	Deep-sea or equivalent	Deep Sea
Туре	Digital, microprocessor based with LCD display	Comply
Parameters	Voltage, current, frequency, temperature, KW, KVA, KVAR, alarms, protections, Thresholds for the parameters.	Comply
Remote monitoring	Through RJ45 connector with required software	Comply
Modes	Auto, Manual, Emergency stop	Comply
Alarm	Alarm Connection through relay (Mains fail Generator running, Mains Available Generator Running, Mains fail Generator Not Running)	Comply
Installation accessories		



Sound attenuated Canopy	Maximum 85dba sound level @ 1 meter)	Comply
Silencer pipe	MS pipe covered with heat proof materials as per manufacturer recommendation with water drainage system. Engine exhaust silencer shall be coated to be temperature and rust resistant and rated for critical applications. with required flangs, elbows etc. Silencer pipe should be extended up to building top.	Comply
Exhaust duct	18SWG MS sheet with rust free painting	Comply
Civil Work	Required civil work for ducting, silencer pipe fittings, CC Casting for Generator base.	Comply
Ancillary Work		
_	New DG, by rearranging and repositioning existing DGs During missioning work, vendor shall need to manage surrounding and house	
	Standard tools box set	
Tools	Standard tools box set	
Response time against fault	During warranty period, vendor should arrange support for clearing any fault within 2 hours from fault notification time.	Comply
DG Battery	DG battery should be foreign procured and maintenance free and Battery capacity should ensure genset be started continuously more than 6 times.	Comply
Maintenance and support	First three RMS (1st servicing 50 hours and 2nd & 3rd servicing 200hrs/6-month interval including all filters & lube oil & accessories), EMS and on call support are totally free within warranty period (including all spares for RMS and EMS activities)  Cost will be chargeable after warranty  Cost will be chargeable (EMS, RMS and on Call) from day one for reuse equipment	Comply

# **Specifications (RAN Sites)**

Specification	Banglalink Requirement	Comply/Not Comply	CROSS WORLD
Capacity	20KVA, 30 KVA, 50 KVA and 60 KVA (Prime, Three Phase)		Comply
Brand	Caterpillar/ SDMO/ Tempest/ Kohler/ FG Wilson/Similar quality		Tempest
Model	Will be provided by vendors		PM20, PM30, PM45, PM60
Country of Manufacturing	European/USA origin (required authentication with contact details).		UK
Country of Origin	European/USA origin (required authentication with contact details).		UK



Canopy			
Alarm	Alarm Connection through relay (Mains fail Generator running, Mains Available Generator Running, Mains fail Generator Not Running)  Comply		
Modes	Auto, Manual, Emergency stop	DSE 7120	
Parameters	Voltage, current, frequency, temperature, KW,		
Туре	Digital, microprocessor based with LCD display	Comply	
Brand	Deep-sea or equivalent	Deep Sea	
GENERATOR, CONTROLLER	The User manual shall be submitted with technical offer		
Protection	All the necessary protection	volt, short circuit	
	, and cooling	Under volt, under	
Circuit Breaker Brand Cooling	Germany/similar quality  Air Cooling	Terasaki Air cooling	
Capacity Capacity	Mentioned by the bidder  ABB, Italy; Merlin Gerin, France; Siemens,	As required	
Output Circuit Breaker rating & Breaking	(380 - 440) volts	400 V	
Phase	3 Phase, 4 Wire	3 phase, 4 wire	
Frequency	50 HZ	50 Hz	
Alternator Brand	LEROY-SOMER (FRANCE), STAMFORD (UK), MECCALTE (UK)	Stamford/ Meccalte	
Alternator Part:	The User manual shall be submitted with technical offer	Chameland I have	
Auto Charger	In-built External auto charger must be available	In built	
Fuel Tank	Built in min 60 L for 20KVA, 80L for 30KVA and 100L for 50 and 60KVA Capacity)	Comply	
Protection	Over and under speed, Low Oil pressure, over heating etc.	Comply	
Cooling	Water Cooling	Water cooling	
Maximum Power at rated rpm, kW	Specified by the bidder	20, 30, 45, 60 KW	
RPM	1500 rpm	1500 rpm	
Engine Brand	PERKINS / John Deere/CAT/	Perkins	
Engine Type	Diesel Engine	Diesel	
Engine Part:	The User manual shall be submitted with technical offer		
Alarm Sensor	Generator running alarm & Low fuel level alarm sensor should be provided with required cable		
Anti-Vibration Skid	Should be mounted on the anti-vibrated skid.	Inbuilt	
Emergency Stop	Should be provided	Inbuilt	
Starting System	Auto but should have option to run the DG manually.	Comply	
Port of Shipment	European/USA (required authentication with contact details)		



Manufacturer	urer Imported		
Sound level	(75-80) dBA@ 1 meter (60-65) dBA@ 1 meter for sound proof canopy	80 ±1 dBA @ 1 m	
ATS			
ATS Type	Local	Local	
Туре	Magnetic Contractor type with interlock	Comply	
Criterion of ATS	a) 4 pole magnetic contactor ( b) Over and under voltage relay c) adjustable parameter etc.		
Other			
Generator Grounding	Generator separate Grounding required with PIT (Resistance <1 Ohm)	Comply	
Silencer Pipe	Silencer pipe should be extended outside of DG room	Comply	
DG Battery	DG battery should be foreign procured and maintenance free and Battery capacity should ensure genset be started continuously more than 6 times.	Foreign dry charged	
	For one year and following items per generator.	Comply	
	A) Fuel Filter 03 nos	Comply	
	b) Lube Oil filter 03 nos.	Comply	
Maintenance materials	c) Air Filter 03 nos.	Comply	
ividifice filaterials	d) Coolant 09 can.	Comply	
	e) Motor Flush 06 can	Comply	
	f) Radiator flusher 06 can	Comply	
	g) Lube Oil (Mobil special 60 liter).	Comply	
<b>Generator Installation</b>	Generator installation( included)		
Periodic Service	Three times in the year with FOC	3 times	
Generator weight (KG)	Standard	850 kgs	
Generator dimension (mm)	Standard	1600 X 730 X 1270	
Installation Cost with Materials and Earthing Materials	(Items Like: Flexible pipe, Sensing Cable, Fuel line, Fuel delivery & overflow pipe, Fuel Tank sensor, Silencer pipe, Earthing cable, Earthing bar, 120' GI pipe, 120' (2SWG) Copper wire, Cable lugs, Nut & Bolt etc.) (As Per Mentioned Specs )		
Periodic Service time frame	3 servicing within 1000-1200 RH, If servicing is not required then supplier will hand over the servicing material to BL	Comply	

## Service scope:

For existing DG replacement, site survey is **highly recommended.** Bidder has to perform below task:



- At first bidder need to maintain proper safety measured during installation and commissioning work.
- Bidder needs to relocate existing Diesel Generator and transfer it to Banglalink Ashulia warehouse/any other site.
- Cable disconnection and reconnection work should be done by the supplier.
- Necessary cable tie, tape, lugs (if require) need to supply by bidder. BDCL will not provide any supporting materials.
- If any minor civil renovation activity required supplier will be responsible for this. Besides supplier will manage all type of issue during installation like local constraint.
- If anything damages during carrying or installation, then supplier will be responsible for this.

## **Documentation and Certificates**

Following Documents & Certificate are required:

- (i) Factory Acceptance Test Certificate (FAT certificate)
- (ii) Installation Manual and Commissioning Manual
- (iii) Operation & Trouble Shooting Manual
- (iv) Installation & Commissioning report (I & C Report)
- (v) Product LC/shipment/Port clearance documents must be need to submit to BL
- (vi) BDCL may contact with principal vendor to get the info reagrding Generator authenticity. (Engine/alternator serial number & others)
- (vii) Statement on availability of spare parts and after sales service throughout the country.

## **EMS, RMS and On Call Support:**

S/N	Description of works	Qty
1	RMS- Routine Maintenance Support: Quarterly Servicing, inspection and maintenance including all necessary items	Each
2	EMS-Emergency Maintenance Support: Emergency fault handling and on-call support (physical) without spares	Each

## **Severity Levels of Defects**

## **Classification of Defects:**

## **Critical:**

- If the service/system/product is not usable or not in a position to launch commercially;
- The scope, product and materials is deviated without any agreement /consent;
   (BDCL suggest for pre inspection and Factory test report before delivery or deployment of the system)
- Equipment is not functioning/no output



## Major:

- Inability to operate the service maintaining the quality/grade.
- The system is operable but with degradation of service
- Frequent fault of any specific items

### Minor:

- Have no direct impact in core function;
- Degradation of service as per limit;
- Lack of documentation, Operation manual/documents are not available.

## **Service Level Agreement (SLA):**

Categories	Service Availability	Lead-time
Critical	7*24	<ul> <li>30 minutes for response</li> <li>2 hours for partial solution</li> <li>2 days for full solution</li> </ul>
Major	7*24	<ul> <li>30 minutes for response</li> <li>4 hours for partial solution</li> <li>2 days for full solution</li> </ul>
Minor	7*24	<ul> <li>30 minutes for response</li> <li>2 days for partial solution</li> <li>4 days for full solution</li> </ul>

## **Spare Parts list:**

Item Name	Specification	Unit

## **Split of Parties' Responsibility**

The purpose of this section is to specify the Parties' responsibilities concerning the Scope of Supply. As a general principle, the Supplier shall have the total responsibility for the ordered Scope of Supply. To be able to fulfill his obligations under the Contract, the Supplier may need information and/or assistance from the Purchaser where the Purchaser shall play supporting role which should be listed in the below table.



Description of Responsibility/Task	Purchaser	Supplier
Issue Purchase Order	Р	
Delivery of materials or equipment at site after transformer testing \testing	S	Р
Installation & Commissioning	S	Р
Maintenance of complete Sub-Station including all necessary equipment	S	Р
Invoice submission		Р
Invoice processing	Р	
Provide warranty support		Р

P=Primary role, S= Supporting role

Activities not listed shall be understood as the Supplier's responsibility.