Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
1	2	Ch 2			Network Diagram	From the Tender Specification the end to end Network Architecture is not clear. Please provide a Network Diagram which should include from Access to the Core detail connectivity.	Please see the attachment
2	2	Ch 2	2.1 a)	10	Two Soft Switches to be operated with Dual Homing Mode, one at Sher-E-Bangla Nagar Telephone Exchange building and another at Ramna Telephone Exchange building, Dhaka. The present equipped capacity for each of the Soft Switch is presented in Annex 3.1.	The Dual Homing for Softswitch is not clearly understandable as it is not referred by ITU-T and this feature is vendor specific.	Please read the clause as: Two Soft Switches to be operated at hot standby mode, one to be installed at Sher-E-Bangla Nagar Telephone Exchange building and another at Ramna Telephone Exchange building, Dhaka. The present equipped capacity for each of the Soft Switch is presented in Annex 3.1.
3	2	Ch 3	3.2. B)	25	Traffic Matrix	The connectivity Matrix in Gulshan Gateway shows the requirement for E1 is 210 and for CCS7 signaling terminal is 46. But in Annex 3.2 Capacity Requirement for Gulshan Site shows 134 E1 and 24 CCS7 Signaling terminal. Which one is correct?	Please correct the figures in Annex 3.2 as 210 E1 (instead of 134E1) and 46 (instead of 24) CCS7 signaling terminal.
4	2	Ch 3	3.4.1	27	Traffic Data	What is the subscriber Erlang for voice calls from AGW POTS?	0.12 erlang

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
5	2	Ch 5	5.2 b)	31	The soft Switches shall be capable to work at Dual Homing mode with Hot-Swappable function. The bidder shall explain in detail the Dual homing backup mechanism of the offered SS Platform. The two Soft Switches supporting dual homing feature shall operate either hot standby or load sharing mode.	As in Question 1.	The Soft Switch shall be capable of working at mirror mode/hot backup mode during working in a pair in the network. The pair of soft switches shall be installed in two different locations (Sher-e-Bangla Nagar and Ramna) having the same hardware configuration, software configuration, and configuration data etc. These two Soft Switches will be interconnected by a heartbeat link to check whether the peer Soft Switch works normally. In normal operating condition, the active SS will control and manage all the Trunk Gateways, Access gateways and other network elements (if any) to provide services to the subscribers. When the active Soft Switch becomes faulty, the standby Soft Switch will not receive any heartbeat signals from the active Soft Switch. In this situation, the standby Soft Switch will be automatically instantly activated and takes over theentire control without affecting the connected calls.Soft Switch supporting hot backup mode may operate either as active/standby or load sharing mode.
6	2	Ch 5	5.6.2	34	The IN capability shall be based on the conceptual model issued by ITU-T and adopted by ETSI. The system shall provide at least ITU-T's INAP CS - 2 capabilities.	"The IN capability shall be based on the conceptual model issued by ITU-T and adopted by ETSI. The system shall provide ITU-T's INAP CS-1+ or CS - 2 capabilities."	Please read the clause as: "The IN capability shall be based on the conceptual model issued by ITU-T and adopted by ETSI. The system shall provide ITU-T's INAP CS-1+ or CS - 2 capabilities."
7	2	Ch 6	6.4.3	35	The TGW shall provide V5UA (V5.2 User Adaptation) to carry V5.2 c-channel signaling information from connecting E1 (V5.2) to the SS.	Since there is no V5.2 users V5UA will not be applicable for this network. **Recommendation**: "The TGW shall provide V5.2 interface from connecting E1 to the SS."	Please read the clause as: "The TGW shall provide V5.2 interface from connecting E1 to the SS."

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
8	2	Ch 13	13.6.10	87	The offered equipment shall support at least two GE (optical) uplinks for narrowband and broadband services for working in 1+1 redundancy mode. The offered equipment shall be GPON supported for uplink connectivity. The GPON uplink port may be provided inbuilt with the system or by adding separate device.	**Recommendation:** "The offered equipment shall support at least two GE (optical) uplinks for narrowband and broadband services for working in 1+1 redundancy mode. The offered equipment shall be GPON supported as an option for uplink connectivity. The GPON uplink port may be provided inbuilt with the system or by adding separate device."	Please read the clause as: "The offered equipment shall provide at least two GE (optical) uplinks working in 1+1 redundancy mode for carrying narrowband and broadband traffic."
9	2	Ch 13	13.6.13	87	The main control board of the access gateway shall support H.248, MGCP and SIP protocol.	**Recommendation**: "The main control board of the access gateway shall support H.248 and SIP protocol. MGCP protocol is optional."	Please read the clause as: "The main control board of the access gateway must support H.248 and SIP protocol."
10	2	Ch 13	13.2.1	81	Splitters will be installed in each optical network between the GPON Optical Line Terminal (GPON OLT) and the Optical Network Terminals (ONTs) that the OLT serves. AGWs will also be connected through optical fiber available through PON splitter.	**Recommendation:** "Splitters will be installed in each optical network between the GPON Optical Line Terminal (GPON OLT) and the Optical Network Terminals (ONTs) that the OLT serves. AGWs will also be connected through optical fiber available through PON splitter as an optional requirement."	**Please read the clause as:** "Splitters will be installed in each optical network between the GPON Optical Line Terminal (GPON OLT) and the Optical Network Terminals (ONTs)/Multi-Dwelling Units (MDUs)/Single Business Units (SBUs). AGWs may also be connected through optical fiber available through PON splitter as an optional requirement."
11	2	Ch 13	NA	NA	NA	In the RFP document number of dowlink GPON port requirement per OLTE is missing. Please provide the info.	Please see the revised Annex 3.4 attached with this.
12	2	Ch 13	13.6.29.c	91	The advanced residential ONT should support four Fast-Ethernet Ports and two POTS ports	Number of POTS port requirement in ONT is 4 but in annex 13.6.29.c), the no. of POTS requirement in ONT is 2. Please confirm the no. of POTS port in ONT.	Please read the clauses as: b) The basic residential ONT should support two POTS and 4 Fast Ethernet ports. c) The advanced residential ONT should support four POTS and four Fast Ethernet ports. See also the revised Annexure-3.4
13	2	Ch 13	13.1.11.c	79	The offered equipment must support Ethernet synchronization via uplink interface including GE and 10GE which fulfill compliant to G.8261, G.8262 and G.8264 standard.	OLT generally do not support synchronous ethernet. What does it mean by synchronous ethernet? Please verify.	The requirement is defined in Clause-13.1.11

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
14	2	Ch 13	13.1.13	80	L3 Functions	**Bidder's Recommendation:** The offered equipment shall support L3 awareness. Customer data traffic shall be switched/routed towards the IP core network. The bidder shall mention L3 functions supported by the offered equipment.	Please follow the specification.
15	2	Ch 13	13.6.29. q.1.	94	Quality of service	**Bidder's Recommendation:** The ONT shall support TYPE B protection defined in G.984.x and the switchover time is less than 1s.	Please read the clause as: "The ONT shall support TYPE B protection defined in G.984.x and the switchover time is less than 1s."
16	2	Ch 13	13.6.29. q.2.	94	Quality of service	**Bidder's Recommendation:** The ONT shall support the ONT detection and to close the faulty optical port when receiving the command from the OLT.	Please follow the specification.
17	2	Ch 13	13.6.29.o.12	93	The ONT shall support Dual homing	What does "Dual Homing of ONT" refer to. Please explain.	Please replace the clause by: "The ONT shall be controlled by the standby softswitch without service interruption in case the active Softswitch becomes faulty"
18	2	Ch 13	13.6.3	86	The offered AGW shall have the facility to switch call between its POTS subscribers when the link with the Softswitch fails.	Is this mandatory that AGW shall have the facility to switch call between its POTS subscribers when the link with the Soft switch fails? Generally switching is performed in soft switch. Please verify.	Please consider the statement to be deleted.
19	2	Annex 3.3	NA	117	NA	Number of xDSL ports requirement is mentioned . But there are different type of xDSL card i,e ADSL, VDSL and SHDSL. Please mention the number of port requirement of each type.	Please see the revised Annex-3.3
20	2	Ch 3	3.3	26	Completion of Interconnection Networks	MUX is required to connect TGW with existing exchange. Currently do you have any MUX already deployed in the network or we need to provide 7 no. of MUX with 7 TGW.	Please see the BTCL's response in Query No.65

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
21	2	Ch 3	3.1	26	NA	It is mentioned that BTCL owns an IP core network consisting of Huawei L3 Switches (Model S8512, S8508 and S6506R). Please mention detail of this switch. Is there any other equipment in BTCL IP core network?	The bidder may conduct survey to gather the required information, if necessary.
22	2	Ch 13	13.1.7	78	The equipment shall support at least 100 GPON ports	What does it mean by 100 GPON port in clause 13.1.7?	Plaese read the clause as: "The equipment shall support at least 100 numbers of GPON access ports. Each GPON access port shall support a total bandwidth of 2.488 Gbps downstream and 1.244 Gbps upstream."
23	2	Ch 15	15.2 a)	100	The offer shall include necessary battery sets to provide back-up DC power source to run the system during AC mains failure. The Bidder in his offer shall use the detail breakdown of its DC power requirement, as given by him in the bid offer.	What are the nodes belong to this term "system"? Does this system refer to vendor supplied system in this offer?	Yes, the system refers here to all the equipment to be supplied under this tender. Reserve capacity for other system/equipment (BTCL's existing and/or future) is seperately mentioned in the calculation.
24	2	Ch 15	15.2 j)	101	The bidder shall have to supply 2.2V battery	Is it 2.2 V per cell battery?	Yes, it is 2.2V per cell battery.
25	2	Ch 15	15.3 a)	101	The offer shall include necessary rectifier modules to provide DC power source to run the system and to charge the back-up batteries. The Bidder in his offer shall give a detail breakdown of its DC power requirement.	What are the nodes belong to this term "system"	The system refers here to all the equipment to be supplied under this tender. Reserve capacity for other system/equipment (BTCL's existing and/or future) is seperately mentioned in the calculation.
26	2	Ch 12	12.1.3.1 c)	72	The NMS shall have the capability to support the following management functions for all elements: c) Accounting Management	What are the functions of Accounting Managements?	Please consider the feature to be deleted.
27	2	Ch 12	12.1.3.1 f)	72	The NMS shall have the capability to support the following management functions for all elements: f) Capacity and Planning Engineering Tool	What are the functions of Capacity and Planning Engineering Tool?	Please consider the feature to be deleted.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
28	2	Ch 12	12.1.3.1 g)	72	The NMS shall have the capability to support the following management functions for all elements: g) Network Loading and Simulation Tool	What are the functions of Network Loading and Simulation Tool?	Please consider the feature to be deleted.
29	2	Ch 7	7.2.2 l)	40	The firewall shall support the following features: L) The vendor shall provide unlimited license for the VPN Client over Windows 97, ME, NT, 2000, XP, Sun Solaris; Intel-based Linux distributions for remote management and access requirement.	This feature need to be put as "optional" for fireweall	Please read the clause as: The firewall shall support the following features: L) The vendor shall provide license for unlimited period for the VPN Client over Windows 97, ME, NT, 2000, XP, Sun Solaris; Intel-based Linux distributions for remote management and access requirement.
30	2	Ch 7	7.2.2 s)	40	The firewall shall support the following features: S) The system shall support H.323 NAT Traversal	This feature need to be put as "optional" for fireweall	Please follow the specification
31	2	Ch 7	7.3	41	Session Border Controller	Why does BTCL need an SBC for this network? SBC is required only when this network receives IP telephony from outside network. If SBC is required, what type of SBC is required, A-SBC or N-SBC? Please clarify.	Please consider the Clause- 7.3 to be deleted
32	2	Ch 7	7.3.1.1	41	The SBC shall have 1+1 redundancy in the normal time. The change over on failure shall be smooth and should not be traffic affecting.	What would be the detail mechanism of the node level 1+1 SBC configuration? In case of failure of 1 SBC and switchover to redundant one connected calls will be affected regardless of redundancy mechanism on a node level. Please clarify the positioning of the SBC in the Network Diagram that has been asked in Ques. 1.	Please consider the Clause- 7.3 to be deleted
33	2	Ch 7	7.3.1.2	41	The Session Border Controller should support the following security features: f. DoS and DDoS detection and blocking g. Rogue RTP Protection h. SDTP authentication and confidentially	These features need to be put as "optional"	Please consider the Clause- 7.3 to be deleted

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
34	2	Ch 7	7.3.1.3	41	The SBC shall support following Codecs: vi) Codec Relay/Pass through *EVRC, EVRC-B, vii) G.711/G.7xx transcoding	These functionalities are supported by Media Gateway.	Please consider the Clause- 7.3 to be deleted
35	2	Ch 7	7.3.1.4	41	The SBC shall provide transcoding capability, supporting transcoding between all supported codec and packet size combinations.	These functionalities are supported by Media Gateway.	Please consider the Clause- 7.3 to be deleted
36	2	Ch 7	7.3.1.5	41	The SBC shall support multiple protocols as follows: iv) MGCP	These functionalities are supported by Media Gateway.	Please consider the Clause- 7.3 to be deleted
37	2	Ch 7	7.3.1.7	42	The SBC shall allow dynamic switching of vocoders during mid-call or on a call-by-call basis. This will allow the VoIP system to respond to available bandwidth conditions in real time.	These functionalities are supported by Media Gateway.	Please consider the Clause- 7.3 to be deleted
38	2	Ch 7	7.3.1.8	42	The system shall preferably support mechanisms such as piggyback, where different voice information to the same destination is multiplexed into a single packet. This ensures that the header overheads are significantly reduced.	This feature need to be put as "optional"	Please consider the Clause- 7.3 to be deleted
39	2	Ch 7	7.3.1.9	42	The SBC shall support Voice Activity detection (VAD), with silence suppression and Comfort Noise Generation (CNG).	These functionalities are supported by Media Gateway.	Please consider the Clause- 7.3 to be deleted
40	2	Chp. 2	2.5.5	12	Scope of work	Q. What will be the quantity and specification for Aluminium Glass Partition	Aluminium Glass Partition will be applicable for TGW, SS and NMS sites only.The bidder may conduct necessay survey.
41	2	Chp. 2	2.5.6	12	Scope of work	Q. What will be the quantity for earthing facility and in which floor the equipment room will be located?	Supply and Installation of "Earthing Facility" in all TGW and AGW sites. For the TGW and SS sites, the bidder may conduct necessay survey. For, AGW sites the equipment room may be in the basement/ground/first floor.
42	2	Chp. 2	2.5.9	12	Scope of work	Q. What will be the exact scope for building modification?	Building modification will be applicable for TGW, SS and NMS sites only. The bidder may conduct necessary site survey.
43	2	Form B.8	A.13	128	Summary price for other equipments		

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
44	2	Form C.8	A.13	140	Set of required specific tools and testers for all equipment	Q. What are the specification and quantity of tools and testers required?	Please add a new clause-14.6, The bidder shall quote the following tools and tester for operation and delivery of the service for each AGW site. a) Head Gear Tone Tester - 3 sets b) Step Type Aluminum Ladder (1 m) - 1 c) Step Type Aluminum Ladder (2 m) - 1 d) Punching Tools - 5 sets e) Jumper Scrapper - 3 nos.
45	2	Form D.2		146	Detail list and price for tools and testers and other equipments	Q. What are the specification and quantity of tools and testers required?	Please see the answer to the previous question.
46	2	Chp. 1	1.4.1.2	6	Instructions for the Preparation and Submission of the Bid	Q. We understand that the Certificate for successful ITC and commercial cutover of OFC system is not required because the tender scope is limited to supply only. Please confirm.	For OFC-related supplied items PAT will be done according to the tender guidelines.
47	2	Annex. 1	2	109	Format for maintenance support during guarantee period	The support shall continue for 3 years from the date of effect of last PAC - As per earlier tender of BTCL support duration was 2 years. Please confirm.	In this tender, the Performace Guarantee period will be 3 years.
48	2	Annex. 1	N/A	N/A	Format for maintenance support during guarantee period	RSG access is necessary for support. Will there be RSG acess available in customer premises?	BTCL can arrange internet access if RSG access is provided by the vendor.
49	2	Annex. 1	13	110	Format for maintenance support during guarantee period	Q. What is the classification of critical, major and minor fault. This needs to be clearly stated. Or Ericsson can assist with their standard offering.	Please follow the point-13 in the Format for maintenance support during guarantee period
50	2	Annex. 1	13.a	110	Format for maintenance support during guarantee period	Q. Rectify the fault within 12 hours- does it also included travel time within 7 sites	Yes, travel time is included.
51	2	Annex 2	11.g	154	Format for maintenance support during guarantee period	Q. O&M Fault handling - Is this fault related to alarm handling or also related to configuration change.	Any fault related to operation and maintenance of the equipment/system

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
52	1	Chp. 3	3.57	19	Terms of Payment	Tender scope included the supply of Fiber, duct, microbus and pick-up van that do not need any installation service. In that case, payment terms should be 100% upon delivery like training and factory test/CPOC	For Fiber and duct, payment mode shall be similar as described for equipment. Terms of payment will not applicable on O & M vehicles, as the requirement has been deleted.
53	2	Chp. 2	12.2.1 & 12.5.2	76, 77	Maintenance Vehicle	a. Brand : Other than the mentioned brand in the tender, can we offer any other low cost brand fulfilling the same specification?	Please consider the Clause-12.5 to be deleted.
						b. Does CNG conversion required?	Please consider the Clause-12.5 to be deleted.
						c. Who will be responsible for registration and insurance? As a telecom vendor Ericsson is not responsible for this.	Please consider the Clause-12.5 to be deleted.
						d. What will be the engine type for pickup (Diesel or Patrol)?	Please consider the Clause-12.5 to be deleted.
54	1	Chp. 3	3.57	19	Terms of Payment	Q. In this RFQ there are 2 types of payment terms - foreign currency and local. To avoid LC related complexity is it possible to have a 2 different contracts - one for foreign currency and other for local currency.	Please follow the specification.
55	1	Chp. 3	3.45	17	Target date for completion	What would be the total project time frame for implementation? Should we consider 9 months including NGN core part, access with PON and rest of the part of this project?	Targetted completion time/supply period is clearly mentioned in the clause.
56	1	Chp. 3	3.44	17	Delivery period	What would be the foreign equipment delivery lead time?	Delivery period should be such that the targetted completion time is achieved.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
57	2				**1.2** The Bidders "Mandatory Documents" shall comprise of the following documents in each set and a total of four (4) sets (one original, 3 photocopies) shall be submitted. **1.3** Hard copies four (4) sets of the second part of the first folder of bid document i.e., the part titled "Detail Technical Documents" shall be submitted by the bidder, out of which two sets shall be in original print and two sets shall be photocopy. Also a soft copy shall be provided in CD (in MS Office & PDF format). **1.8** Hard copies four (4) sets of the second folder of bid document i.e., the folder titled "Financial Offer" shall be submitted by the bidder, out of which two sets shall be in original print and two sets shall be photocopy. Also a soft copy shall be provided in CD (in MS Office & PDF format).	For "Mandatory Documents",the bidder should submit one original ,three photocopies, but for "Detail Technical Documents" and "Financial Offer", the bidder should submit two original ,two photocopies.Please clarify whether the rule is different.	Yes, the rule is different.
58	2				**1.6.1** A "Clause by Clause Compliance Schedule" to all the clauses and sub-clauses of the Tender Document. The schedule shall be prepared as per format shown in **Book 1 (Annex C)** of the tender document. In the reference column of Annex-C (Book-1), the bidder must clearly mention the volume, chapter, and page number etc. to help TEC verify the tender requirement	In BTCL's Tender Documents, there are two templates of SOC,one is **Annex C** in Book 1 and another is **Form G** in Book 2, please clarify which template of SOC should be used.	Please folllow the format given in Annex C (page no. 30 of Book-1) and consider the Form G of Book-2 to be deleted.
59	2				**2.1** g) Firewalls, Session Boarder Gates/ Controllers and others ancillary items.	Which site would the Firewalls and Session Boarder Controllers be deployed?	Please read the clause as: Firewalls to be installed at Sher-E-Bangla Nagar & Ramna and other ancillary items.
60	2				**2.1** j)Supply of Optical Fiber and HDPE duct with necessary ancillary items (Closures, Termination Box/ODF, pigtail, patch cord, etc.) requirement shown in Annex 3.4. Installation and commission will be done by other tender.	Dose the successfuf bidder should provide transmission euqipment for conntecting LIG and LEA?	Please refer to Clause-2.1.i). The connectivity and transmission equipment will be provided to the vendor.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
61	2				**2.5.1 Raised Floor** Supply and Installation of 'Raised Floor' in all switch rooms. The average size of the switch room shall be: **2.5.2 False Ceilin**g Supply and Installation of 'False Ceiling' in all switch rooms. The size of the switch room shall be:	How many switch rooms should be supplied with Raised Floor and False Ceiling?	Supply and Installation of 'Raised Floor' and "False Ceiling" in all TGW, SS and AGW sites.
62	2				**2.5.3 Lighting Facility** Supply and installation of adequate 'Lighting Facility' for equipment rooms (at least five lighting set), Battery rooms & power room (at least two lighting set). Each of the lighting set shall have at least two energy saving lamps.	How many equipment rooms and Battery rooms and power rooms should be supplied with Lighting Facility?	Supply and Installation of 'Lighting Facility' in all TGW, SS and AGW sites.
63	2				**2.5.4** Emergency lights Supply and installation of adequate 'Emergency lights' for equipments rooms and OMC room (at least two light points per switch room and one light per OMC room). The supplied batteries shall be used as back-up power for this purpose.	How many switch rooms and OMC rooms should be supplied with Raised Emergency lights?	Supply and Installation of 'Emergeny Lights' in all TGW, SS and AGW sites.
64	2				**2.5.6** Earthing Facility Supply and installation of adequate and separate "Earthing Facility" at all TGW and AGW sites for a) all telecom equipment b) all AC & DC power equipment	According to Clause 2.1 c), we know that there are 188 AGW equipment in this project, how many AGW site in this project? Please clarify.	Please consider 188 AGW sites

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
65	2				**2.13.1 Foreign Training** Group-C: Training on Optical Fiber, GPON System and MUX Equipment **3.3** Completion of Interconnection works. iii) The interconnection works shall be done as per the traffic matrixes A to G of clause no. 3.2 above. All the E1s of existing exchanges mentioned in these tables shall have to be connected with the proposed trunk gateways. **The Bidder shall quote necessary number of MUXes to get these E1s to be connected with the Trunk gateways.** That means these MUXes shall have necessary number of STM-1 and E1 interface to connect the Trunk Gateways with existing exchanges as mentioned in the tables. The bidder may quote necessary E1 interfaces in the Trunk gateway as per requirement.	In this project we can't find the requirement of MUX equipment, pls clarify whether the bidder should provide MUX equipment and the Foreign Training about MUX equipment.	Please consider the Clause-3.3.iii) to be Clause-3.3.ii). According to this clause, all the E1s of the existing exchanges mentioned in the Traffic Matrix A to G in Clause-3.2 have to be connected with the TGW either directly to E1 cards in TGW or to the STM-1 card in TGW via MUX equipment. It is the bidder's choice. If MUX equipment is offered, foreign training on MUX equipment will be included.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
66	2				**7.1.6**, **b)**The switch shall support minimum of 200 Gbps switching capacity and 100 million packets per second forwarding performance. The switch shall be supplied with 1+1 hotstandby redundant control and switching. Module and **1+1** hot-standby redundant DC (-48V) power supply modules. **13.1.2** The equipment shall run on DC power and the power module shall be duplicated with **1+1** hotstandby mode. **13.6.5** The power supply module shall be duplicated to support **1+1** redundancy. **13.6.27.1**The present capacity of the rectifier will be at least double of the present power consumption requirement at the AGW node. The rectifier shall be modular in design and based on parallel redundant **N+1** system. **15.3 a) 13)** Number of modules to be supplied = **Nr + 1**	In Clause 7.1.6 B),13.1.2, 13.6.5,13.6.27.1, it requires that rectifier module should be **1+1**; In Chapter Fifteen,Requirements of Power System,there is detailed calculation method about rectifier in Clause 15.3. In the clause 15.3,there are detailed calculation process, while not require rectifier module should **1+1.**	Duplicated 1+1 power modules/cards in LAN Switch, GPON OLTE, and AGW do not require duplicated rectifier module. Connections to the duplicated power modules of the Equipment shall be provided from the circuit-breaker of the DC distribution panel to be supplied according to the Clause-15.3.f.
67	2				**13.6.27.5** For indoor type, standby battery time is **8 hours** for present capacity of AGW with recharging time within 10 hours to 80% capacity after fully discharged and for outdoor type,the standby battery time shall be at least **6 hours.** **15.2 Battery** a) 9) Total Required Back-up Capacity (for TGW sites) =8 x Itr = Ibr in AH 12) Total required Back-up Capacity (for SS site) = 8 x Itm = Ibm in AH	It requires **8 hours** battery backup time for indoor site and (at least) 6 hrs battery backup time for outdoor site in clause 13.6.27.5. the calculation formula in clause 15.2.9 shows the battery backup time is 8hrs. If there is outdoor site, weather the battery backup time in the calculation formula in clause 15.2.9 can be changed to **6 hours**?	Clause-13.6.27.5 is only for AGW sites. Although no calculation formula is given for AGW sites but the bidder shall show detail breakdown of offered capacity in the bid. Whereas, Clause-15.1, 15.2 & 15.3 are applicable for 7 SS (plus TGW) and TGW sites. Clause-15.4 is applicable for all AGW, SS and AGW sites.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
68	2				**Annex 3.5A** & **Annex 3.5B** 3) DC power supply Piece :2 1+1 redundant mode	After detailed calculation process according to clause 15.3 and configure DC power system according to clause 15.3, should the DC power system be configured 2 stes for redundancy for each site? Please kindly clarify what's the meaning of 1+1 redundant mode of DC power supply here?	LAN switches in the Annexes shall have two DC power module/card working in 1+1 hot standby mode. Please see the answer of question no.66
69	2				**12.4.2** The bidder shall install necessary software and hardware for online CDR transfer to the PTCL billing center, BTRC and LEA premise.	What is the capacity of required Mediation and Billing sub-system? Please clafiry wheather the bidder shall provide billing function or just transfer the CDR to Billing center.	According to this clause, the bidder shall have to arrange online CDR transfer to three nodes:BTCL Billing Center, BTRC and LEA. The bidder shall quote a solution which shall include necessary furnitures, hardware and software required at BTCL Switch-side and at the deliver nodes i.e. BTCL Billing Center, BTRC and LEA, The bidder shall submit the proposed interconnection diagram, data flow diagram and mention the connectivity requirements. BTCL shall provide the transmission media
70	2				**Annex 3.5A** & **Annex 3.5B** 4) GE optical interface	As for GE optical interface, which kind of module should be offered, single mode or multiplexing mode? and how about the transporting distance, 10km or 40km	Mult-mode and Short-haul (connections within same building)
71	2				**Annex 3.1** Capacity Requirements of the Soft switch	Softswitch can not provide STM-1,E1 interfaces.	Please see the revised annex attached.
72	2				**Annex3.3** Capacity Requirements of the Access Gateway (AGW)	which type are outdoor ,which type are indoor in the Annex3.3 table.	AGW Type-5 shall be outdoor type and other types shall be indoor type.
73	2				**Annex3.4** Capacity Requirements of the GPON OLTE and Splitter	How many GPON ports for each GPON OLT equipment?	Please see the revised annex attached.
74	2				BOQ all Form Bs and Form Cs	Once again, we suggest BTCL to modify the BOQ Forms as below>	Please see a sample revised format for all Bs and Cs as attached.
75	2		2.1d	10	Seven GPON OLTE one per TGW site having present equipped capacities is shown in ***Annex 3.4.***	How many GPON downlink ports are required in each OLTE? What is the required bandwidth or interconnectivity between LAN Switch and GPON OLTE?	Please see the revised Annex 3.4 attached with this sheet.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
76	2		2.1c	10	188 (one hundred and eighty eight) Access Gateway will be installed in different places of Dhaka city of different equipped capacities shown in Annex 3.3.	How many AGWs are interconnected with each OLTE? Are the AGWs connected via GPON port or GE port?	No AGWs will be interconnected with OLTE. Each AGW will be connected to an Aggregation Switch at TGW sites via a local Access/Aggregation Switch. The connection will be through GE ports.
77	2		Annex 3.4A	117	(Table showing the number of splitters required and the split ratio)	Is this the total number of splitters required? If yes, does the number of splitters connecting with the 7 OLTE be equally divided? If not, please kindly advise, which and how many splitters are to be connected with each OLTE?	Please see the revised Annex 3.4 attached with this sheet.
78	2		Annex 3.4A	117	(Table showing the number of splitters required and the split ratio)	According to the table, the number of GPON ports available after split is 1,416 GPON ports. Please kindly verified if the number of GPON ports are as according to the network planning of BTCL's. It was calculated using the following formula:- # of GPON ports after split = SUM[(split ratio * # of splitter for each set)]	Please see the revised Annex 3.4 attached with this sheet.
79	2		Chapter 13	78	Requirements of Access Network	If possible, please kindly provide access network diagram interconnecting between AGWs and GPON OLTE.	AGWs will not be connected through GPON.
80	2		Annex 3.3	117	(Table showing the capacity requirements of the AGW)	In Annex 3.3, it shows the downlink port requirements for ONT as 4 POTS and 4 FE. Whereas in Clause 13.6.29a)-c), it has shown two ONTs, basic and advanced. Should the bidder quote 3 different types of ONTs, i.e. Basic Residential ONT, Advanced Residential ONT and the ONT specified in Annex 3.3?	Please see the revised Annex 3.3 attached with this.
81	2		Annex 3.3	117	(Table showing the capacity requirements of the AGW)	For the MDUs, are they connected to the OLTE or the AGW? Please kindly specify the MDUs' uplink requirements.	MDU's will be connected to the OLTE through GPON.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
82	2		13.1	78	13.1 GPON OLT (Optical Line Terminal)	In subchapter 13.1, it was not mentioned the battery and power supply for the GPON OLT. Does the bidder need to provide power supply and battery for GPON OLT? If yes, please briefly describe its requirements.	No separate power system is required for GPON OLT. Batteries and Rectifiers mentioned in Chapter-15 of Book-2 will be used to feed the equipment,
83	2		13.6.9	87	The equipment shall support voice telephony service by 'POTS only' cards and voice and internet service simultaneously by 'POTS plus ADSL2+' cards. The ADSL2+ cards shall have in-built splitter.	"To further optimise shelf's slot usage in AGW, the POTS plus ADSL2+ cards, i.e. combo card, shall support at least 32 POTS & 32 ADSL2+ ports in each combo card."	Please quote as per requirement of the tender document.
84	2		13.6	86	Access Gateway	"As to guarantee BTCL's narrowband customers' satisfaction, there should be no interruption to existing narrowband services during firmware upgrade."	Thanks for suggestion
85	2		2.14	21	Inter-connection between different ODF/DDF	what is the connector type of existing ODF system in BTCL? We recommends SC/PC as the connector type in this project which is widely applied in FTTH network	Please make survey for this purpose, if necessary.
86	2					There will be FDT (Fibre Distribution Termination) cabinet in ODN network? Which splitter will be installed inside?	As required.
87	2					The implementation of ODN part will be completed by Vendor or BTCL? If by another vendor, then what about PAT issue? Because, whole PAT will be depending on another vendor who will install new Fiber Optic Cables (ODN). In that case, we request to include relevant clause/s in tender book for PAT.	The ODN part will be completed by a vendor to be selected through another tender. Answer to the questions-121 & 122 will also applicable in this regard.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
88	2		1.6.1	8	A “Clause by Clause Compliance Schedule” to all the clauses and sub-clauses of the Tender Document. The schedule shall be prepared as per format shown in Book 1 (Annex C) of the tender document. In the reference column of Annex-C (Book-1), the bidder must clearly mention the volume, chapter, and page number etc. to help TEC verify the tender requirement.	We found that formate of CLAUSE BY CLAUSE COMPLIANCE SCHEDULE is given twice, one is Annex C of (page no. 30 of Book-1) and another is Form G (page 152 of Book-2). Question is, Can we use Form G (page 152 of Book-2) as it will be convenient for vendors? Moreover, in all previous tenders of BTCL, the SOC templates were same as Form G (page 152 of Book-2	Please folllow the format given in Annex C (page no. 30 of Book-1) and consider the Form G of Book-2 to be deleted.
89	2		5.2	31	(a) The SS should be highly reliable and highly stable with all the card level redundancy (Active- Standby/ Hot-Swappable/Load-Sharing). It should be built around a hardware platform delivering carrier grade service.	For carrier grade service, it is necessary for the SoftSwitch to support hot patching function, it can fix the bug online without interrupting the service, also don’t need to restart the board to interrupt service.	Please follow the specification
90	2		5.2	31	(b) The soft Switches shall be capable to work at Dual Homing mode with Hot-Swappable function. The bidder shall explain in detail the Dual homing backup mechanism of the offered SS Platform. The two Soft Switches supporting dual homing feature shall operate either hot standby or load sharing mode.	Dual homing is a very useful feature for the customer, but it should be accompanied by certification from other operators to verify vendor's commerical application of dual homing in the world.	Thanks for suggestion
91	2		5.2	31	(f) Fast Ethernet or Gigabit Ethernet ports must be in redundant configuration.	The SoftSwitch should separate service traffic and management media in different ports. Because the same port for service traffic and management media will decrease the service performance especially when there is a traffic rush and data fully configured, the performance will be greatly affected.	Please follow the specification
92	2		5.3	32	(e) The SS shall support, and be compliant to, White Book ITU-T Recommendations E.163 and E.164 addressing schemes.	E.163 was withdrawn and some recommedations were incorporated into revision 1 of E.164 IN 1997. So E.163 can be omitted in this clause.	Please read the subclause as follows: (e) The SS shall support, and be compliant to White Book ITU-T Recommendations E.164 addressing schemes.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
93	2		5.5.3	33	Speech Activity Detection with silence suppression (transmission of silence packets) and insertion of comfort noise at far end should be supported, if required. The deviation shall be treated as “Minor Deviation”.	Please update Speech Activity Detection to Voice Activity Detection	Please replace "Speech Activity Detection" by "Voice Activity Detection".
94	2		5.2	31	Design Criteria	The Softswitch shall support upgrade to AGCF and MGCF for future network evolution. Vendor to provide the reference for AGCF and MGCF deployment.	Please follow the specification.
95	2		6.3	35	Packet Interfaces	Please add requirement for an useful function: PPPoE client function - Packet Interfaces shall support the FE and GE interfaces to the IS-IS function.	Please follow the specification
96	2		6.4	35	Signaling	Please add SCTP multi-homing - TGW shall support Multiple IP addresses in one SCTP association supported by both ends. Thus, it is more reliable for the upper layer subscribers.	Please follow the specification
97	2		6.4.4	35	The TGW shall provide M2UA or M3UA or MPUA or other protocols if necessary.	The IUA and V5UA are also important protocols. So please change to: The TGW shall provide M2UA, M3UA, IUA and V5UA or other protocols if necessary.	Please follow the specification
98	2		6.5	36	Voice Processing	Some useful functions can be added, such as: IP over E1 function - TGW shall adapt the IP data packets into the TDM packets, implement transparent transmission based on the route, and support the Compressed Real-Time Protocol (CRTP) function.	Please follow the specification
99	2		6.10	37	TGW shall support	By adding the requirement for SSH server function, the data integrity and reliability are guaranteed, and the remote user login and access are implemented.	Thanks for suggestion
100	2		8.3	43	Call Detailed Recording (CDR) facility in Circuit	Please add: The codec shall been contained in the CDRs, used for checking whether transcode is correctly.	The requirements mentioned in the tender document are the minimum requirement. Bidder may quote additional features as he wishes.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
101	2		8.14	44	Call Detail Record (CDR) facility for subscribers	Please add: The codec shall been contained in the CDRs, used for checking whether transcode is correctly.	The requirements mentioned in the tender document are the minimum requirement. Bidder may quote additional features as he wishes.
102	2		8.3	43	Call Detailed Recording (CDR) facility in Circuit	Please add: The check_sum shall been contained in the CDRs, used for checking whether the bill is saved correctly	The requirements mentioned in the tender document are the minimum requirement. Bidder may quote additional features as he wishes.
103	2		8.14	44	Call Detail Record (CDR) facility for subscribers	Please add: The check_sum shall been contained in the CDRs, used for checking whether the bill is saved correctly	The requirements mentioned in the tender document are the minimum requirement. Bidder may quote additional features as he wishes.
104	2		9.2	46	NGN Protocol	For security purpose, the following specification can be added: The IP security protocol (IPSec) used for protecting the security of communications between the Softswitch and the managed gateways, such as IADs, UAs, and Media Gateways	Thanks for suggestion
105	2		9.2	47	NGN Protocol d) SS7 over IP based on SCTP (SIGTRAN) according to the following standards and/or the later one for similar functions: iv) SCCP User Adaptation RFC 3868 – (SUA)	SUA is SG function to convert TDM SCCP signaling IP protocol, it is not protocol used in NGN product. This requirement should be deleted.	Please read the clause as: d) SS7 over IP based on SCTP (SIGTRAN) according to the following standards. i) IETF Recommendation RFC 3331 – (M2UA) or RFC 3332 – (M3UA) ii) IETF Recommendation RFC 3057 – (IUA) Any deviation shall be considered as "Change of Substance"
106	2		10.1-10.20	48-59	Section 10.1 - Section 10.20 to describe detail feature & function to bidder	In this chapter, it did not mention actually configured quantities for each feature. How does vender to quote the feature with quantity for BTCL?	Please quote all functions for 100% subscribers.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
107	2		Annex-3.1	114	4. Minimum Number of FE / GE Port Number 2/28*	Please clarify this issue. Does it mean 2 FE / 28 GE Port in softswitch? Why need 28 packet interface port based on 171K subscriber?	Please read as "4. Minimum Number of FE / GE Port 2+2"
108	2		16.20	105	16.20 Criteria for calculation of Technical Evaluation Score of Evaluation:	In industrial standard, evloution is based on TDM-NGN-IMS. So operator shall evalute vender's NGN product to evolve to IMS ability to add new criteria is III. Number of NGN system upgrade to IMS within 2 years. ≥ 4 | 4-3 | 2-1 3 | 2 | 1	Please follow specification
109	2		Annex 3.3	117	Capacity Requirements of the Access Gateway (AGW)	Please specify subscriber types of xDSL. For example, In ADSL subscribers, it can be SIP/H.323 subscriber.	Please see the attached revised requirement.
110	2		Annex 3.1	114	Capacity Requirements of the Softswitch CCS 7 Sig Terminal	Does it mean signaling link?	Yes.
111	2		2.1	10	c) 188 (one hundred and eighty eight) Access Gateway will be installed in different places of Dhaka city of different equipped capacities shown in Annex 3.3.	In How many sites or locations these 188 Access Gateway will be installed? Do we have do all civil and power related works in all AGW sites?	All 188 AGW will be installed in 188 separate sites. All related works will be the bidders responsibility, those are mentioned in Clause-2.5, Chapter-2 of Book-2.
112	2		2.5.1	11	Supply and Installation of 'Raised Floor' in all switch rooms.	For which sites Raised Floor will be supplied? Is it for both TGW and AGW sites or only for TGW site?	Supply and Installation of 'Raised Floor' in all TGW and AGW sites.
113	2		2.5.2	11	Supply and Installation of 'False Ceiling' in all switch rooms.	For which sites False Ceiling will be supplied? Is it for both TGW and AGW sites or only for TGW site?	Supply and Installation of 'False Ceiling' in all TGW and AGW sites.
114	2		2.5.3	12	Lighting Facility :Supply and installation of adequate 'Lighting Facility' for equipment rooms (at least five lighting set), Battery rooms & power room (at least two lighting set). Each of the lighting set shall have at least two energy saving lamps.	For which sites Lighting Facality will be supplied? Is it for both TGW and AGW sites or only for TGW site?	Supply and Installation of adequate "Lighting facility" in all TGW, SS and AGW sites.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
115	2		2.5.4	12	Emergency Lights Facility :Supply and installation of adequate 'Emergency lights' for equipments rooms and OMC room (at least two light points per switch room and one light per OMC room). The supplied batteries shall be used as back-up power for this purpose.	For which sites Emergency Lights Facality will be supplied? Is it for both TGW and AGW sites or only for TGW site?	Supply and Installation of adequate "Emergency Lights" in all TGW and AGW sites.
116	2		2.5.6	12	Earthing Facility : Supply and installation of adequate and separate "Earthing Facility" at all TGW and AGW sites for a) all telecom equipment b) all AC & DC power equipment	In how many sites Earthing Facility need to be supplied?	Supply and Installation of "Earthing Facility" in all TGW and AGW sites.
117	2		2.5.7	12	Fire detection and fire fighting Facility : Supply and installation of adequate "Fire detection and fire fighting Facility" for all equipment.	In how many sites Fire detection and fire fighting Facility need to be supplied and installed?	Supply and Installation of adequate "Fire Detection and Fire Fighting" facility in all TGW and AGW sites.
118	2		2.5.8	12	Alarm Bell : Supply and installation of external high-dB level alarm bell in all sites. The bells are to be triggered by system's emergency alarms and are to be powered by exchange no-break power source. Each bell has to be fitted at a place from where sound can be heard easily from the building security duty-point.	In how many sites Alarm Bells need to be supplied and installed?	Supply and Installation of alarm bells in all TGW, SS and AGW sites.
119	2		2.5.11	13	Any other item of works not foreseen in this document, but essential for installation and proper operation of the offered equipment (the bidder shall specify, if necessary, quantity and quote unit price)	Is it require to supply Air-conditioner, Automatic Voltage Regulator (AVR) & Generator in both TGW & AGW sites under this purchase?	Air-conditioners, AVRs (if required) and Generator (if required) shall be arranged by BTCL.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
120	2		2.5.10	12	Station AC Power Wiring with Low Tension Switchgear (LTS) : The Contractor shall install standard “Station AC Power Wiring” at all stations for all the equipment to be installed under this purchase. The wiring shall start from the station AC power, bus bar of BTCL, which will be connected to a LTS provided by the Contractor. The capacities of the wiring shall be at least 200% of the calculated present total requirement of power for all equipment. Necessary numbers of SDB Cabinets with adequate circuit breakers shall be installed. The Bidder shall make necessary survey for this purpose.	In how many sites station AC wiring need to be supplied? Is it for both TGW & AGW sites or only for AGW sites?	In all TGW (plus Soft switch & NMS)and AGW sites.
121	2		2.11.1	14	The bidder’s offer shall include an overall “Performance Guarantee Period” for the whole equipment covered by this purchase. This period shall deem to have started **from the cut-over of the first equipment** into commercial service and last for 3 (three) calendar years **from “the date of effect”** of the last PAC of the contract.	Starting Date of Performance Guarantee Period has been written down two different times. One is from the cut-over of the first equipment and another one is from the date of effect of the last PAC of the contract. Which date will be the stating time for Performance Guarntee Period? Because of this project includes 188 sites and 7 TGWs sites, Huawei's suggestion is the starting date of performance guarantee period shall be from the cutover of the first equipment.	Please read the clause as: The bidder’s offer shall include “Performance Guarantee Period” for the all the equipment covered by this purchase as below-(a)The period shall deem to have started from the cut-over of the first equipment into commercial operation and last for 3 (three) calendar years from “the date of effect” of the last PAC of the equipment installed at TGW, Softswitch & NMS sites. (b) Performance guarantee period of an AGW site shall start after the date of issuance of PAC of that particular AGW. (c) Performance guarantee period of other equipment/material/item not covered by (a) & (b) above, shall start after the date of issuance of PAC of the particular equipment/material/item.

Sl	Book	Chapter/Form	Clause	Page	Name	Bidder;s Questions and/or Recommendations	BTCL's Response
122	2		2.12.2	15-16	BTCL shall start such tests within one month after receipt the request. The bidder may, upon agreement by the both party, offer PAT for any part or parts of the total system. Such request for partial PAT may also be asked for by BTCL.	As the connection of transmission link is not the scope of work of this project, if for any reason the transmission links has not been ready for 188 AGWs before the commissioning of the system, how can successful bidder request to BTCL to start PAT within one month after commissioning and what will be the start time of performance guarantee period if PAT will be delayed for establishing of transmission link?	BTCL will provide transmission link at the soonest possible time to AGW sites. The contractor shall submit the request for PAT to BTCL after self-testing. Performance guarantee period of an AGW site shall start after the date of issuance of PAC of that particular AGW.
123	2		3.3.iii	26	The interconnection works shall be done as per the traffic matrixes A to G of clause no. 3.2 above. All the E1s of existing exchanges mentioned in these tables shall have to be connected with the proposed trunk gateways. The Bidder shall quote necessary number of MUXes to get these E1s to be connected with the Trunk gateways. That means these MUXes shall have necessary number of STM-1 and E1 interface to connect the Trunk Gateways with existing exchanges as mentioned in the tables. The bidder may quote necessary E1 interfaces in the Trunk gateway as per requirement.	For the MUX requirement into the 3.3.iii it is mentioned that all the E1's should be converted to STM1. But into the traffic matrix of 3.2 (A-G) it is found that there are other services present into the matrix, e.g: FE, GE, STM1. So the query from vender side is, is it only E1 that is under transmission responsibility or all other services should be considered?	Please see the BTCL's response in Query No.65
124	1		3.57.3	20	A) Payment for Equipment Price 1) 40% (forty percent) of the invoice amount……..		Please read the clause as: A) Payment for Equipment Price 1) 30% (thirty percent) of the invoice amount……..
125							In addition to these clarifications, BTCL, at its own initiative, has revised/corrected some requirements/features in Book-2, which is incorporated as ***bold italics*** ptrint form in the Book.