



BANGLADESH SUBMARINE CABLE COMPANY LIMITED (BSCCL)

BIDDING DOCUMENT

Name of the Service: Invitation of Bid for Leasing International Internet Bandwidth from Singapore & Marseilles and backhaul from Tuas Landing Station to SG3, Equinix of Singapore for Operation of BSCCL's IP Transit Service.

Tender No: 14.34.0000.110.07.015.19.01

Date: -----

Issued To:

Date of Issue:

Bangladesh Submarine Cable Company Limited (BSCCL), Rahmans' Regnum Center (7th Floor), 191, Tejgaon-Gulshan Link Road, Dhaka-1208.

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A handwritten signature in black ink, appearing to be 'A. B. Khan'.

A handwritten signature in black ink, appearing to be 'S. M. Khan'.

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Invitation of Bid for Leasing International Internet Bandwidth from Singapore & Marseilles and backhaul from Tuas Landing Station to SG3, Equinix of Singapore for Operation of BSCCL's IP Transit Service.

1. INVITATION FOR BID PROPOSAL AND INSTRUCTIONS TO THE BIDDER

- 1.1 Bangladesh Submarine Cable Company Limited (BSCCL) is an International Long Distance Communications (ILDC) and International Internet Gateway (IIG) operator in Bangladesh and is providing IPLC & IP Transit services through the Submarine Cable network. BSCCL is a member of SEA-ME-WE-4 and SEA-ME-WE-5 Submarine Cable Consortiums. In order to facilitate IP Transit services to its clients, BSCCL intends to get lease of International Internet Bandwidth from Singapore and Marseilles of France. BSCCL also intend to purchase backhaul service from Tuas Submarine Cable Landing Station to SG3, Equinix in Singapore for CDN peering. Hence, BSCCL is floating this tender in order to purchase IP transit services from both Singapore and Marseilles and backhaul service from Tuas Landing Station to SG3, Equinix of Singapore. Purchasing of the said IP transit services and backhaul services will be for a period of two years.
- 1.2 BSCCL will consider selecting three upstream providers in Singapore to ensure redundancy and better routing.
- 1.3 BSCCL will consider selecting two upstream providers in Marseilles to ensure redundancy and better routing.
- 1.4 BSCCL will consider four or more 10G backhaul which includes necessary cross connections from Tuas Landing Station to Equinix-SG3, Singapore.
- 1.5 Detail scope of work has been given in the subsequent paragraphs.
- 1.6 The bidders are requested to follow the process for submission of the bid proposal mentioned in clause 7.

2. Method of Procurement: Restricted (International) Tender

3. Source of Fund: Company's Own Fund

4. ELIGIBILITY REQUIREMENTS OF THE BIDDERS

- 4.1 The bidder offering the IP transit service shall have the authority to sell the IP Bandwidth internationally where the offered IP node is located.
- 4.2 The position of the bidder offering the IP transit service shall be within the first 15 of Asia for Singapore and first 15 of Europe for Marseilles in the ranking of Rensys published for November, 2019.
- 4.3 The bidder must not have been declared bankrupt or filed for bankruptcy in any country.
- 4.4 The bidder must have legal capacity to enter into a contract with BSCCL.
- 4.5 Bidders registered in Israel or having their origin in Israel are not eligible for participation in this tender.



5. SCOPE OF SERVICE REQUIREMENTS FOR THIS PROPOSAL

- 5.1 With a view to provide Internet bandwidth through SMW4 and SMW5 cable system, BSCCL intends to procure IP transit bandwidth at InterXion Data Center, Marseilles, France and at SG3 Data Center, Equinix Singapore.
- 5.2 BSCCL is going to install a router at SG3, Equinix of Singapore. The IP Transit services to be procured from the successful bidders will be terminated at the router of BSCCL in Singapore. The bidder will be responsible for the backhaul (if required) and cross-connect to connect the bidder's router ports to BSCCL router at SG3, Equinix, Singapore. BSCCL will use its own Submarine Cable capacity of SMW4 and SMW5 cables to bring the IP bandwidth from BSCCL's router at Singapore to Bangladesh.
- 5.3 In case of IP transit services to be procured at Marseilles, France, BSCCL will use its SMW5 and SMW4 cable capacity to bring the services to Bangladesh. The bidder will be responsible for the backhaul (if required) and cross-connect to connect the bidder's router ports to the SMW5 submarine cable ports at InterXion Data center, Marseilles and/or to the SMW4 submarine cable ports at Marseilles cable landing station.
- 5.4 BSCCL will purchase IP transit service through 8x10G ports from Singapore. There is a probability of increasing the number of 10G ports. BSCCL will activate each 10G circuit whenever it is required within the two years after the signing date of the Contract with the successful bidders. Service of each activated 10G port will continue for two years from the date of activation, but there will be a provision of price revision after the end of one year of service.
- 5.5 BSCCL will select three successful bidders at Singapore to provide eight numbers of 10G IP ports in the manner described in clause no 15.6. The circuits will be activated in the following manner and terms.

Serial No	Circuit Details	From Bidder
1	1 st Circuit	1 st Successful Bidder
2	2 nd Circuit	2 nd Successful Bidder
3	3 rd Circuit	3 rd Successful Bidder
4	4 th Circuit	1 st Successful Bidder
5	5 th Circuit	2 nd Successful Bidder
6	6 th Circuit	3 rd Successful Bidder
7	7 th Circuit	1 st Successful Bidder
8	8 th Circuit	2 nd Successful Bidder

Each circuit will be activated initially for one year; then after successful completion of one year it will be renewed for another one year. But, if the performance of any circuit of any

bidder (1st, 2nd or 3rd Successful bidder for IP Transit at Singapore) is not satisfactory to BSCCL then the circuit will not be renewed for the second year, also no additional circuit will be activated with that bidder.

5.6 Similarly, BSCCL will purchase 2x10G IP ports from Marseilles. One is through SMW4 and the other one through SMW5. Bidder shall note that both the circuits will not be activated at the same time. BSCCL will activate each 10G circuit when it will be required. Service of each activated 10G port will continue for two years from the date of activation, but there will be a provision of price revision after the end of one year of service.

5.7 BSCCL will select two successful bidders at Marseilles to provide two numbers of 10G IP ports in the manner described in clause no15.5. The circuits will be activated in the following manner and terms.

Serial	Circuit Details	From Bidder
1	1 st Circuit	1 st Successful Bidder
2	2 nd Circuit	2 nd Successful Bidder

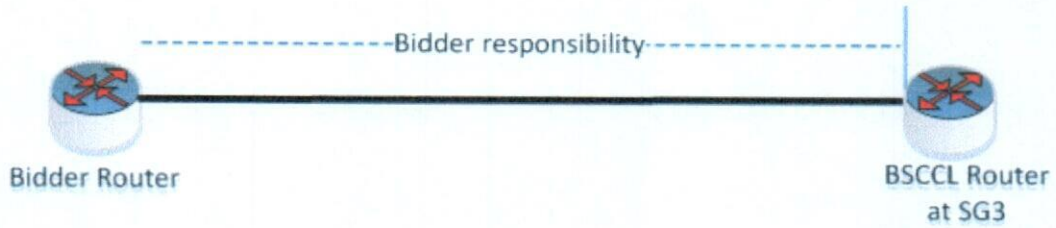
Each circuit will be activated initially for one year; then after successful completion of one year it will be renewed for another one year. But, if the performance of any circuit of any bidder (1st or 2nd Successful bidder for IP Transit at Marseilles) is not satisfactory to BSCCL then the circuit will not be renewed for the second year, also no additional circuit will be activated with that bidder.

5.8 BSCCL will purchase 4(four) or more 10G backhaul service from Tuas CLS to Equinix SG3 separately including cross-connect to the BSCCL's router at SG3, Equinix. BSCCL will activate each 10G Backhaul service based on its requirements. Service of each activated 10G Backhaul service will be continued for two years from the date of activation but after one year of completion the price will be reviewed.

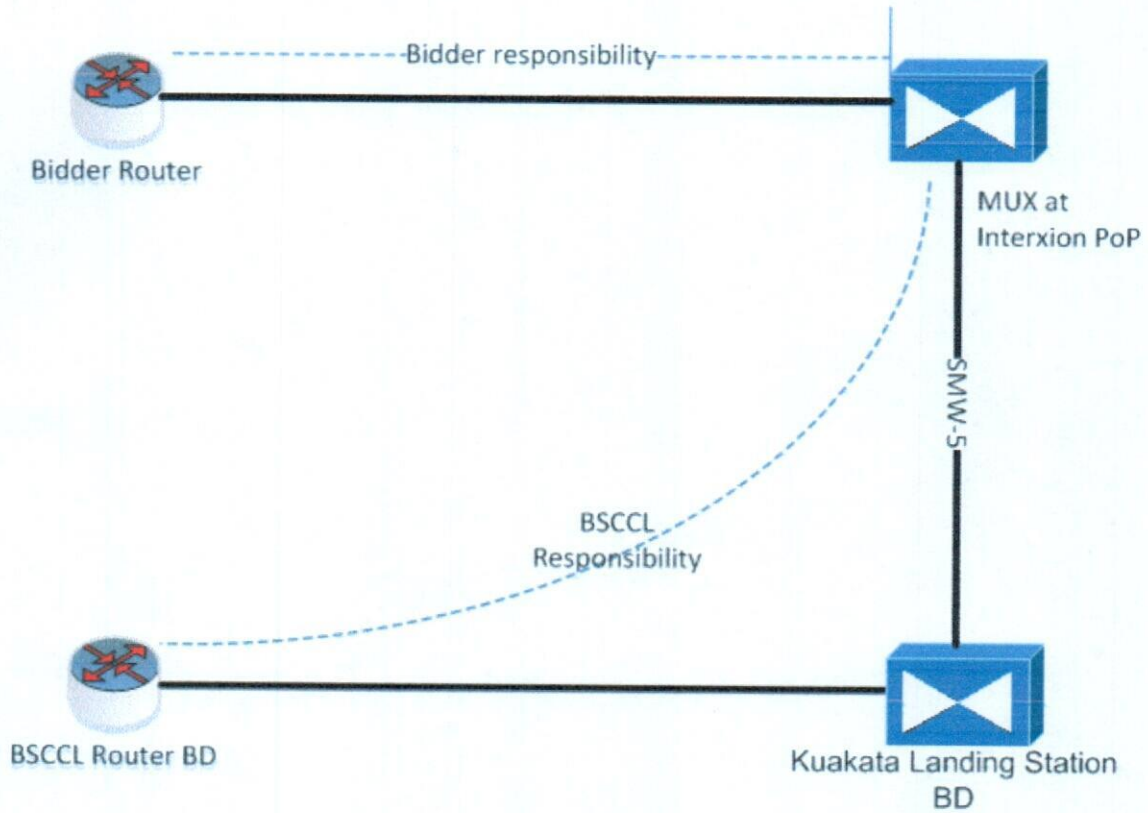


5.9 The following Diagram will illustrate the method of connection for providing the IP bandwidth:

For East (Singapore)



For West (Marseille) through SMW-5



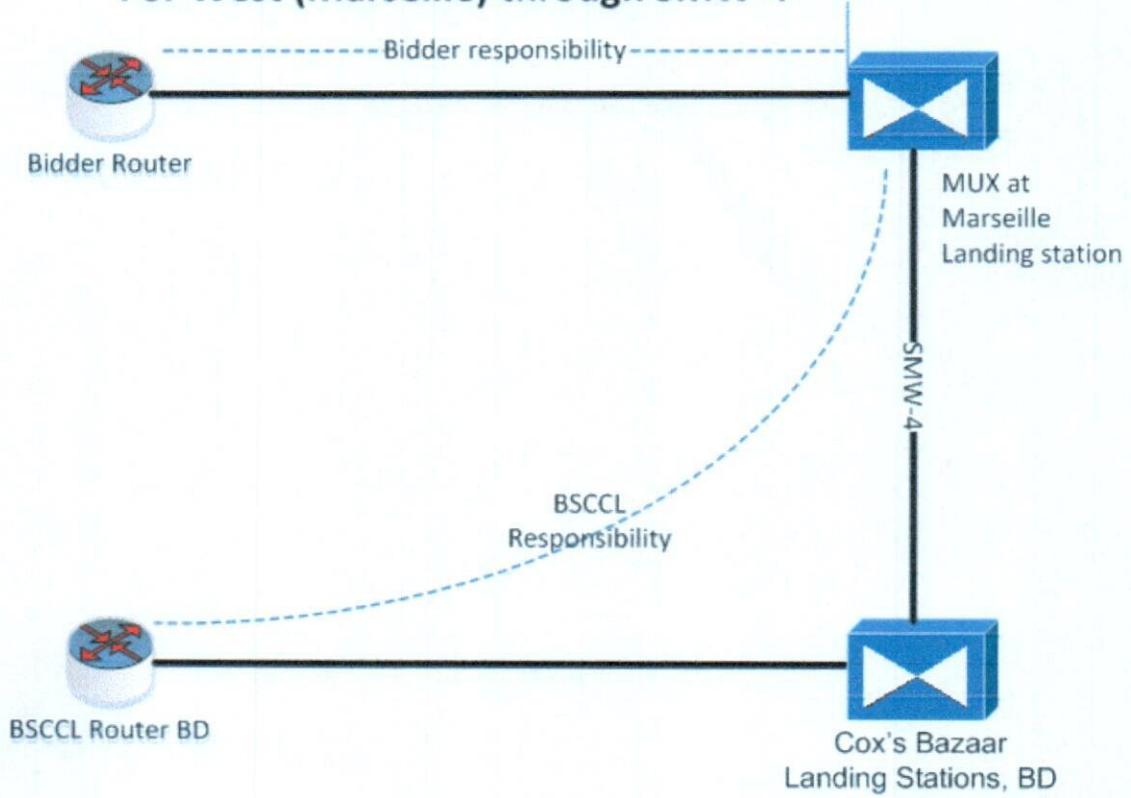
M. Hussain

ABM

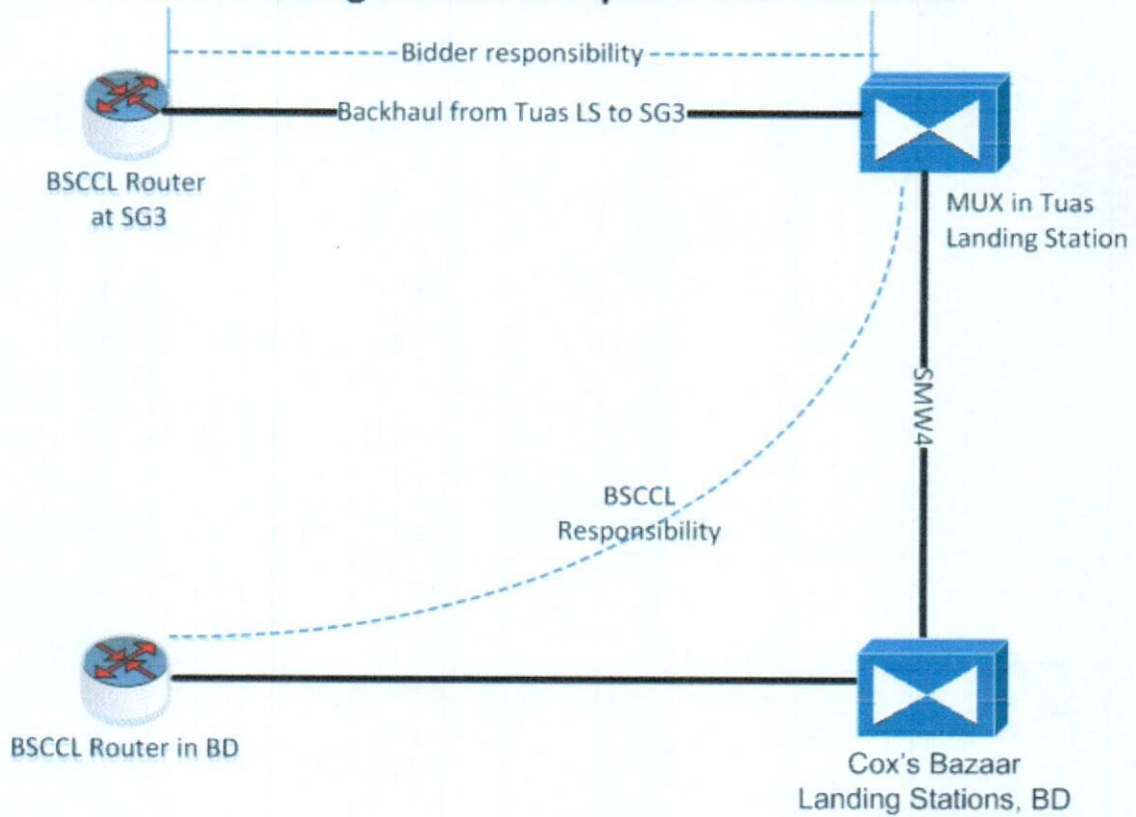
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For West (Marseille) through SMW-4



For Tuas Landing Station to Equinix-SG3 Backhaul



M. Manoj

BB

AS/RA

Rm

5.10 BSCCL is requesting the bidders to quote for the services as follows:

Table 1: IP-Transit service in Singapore (All Price in USD)

Data Center where BSCCL will take the service	NRC (if any)	MRC per Mbps for Committed (7.5 Gbps) Bandwidth		MRC per Mbps for Burstable (upto 2.5Gbps) Bandwidth		Total Price for 2 years (as per formula*)	15% (VAT& TAX)
		Year-1	Year-2	Year-1	Year-2		
Equinix SG3							

* Formula is given in Annexure-1

Table 2: IP-Transit service in Marseilles

Table 2.a: IP-Transit service in Marseilles through SMW5 (All Price in USD)

Data Center where BSCCL will take the service	NRC (if any)	MRC per Mbps for Committed (5.0 Gbps) Bandwidth		MRC per Mbps for Burstable (5.0 Gbps) Bandwidth		Total Price for 2 years (as per formula*)	15% (VAT & TAX)
		Year-1	Year-2	Year-1	Year-2		
Interxion, Marseilles							

*Details are given in Annexure-2

Table 2.b: IP-Transit service in Marseilles through SMW4 (All Price in USD)

Name of CLS	NRC (if any)	Fixed MRC for Backhaul		MRC per Mbps for Committed (5.0 Gbps) Bandwidth		MRC per Mbps for Burstable (5.0 Gbps) Bandwidth		Total Price for 2 years (as per formula*)	15% (VAT & TAX)
		Year-1	Year-2	Year-1	Year-2	Year-1	Year-2		
Marseilles									

*Details are given in Annexure-2

Table 3: Backhaul Service from Tuas LS to Equinix SG3 (including Cross-connect) for each 10G (All Price in USD)

Location	NRC (if any)	MRC		Total Price for 2 years (as per formula*)	15% (VAT& TAX)
		Year-1	Year-2		
Tuas LS to Equinix SG3					

*Details are given in Annexure-3

--For evaluation purpose, prices quoted in Annexure-1, Annexure-2 and Annexure-3 will be considered.

--Definition of Committed bandwidth, Burstable bandwidth and 95th Percentile has been given in Annexure-5

- 5.11 The prices should be quoted for Singapore circuits, Marseilles circuits and backhaul service separately as per quotation forms given in Annexure-1 to Annexure-3. Bidder may submit financial offer either for Singapore circuits or for Marseilles circuits or for back-haul service or for any two services or for all the three services. For IP Transit circuits in Marseilles, bidder may quote either for circuit through SMW5 or for circuit through SMW4 or for circuits both through SMW4 & SMW5. Bidder's offers for each of the three services will be evaluated separately and selection of successful bidder/bidders for each of the services will also be carried out separately. In case of IP Transit service in Marseilles, offers for circuits through SMW4 & SMW5 will be evaluated separately.
- 5.12 The offer shall include commissioning and testing of the ordered capacity on Router IP port to provide IP transit service to the Internet backbones complying with applicable international standards.
- 5.13 The asked Bandwidth must be symmetric.

6. DURATION OF IP BANDWIDTH AND BACKHAUL SERVICE LEASE

- 6.1 The duration of contract period for purchasing of each 10G IP circuit/Port shall be 2 (two) years effective from the date of the Commissioning of the respective service, however price will be reviewed after one year for each circuit. Also, the duration of contract period for purchasing of backhaul service from Tuas CLS to Equinix SG3 shall be 2 (two) years effective from the date of the commissioning of the respective service.
- 6.2 The contract may be renewed upon mutual agreement of both the parties after the expiry of the two years period.

7. SUBMISSION OF OFFER

- 7.1 The technical proposal and the financial proposal shall be submitted separately in two separate files mentioning the type of proposal (Technical or Financial). The hard copy of the offer shall be submitted in person or should reach by postal mail to the following address within the date and time stipulated in the invitation notice;

Managing Director
Bangladesh Submarine Cable Company Limited
Rahmans' Regnum Center (7th Floor),
191, Tejgaon-Gulshan Link Road,
Dhaka-1208.

- 7.2 The bidder may also submit their offer in PDF format through email to the following addresses;

- a) tender@bsccl.com
b) And a copy (cc) to bsccl.tender@gmail.com

The late bids will not be considered for evaluation and will be rejected; the above email id will be blocked just after the time and date of Tender submission.

The pdf file of the financial offer should be password protected. The password should be sent to md.bsccl@bsccl.com with a copy to bsccl.md@gmail.com within the bid closing time.

- 7.3 The bidder may submit the offer in any form as per clause No. 5.1 or 5.2. The Bidder shall clearly mention the type of service (i.e. IP Transit service in Singapore, IP Transit service in Marseilles or Backhaul service in Singapore) in the technical as well as in the financial offer.



8. VALIDITY OF OFFER

- 8.1 Price offer must remain valid for 120 (One hundred and twenty) days from the last date of submission of the bid. Bid validity shorter than the specified period shall be considered as 'Non-responsive'. The bidders shall note that no bid security is required to participate in the bid.

9. CLARIFICATION OF OFFERS

- 9.1 The evaluation committee of BSCCL may ask the bidder for any clarification regarding their offer if needed.
- 9.2 The request for the clarification and the response of the bidder may be through official letter or via email. The bidder must give their response to any query within the time period mentioned in the query. **Any failure may result in declaring their bid as "non-responsive".**

10. CLARIFICATION AND AMENDMENT OF DOCUMENTS

- 10.1 Prospective Bidder requiring any clarification on the bid document may notify such queries to tender@bsccl.com copying bsccl.tender@gmail.com.
- 10.2 At any time prior to the deadline for submission of the bid, BSCCL may, for any reason whether at its own initiative or in response to a clarification requested by a prospective Bidder, amend/modify the bid document.
- 10.3 Any amendment of the bid document will be notified to all prospective Bidders and will be published in BSCCL's web site. Such amendment, if made, shall become an integral part of the bid document and will be binding on all prospective bidders. BSCCL reserves the rights to add/ delete/ modify any clause of the bid document.
- 10.4 In order to provide reasonable time to the prospective Bidders to take the amendment into account in preparation of their bids, BSCCL may at its own discretion, extend the deadline for the submission of the bid by any reasonable period.

11. TECHNICAL REQUIREMENTS FOR THE SERVICES

11.1 DOCUMENTS TO BE SUBMITTED WITH THE BID

- 11.1.1 Clause by clause compliance statement for the relevant clauses related with the service with supporting document, if applicable, must be submitted by the bidders. If any bidder fails to submit supporting documents, then BSCCL may take their own decision on any matter as per their understanding.
- 11.1.2 Documents in support of bidder's eligibility mentioned in clause 2 of this bid document.
- 11.1.3 Latest list of big customers using Internet bandwidth of at least 20 Gbps in the PoP from where the bidder is proposing the service (for bidders offering IP Transit service).
- 11.1.4 A copy of network diagram showing interconnection points, backup links, and details of peering with Internet Exchanges (i.e Hong Kong Exchanges, BBIX) as well as diagram for Inter Asia, Asia to Europe, Europe to Asia, Asia to USA using Trans-Pacific route and Asia to USA using Trans-Atlantic route along with backbone capacity and redundancy. Details about Diversity and Redundancy in the Internet Bandwidth should be provided for evaluation purposes and shall form part of the agreement.
- 11.1.5 Copy (ies) of the Service Level Agreement (SLA) and any other agreements/documents to be signed by both BSCCL and the successful bidder, containing at least the requirements



stated in those documents. Moreover, the SLA will include at least the following Parameters:

- Round Trip Delay/Network Latency
- Packet Loss
- Throughput
- Service availability
- Planned Maintenance window

11.2 Service Availability, RTD, Throughput & Packet Loss (for bidders offering IP Transit service):

11.2.1 Service Availability, RTD, Throughput & Packet Loss:

11.2.1.1 RTD shall be measured by computing the average RTD for one thousand (1000) pings (with the acknowledgment for each previous packet received) of sixty-four (64) bytes each. In case of International Internet Bandwidth, this will be measured from the BSCCL Gateway Router at Dhaka to the different destinations in USA, Europe or Asia Pacific. The commitment RTD shall be as below:

SL No.	Destination	From BSCCL Gateway Router
1	USA (Trans-Atlantic)	270~290 ms
2	USA (Trans Pacific)	230~250 ms
3	Europe (UK)	170~190 ms
4	Europe (France)	170~190 ms
5	Europe (Germany)	170~190 ms
6	Asia Pacific (Singapore)	50~65 ms
7	Asia Pacific (Hong Kong)	80~90 ms
8	Asia Pacific (Japan)	140~160 ms
9	Asia Pacific (China)	190~220 ms
10	Asia (India)	110~130 ms

RTD Summary In case of International IP Transit Port

SL No.	Location/Intra/Inter Region	RTD
1	Intra- Europe	40 ms
2	Intra- USA	60 ms
3	Intra- Asia	130 ms
4	USA-Europe	100 ms
5	USA-Asia	200 ms

The bidder's are requested to provide the regional based IP and the latency headed the destination IP (BSCCL Gateway router) as mentioned in annexure-4. If any bidder fails to meet the latency mentioned above, the bid will be treated as "non-responsive".

11.2.2 Packet Loss:

11.2.2.1 The average monthly packet loss to the last hop router in any PoP of the successful bidder shall be less than 0.3%, measured from the IP gateway router port of BSCCL Equinix PoP. Packet Loss shall be measured by computing the percent loss of one thousand (1000) pings (with acknowledgment for each previous packet received) of sixty-four (64) bytes each.

11.2.3 Throughput

11.2.3.1 The bidder would provide an un-contended bandwidth (1:1) with guaranteed throughput of the contracted bandwidth capacity as measured on physical layer. Bidder shall guarantee a throughput of contracted bandwidth on 1:1 Full Duplex (both ways) on 24 hours x 7 Days basis.

11.2.4 Availability (For both IP Transit and Backhaul services)

11.2.4.1 Services shall be provided at a guaranteed level (except for the planned maintenance). In the event that service level falls below guaranteed level due to International Backhaul, IP PoP, Transmission Equipment, Latency etc. the following compensation shall be payable to BSCCL:

Cumulative Downtime in any Calendar Month	Compensation equivalent to Prorated monthly rental charge
Up to 10.0 minutes	Nil
10.1 minutes – 4 hours	1 day's charge
4 hours – 12 hours	3 day's charge
More than 12 hours	3 day's charge plus 1 day's charge for each full hour beyond 12 hours

*1 day's charge shall be calculated dividing the monthly recurring charge by 30 (thirty)

11.2.4.2 The service would be assumed to be unavailable if RTD/Packet Loss is not met continuously as per specification for a period of 30 minutes. If RTD/Packet Loss varies intermittently for period less than 30 minutes between acceptable to unacceptable limits and if such behavior is observed continuously for one hour then service will be considered to be unavailable for one hour. Each slab of unavailability of thirty minutes or part thereof observed over a period of six months shall be taken into account for calculating the liquidated damages for service degradation.

11.2.4.3 The planned maintenance should not exceed once in a quarter and maximum allowable outage due to the planned outage is 0.45% of total hours in any quarter (3.24 hours). Any planned outage beyond 0.45% shall be considered as unavailability for the purpose of calculating service unavailability credits.

11.2.4.4 In case the above-mentioned parameters exceed for consecutive three months then BSCCL shall have the right to terminate the Service Agreement with the Service provider.

11.2.4.5 Compensation due for failure to meet "Availability" or "Round-trip delay" or "Packet Loss" or "Throughput" requirements will be adjusted from periodic rental charge payment of the respective bidder.

11.2.4.6 The total maximum aggregated compensation payable by respective bidder to BSCCL in any month shall not exceed total monthly recurring charge (MRC). The combined cumulative compensation to be issued during the contract period shall be limited to 20% of the total contract value.

- 11.2.4.7 Failures, interruptions, defects or delays in transmission due to any of the following reasons shall not be counted toward the calculation of service downtime
- a) SMW-4 or SMW5 cable cuts
 - b) Any Force Majeure event
 - c) Any interruptions resulting from defects or failures in Bangladesh end Backhaul or BSCCL end equipment
 - d) Any service modification or alteration through mutual agreement between BSCCL and Service provider
- 11.2.4.8 The bidder shall provide BSCCL necessary access to the router looking glass.
- 11.2.4.9 The bidder is required to provide comprehensive service support on 24 x 7 basis from the date of commencement of the services for the entire agreement **period** without any additional fees and charges.
- 11.2.4.10 In order to protect from DDoS attack mitigation, the bidder have to allow remote Black holing of malicious IP addresses (any between /24 to /32) through BGP announcements from BSCCL end. Black holing can be done based on community or separate black-hole BGP peering.
- 11.2.4.11 The successful bidder shall support dual stack IPv6 & 4-Byte ASN implementation in addition to IPv4 and 2-Byte ASN.
- 11.2.4.12 The successful bidder shall submit Escalation Matrix to communicate any fault related issues.
- 11.2.4.13 The bidder shall carry out any service affecting schedule maintenance in its network between 04:00 and 07:00 Hrs (GMT+6) and schedule maintenance window must notify BSCCL before at least 3 (three) Bangladesh working days (Sunday to Thursday) in advance. Otherwise, schedule maintenance carried out outside the above-mentioned time frame shall be taken into calculations of service availability credits.
- 11.2.4.14 All Scheduled testing requirements shall be notified at least 7 days prior to the testing. Test plans shall be provided at least seven business days prior to the test.
- 11.2.4.15 The service provider shall provide the mechanisms to BSCCL, to measure and monitor the SLA requirements mentioned above.

12. LEAD TIME TO ESTABLISH THE SERVICE

- 12.1 The bidder, in the bid, shall indicate clearly the lead-time to establish the service after work order is issued to them, which should not be more than 2 (two) weeks after issuance of Work Order or after signing of the service order form.
- 12.2 There will have maximum three days of testing period of each circuit after commissioned a circuit.
- 12.3 Within this test period the problem (if any) need to be resolved.



13. FINANCIAL PROPOSAL

- 13.1 All prices must be quoted in US Dollars.
- 13.2 The bidder shall quote VAT and Tax payable in Bangladesh as mentioned in the tables of clause 3.10. and as per clause no 12.5. Any applicable tax and duties payable at the bidder's country from where the service will be provided by the bidder, shall be borne by the bidder.
- 13.3 Amount of discount, if any, must be clearly mentioned
- 13.4 Bids with any conditional price offer shall be treated as 'Non-responsive'.
- 13.5 The evaluation will be conducted in consideration to all recurring and non-recurring charges over a period of two years contract period
- 13.6 The bidder shall submit the financial offer as per the table provided in Annexure-1, Annexure-2 & Annexure-3

14. Bills and Payments

- 14.1 BSCCL will pay the recurring charges quarterly on post-paid basis. The supplier (successful bidders) shall show the VAT and Tax payable in Bangladesh separately in his invoice. BSCCL will make payment after deducting the VAT and Tax payable in Bangladesh.
- 14.2 When a monthly charge applies for a portion of a billing month (whether due to an installation or discontinuation of service during the billing month, a rate change during the month or otherwise) the partial charge is to be calculated based on a daily rate (1/30th of monthly charge).
- 14.3 Invoices shall be submitted by the Bidder headed billing@bsccl.com making a copy to billing.bsccl@gmail.com within 10 working days after end of each quarter.
- 14.4 The burstable usages information including graph and calculation of raw data (as per Annexure -5) shall be mailed to billing.bsccl@gmail.com.
- 14.5 BSCCL will deduct applicable VAT & taxes at source (TDS) as per Bangladeshi laws and credits (BSCCL will deduct 7.5% VAT and 7.5% TAX). BSCCL will pay the bills within 30 working days from the date of issuing the bill.
- 14.6 If there is any dispute in any bill BSCCL will raise objection in writing within 30 (Thirty) days of receiving the invoice.
- 14.7 However, the undisputed amount will be paid within 30 days of receiving the invoice.

15. BSCCL reserves the rights to accept or reject any or all bids without assigning any reason whatsoever.

16. Date of Submission:

- 16.1 Last Date & Time for submitting the bid: **As per Tender Notice and/or subsequent amendments**
- 16.2 Date & Time for opening the bid: **As per Tender Notice and/or subsequent amendments**



17. Evaluation of the offers and award of the contract

- 17.1 The evaluation committee will first examine technical proposals of the bids received within the prescribed date and time to determine the eligibility against the eligibility requirements mentioned in clause 2 above. Only the 'Eligible' bids will be considered for further evaluation. The evaluation committee will then examine every 'Eligible' bid to determine their conformity against different requirements of the bid document regarding, scope, required documents and technical & financial requirements. Any negative determination regarding a bid may result in declaration of the bid as "**Non-Responsive**".
- 17.2 Only the bids to be determined as "Responsive" after this stage of general and technical evaluation will be considered for financial evaluation. During financial evaluation the evaluation committee will check the financial offers of the responsive bids to determine their conformity against the requirements of BSCCL mentioned in the bid document. The committee will also check and correct the arithmetic errors, if any. If any arithmetic error is found during examination, the evaluation committee will make necessary correction and will inform the concerned bidder regarding the error and the proposed correction. If the bidder refuses to accept the proposed correction then his bid will be declared as "**Non-Responsive**" by the evaluation committee.
- 17.3 Upon completion of financial evaluation the evaluation committee will determine the '**Evaluated Price**' for each responsive bid. Bidders shall note that the '**Evaluated Price**' may not be the same as the '**Quoted Price**'. After determination of the '**Evaluated Price**' for each responsive bid, the evaluation committee will list the responsive bids in chronology of the '**Evaluated Price**' with the lowest value of the '**Evaluated Price**' at the top of the list; the bidder with the next higher value of the '**Evaluated Price**' shall be in second place and so on.
- 17.4 For the back-haul service from Tuas CLS to Equinix SG3 at Singapore, the concerned responsive bidder with lowest evaluated price will be considered as the "**Successful Bidder**" for the Backhaul services.
- 17.5 For the IP Transit services at Marseilles, if the responsive bidders offering lowest evaluated prices for the IP Transit services through the SMW4 and the SMW5 are separate bidders then the bidder for circuit through SMW5 will be considered as the "1st Successful Bidder" and the other (for circuit through SMW4 as the "2nd Successful Bidder" for the IP Transit service at Marseilles. But if the responsive same bidder becomes the bidder with lowest evaluated price for both the SMW4 and SMW5 circuits then BSCCL will give the bidder the option for which circuit bidder wishes to get the award. After getting the response, the bidder will be considered as the "1st Successful Bidder" for the IP Transit service at Marseilles. Then BSCCL will select the "2nd Successful Bidder" for the IP Transit service at Marseilles in the following manner:

BSCCL will offer the responsive second lowest evaluated bidder for IP Transit service for the circuit other than that chosen by the "1st Successful Bidder" to accept the evaluated price for other circuit of the "1st Successful Bidder". If the bidder accepts BSCCL's offer then the bidder will be considered as the "2nd Successful Bidder" for the IP Transit service



at Marseilles. If the bidder doesn't accept BSCCL's offer then the same process will be followed gradually for the responsive 3rd and 4th (if any) evaluated lowest bidders in order to select the "2nd Successful Bidder" for the IP Transit service at Marseilles. If said process to select the "2nd Successful Bidder" for the IP Transit service at Marseilles fails then BSCCL will take fresh quotations from the responsive 2nd, 3rd and 4th (if any) evaluated lowest bidders for the circuit other than that chosen by the "1st Successful Bidder". The bidder offering the lowest price in the fresh quotation will be considered as the "2nd Successful Bidder" for the IP Transit service at Marseilles.

- 17.6 For the IP Transit services at Singapore, BSCCL will select three successful bidders. The responsive bidder with lowest evaluated price for IP Transit service at Singapore will be considered as the "1st Successful Bidder" for IP Transit service at Singapore. Then BSCCL will select the "2nd Successful Bidder" and the "3rd Successful Bidder" for the IP Transit service at Singapore in the following manner:

BSCCL will offer the responsive second lowest evaluated bidder for IP Transit service at Singapore to accept the evaluated price of the "1st Successful Bidder". If the bidder accepts BSCCL's offer then the bidder will be considered as the "2nd Successful Bidder" for the IP Transit service at Singapore. If the bidder doesn't accept BSCCL's offer then the same process will be followed gradually for the responsive 3rd, 4th and 5th (if any) evaluated lowest bidders in order to select the "2nd Successful Bidder" for the IP Transit service at Singapore. If said process to select the "2nd Successful Bidder" for the IP Transit service at Singapore fails then BSCCL will take fresh quotations from the responsive 2nd, 3rd, 4th and 5th (if any) evaluated lowest bidders. The bidder offering the lowest evaluated price in the fresh quotation will be considered as the "2nd Successful Bidder" for the IP Transit service at Singapore. In order to select the "3rd Successful Bidder" at Singapore, BSCCL will offer the second lowest evaluated bidder of the fresh quotation to accept the evaluated price of the "2nd Successful Bidder". If the bidder accepts BSCCL's offer then the bidder will be considered as the "3rd Successful Bidder" for the IP Transit service at Singapore. If the bidder doesn't accept BSCCL's offer then BSCCL will try to select the "3rd Successful Bidder" through negotiation with the rest of the responsive bidders for IP Transit service at Singapore as per the direction and approval of the Board of Directors of BSCCL.



Annexure-1

Financial Offer for IP Transit Service from Singapore side:

**Option A1: Up to 2.5 Gbps Burstable Bandwidth with 7.5 Gbps Committed (for each 10G IP Port)
(All Price in USD):**

Data Center where BSCCL will take the service	NRC (if any)	MRC per Mbps for Committed (7.5 Gbps) Bandwidth		MRC per Mbps for Burstable (upto 2.5Gbps) Bandwidth		Total Price for 2 years (as per formula)	15% (VAT& TAX)
		Year-1	Year-2	Year-1	Year-2		
Equinix SG3							

Formula= NRC + (12 x Per Mbps Committed MRC x 7500 for 1st yr + 12 x Per Mbps Burstable MRC x 2500 for 1st yr) + (12 x Per Mbps Committed MRC x 7500 for 2nd yr + 12 x Per Mbps Burstable MRC x 2500 for 2nd yr)

Annexure-2

Financial offer for IP Transit Service from Marseilles side through SMW-5 and SMW-4

Option B1 (SMW-5): Upto 5.0 Gbps Burstable Bandwidth with 5.0 Gbps Committed (All Price in USD):

Data Center where BSCCL will take the service	NRC (if any)	MRC per Mbps for Committed (5.0 Gbps) Bandwidth		MRC per Mbps for Burstable (5.0 Gbps) Bandwidth		Total Price for 2 years (as per formula)	15% (VAT & TAX)
		Year-1	Year-2	Year-1	Year-2		
Interxion, Marseilles							


Formula = NRC + (12 x Per Mbps Committed MRC x 5000 for 1st yr + 12 x Per Mbps Burstable MRC x 5000 for 1st yr) + (12 x Per Mbps Committed MRC x 5000 for 2nd yr + 12 x Per Mbps Burstable MRC x 5000 for 2nd yr)

Option B2 (SMW-4): Up to 5.0 Gbps Burstable Bandwidth with 5.0 Gbps Committed (All Price in USD):

Name of CLS	NRC (if any)	Fixed MRC for Backhaul		MRC per Mbps for Committed (5.0 Gbps) Bandwidth		MRC per Mbps for Burstable (5.0 Gbps) Bandwidth		Total Price for 2 years (as per formula)	15% (VAT & TAX)
		Year-1	Year-2	Year-1	Year-2	Year-1	Year-2		
Marseilles									

Formula = NRC + (12 x Fixed MRC for Backhaul for 1st yr + 12 x Fixed MRC for Backhaul for 2nd yr) + (12 x Per Mbps Committed MRC x 5000 for 1st yr + 12 x Per Mbps Burstable MRC x 5000 for 1st yr) + (12 x Per Mbps Committed MRC x 5000 for 2nd yr + 12 x Per Mbps Burstable MRC x 5000 for 2nd yr)



Annexure-3

Financial offer for 10GE Backhaul Service from Tuas LS to Equinix SG3 (each 10G circuit) (All Price in USD):

Location	NRC (if any)	MRC		Total Price for 2 years (as per formula)	15% (VAT& TAX)
		Year-1	Year-2		
Tuas LS to Equinix SG3					

Formula = NRC + (12 x Fixed MRC for Backhaul for 1st yr + 12 x Fixed MRC for Backhaul for 2nd yr)

Legends:

- NRC = Non Recurring Charge
- MRC = Monthly Recurring Charge
- Eastern Location = SG3, Equinix, Singapore
- Western Location: Interxion, Marseilles for SMW-5
- Western Location: LS, Marseilles for SMW-4
- LS= Landing Station

Note:

Bidder may submit bid for any one of the requirements (Annexure-1/Annexure-2/Annexure-3) of BSCCL or may submit for more than one of the requirements.






Annexure-4

a. For Singapore Circuits:

Sl.	Country/Region	Country/Region IP Address	Bidder IP Address	Latency
1	USA (Trans-Pacific)	100.43.81.1		
2	Asia Pacific (Singapore)	161.117.70.136		
3	Asia Pacific (Japan)	202.214.194.147		
4	Asia Pacific (Hong Kong)	59.148.233.201		
5	Asia Pacific (China)	219.142.83.55		
6	Asia Pacific (India)	103.218.176.1		

N.B:

- BSCCL will add extra 50ms to reach BSCCL Gateway Router at Dhaka while evaluating the latency for Singapore circuits.
- Bidder need to measure the latency from bidder's gateway router located at Singapore and need to share the ping and trace report separately.

b. For Marseilles Circuits:

Sl.	Country/Region	Country/Region IP Address	Bidder IP Address	Latency
1	USA (Trans-Atlantic)	209.222.96.82		
2	Europe (UK)	212.58.244.129		
3	Europe (France)	51.159.30.174		
4	Europe (Germany)	213.136.66.90		

N.B:

- BSCCL will add extra 150ms to reach BSCCL Gateway Router at Dhaka while evaluating the latency for Marseilles circuits.
- Bidder need to measure the latency from bidder's gateway router located at Marseilles and need to share the ping and trace report separately.



Annexure-5

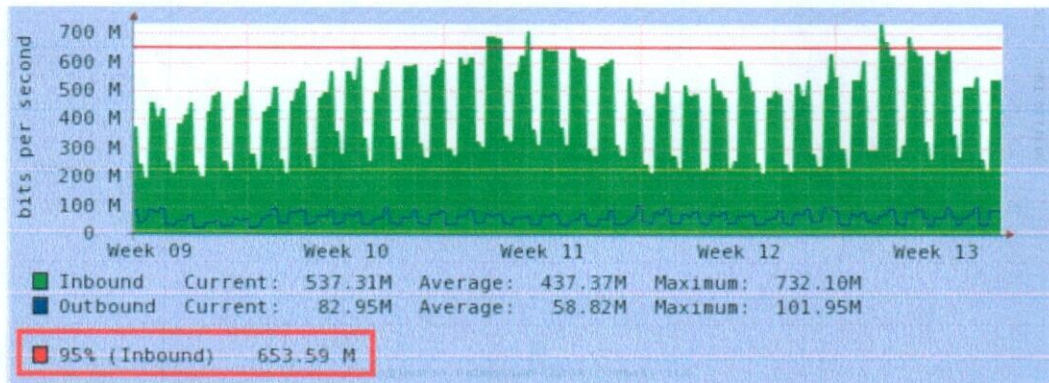
Definition of Committed Bandwidth: Committed Bandwidth means the Bandwidth usage committed to by provider on a monthly basis, as specified in the Order Form.

Definition of 95th percentile: 95th Percentile is a widely used mathematical calculation to evaluate the regular and sustained bandwidth utilization of a connection. According to 95% rule, the monthly samples are sorted; the top 5% both the inbound and outbound traffic samples are discarded; and the next highest remaining data sample on either the inbound or outbound is the "95th Percentile" value. This number is used as the basis for the calculation of any additional monthly charges. If the 95th percentile number falls below the minimum monthly committed amount, no additional charges will occur.

Definition of Burstable Bandwidth: Burstable bandwidth means that there is no limit (i.e. cap) as to how fast data transfer can occur. The only limits will be the physical limits of the hardware and the network connections themselves. Burstable bandwidth will be calculated as below formula:

Burstable Bandwidth = 95th percentile of Bandwidth usage – Committed Bandwidth

Example:



If a customer has committed to 600Mbps per month as per Order Form and according the MRTG data samples for one month and sorts them from highest to lowest, discarding the top 5%. For the purpose of this example, the 95th percentile for the month is 653 Mbps. The company will bill the customer for the additional charges of 653 Mbps, minus the previously invoiced 600Mbps of contractually committed bandwidth, or 53 Mbps. The 53Mbps is treated as burstable bandwidth and will be invoiced for.

Muram *B. B. B.* *B. B. B.* *R.*