



**BANGLADESH TELECOMMUNICATION
REGULATORY COMMISSION**

IEB BHABAN (5, 6 & 7 FLOOR), RAMNA, DHAKA-1000

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**REVISED
DRAFT REGULATORY AND LICENSING GUIDELINE
FOR INVITATION OF PROPOSALS
FOR
ISSUING LICENSES
TO
BUILD, OPERATE AND MAINTAIN
SUBMARINE CABLE SYSTEMS
IN
BANGLADESH**

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BANGLADESH TELECOMMUNICATION REGULATORY COMMISSION

DRAFT REGULATORY AND LICENSING GUIDELINES

FOR ISSUING LICENSES TO

BUILD, OPERATE AND MAINTAIN

SUBMARINE CABLE (SMC) SYSTEMS IN BANGLADESH

1. INTRODUCTION

- 1.1 The Bangladesh Telecommunication Regulatory Commission (“the Commission”) is empowered under section 36 of the Bangladesh Telecommunication Act, 2001 (Act No. XVIII of 2001) (“the Act”) to issue Licenses for the operation and provision of telecommunication services, and to determine the eligibility criteria and other general terms and conditions of Licenses.
- 1.2 Having given due consideration to the principles of transparency, fairness, non-discrimination and all other relevant principles, the Commission has decided to issue Guidelines on Licensing procedure to build, operate and maintain SMC systems in Bangladesh as envisaged in the Licensing (Procedure) Regulations, 2004.
- 1.3 These Guidelines, along with the terms and conditions of the Licenses, should be read in conjunction with the Act, any subsequent legislation, and prevalent laws or sector policies framed by the Government, and other rules, regulations, decrees, orders, decisions, guidelines, directives and documents of general application issued by the Government or the Commission from time to time.
- 1.4 These Guidelines may be withdrawn, revised, updated or amended from time to time, without any prior notice, to take into consideration various factors including, but not limited to, any threat to public health, national security and statute or Court orders.

2. OBJECTIVES

- 2.1 These Guidelines have been prepared taking into account the objective of the Government to ensure installation of additional SMC systems to facilitate growth of ICT sector through uninterrupted telecommunication services in Bangladesh.
- 2.2 These Guidelines are intended to provide an overview of the licensing and regulatory framework for Applicant(s) seeking to obtain Licenses to build, operate and maintain SMC systems in Bangladesh.
- 2.3 Licenses to be issued under this Guideline will authorize an operator to build, operate and maintain high capacity optical fiber SMC System to connect Bangladesh internationally and arrange or install Optical Fiber Cable (OFC) backhaul upto Dhaka.

3. DEFINITIONS, INTERPRETATIONS AND ABBREVIATIONS

The definitions and interpretations of the relevant terms, alongwith pertinent abbreviations, are annexed herewith as APPENDIX: 1.

4. GENERAL REQUIREMENTS

4.1 The followings are the principal legal statutes governing the telecommunication industry in Bangladesh:

- 4.1.1 The Bangladesh Telecommunication Act, 2001 (Act No. XVIII of 2001), (“the Act”).
- 4.1.2 The Wireless Telegraphy Act, 1933 (Act No. XVII of 1933) and The Telegraph Act, 1885 (Act No. XIII of 1885), for matters that are not covered by the Bangladesh Telecommunication Act, 2001.
- 4.1.3 Any Regulations/ Directives/ Instructions made or to be made by the Commission.

4.2 Applicant(s) shall be disqualified from obtaining a License if any provision listed in sub clauses below applies to its owner(s) or to any of its director(s) or partner(s) or to the applicant(s) himself :

- 4.2.1 He is an insane person;
- 4.2.2 He has been sentenced by a court under any law, other than this Act, to imprisonment for a term of 2 (two) years or more, and a period of 5 (five) years has not elapsed since his release from such imprisonment;
- 4.2.3 He has been sentenced by a court for committing of any offence under the Act and a period of 5 (five) years has not elapsed since his release from such imprisonment;
- 4.2.4 He has been declared bankrupt by the Court and has not been discharged from the liability of bankruptcy;
- 4.2.5 He has been identified or declared by the Bangladesh Bank or by the court or by a bank or financial institution as a defaulter loanee of that bank or institution;
- 4.2.6 His License has been cancelled by the commission at any time during the last 5 (five) years;
- 4.2.7 If prosecution is going on against the applicant(s) or its owner(s) or any of its director(s) or partner(s) for any violation of the Act or License conditions.

4.3 In addition to the mandatory grounds for disqualification for applying for a License referred to in clause 4.2, the Commission shall also consider whether the applicant(s) satisfies other criteria including but not limited to:

- 4.3.1 Whether the applicant(s) has sufficient management and financial capacity to operate the activities pertaining to build, operate and maintain SMC System for which the Licenses will be awarded;
- 4.3.2 How far the issuance of the Licenses will serve the public interest and national security.

4.4 Scope of License.

- 4.4.1 Build, operate and maintain optical fiber SMC, including Domestic Cable Landing Station (DCLS) and associated works or facilities.
- 4.4.2 Build or arrange OFC backhaul from DCLS to Dhaka, as per the provision of Infrastructure Sharing Guidelines.
- 4.4.3 Authorize the Licensees to sell or lease capacity to the followings, within the framework of the Licensing Guideline and with the approval of the Commission:

- I. International Gateway (IGW) License holders.
- II. International Internet Gateway (IIG) License holders.
- III. Authorized IPLC Users.

4.5 Number of Licenses.

In order to ensure diversity and generate healthy competition among the Licensees, total 2 (two) new Licenses will be awarded. The number will be confirmed during Invitation of Proposals.

4.6 Duration of License.

The duration of the License, shall initially be for a term of 20 (twenty) years. Upon expiry of the initial term, the License may be renewed for subsequent terms, each of 5 (five) years in duration subject to the approval from the Commission and to such conditions, including the payment of any fees, as may be specified by the Commission under the Act.

4.7 Eligibility for the License.

- 4.7.1 Any applicant who has submitted Preliminary Proposal as per Request for Proposal (RFP) of the Commission shall be eligible for submitting final Proposal. Such Applicant may submit new proposals, bring new partners/ members and reform previous consortium/ partnership/ joint venture during the submission of final Proposal subject to clause 4.7.2.
- 4.7.2 Any Bangladeshi as per the provisions of the Act, except the International Gateway (IGW), International Internet Gateway (IIG), Interconnection Exchange (ICX), Broadband Wireless Access (BWA) and Mobile (CDMA/GSM) Operators having license from the Commission; any person who is a director/shareholder (foreign/Bangladeshi whosoever)/ partner/ proprietor of such company/firm in Bangladesh; and any other company/firm whose any share holder/partner/proprietor holds share(s) of any company/firm holding licenses as mentioned above from the Commission.
- 4.7.3 Any foreign telecommunication business entity in consortium/partnership/joint venture arrangement with Bangladeshi Entity/ Entities, subject to the conditions mentioned at clause 4.7.1.
- 4.7.4 Foreign shareholding is limited to maximum 49% (forty nine percent). The foreign partner shall invest in foreign currency directly equal to his percentage of ownership and no bank loan from any Bangladeshi Scheduled Bank/ Financial Institution/ Leasing Company can be raised for the foreign part of the investment.

4.8 Awarding of License.

- 4.8.1 The Licenses will be awarded by auction, subject to fulfillment of other conditions.
- 4.8.2 License awarding process will involve 02(two) stages. In the 1st stage, applications will be scrutinized based on submission of mandatory documents, as per APPENDIX: 5 (enclosed herewith). The Commission, upon scrutiny, will select the appropriate Applicant(s) who shall fulfill the eligibility criteria to participate in the 2nd stage i.e. open auction.
- 4.8.3 In the event of the Commission requiring additional information from the Applicant(s), the Commission may request for such information, by writing to the Applicant(s). The information requested is to be forwarded to the Commission within a stipulated time to be decided by the Commission.

- 4.8.4 Selected Applicant(s) i.e. selected bidders will be invited to participate in the 2nd stage i.e. open outcry auction process for the license. The auction shall be for License Acquisition Fee. The bidding shall start at Tk. 35 crore [BDT 350 Million]. The bidding and auction procedure has been provided in APPENDIX: 7 in greater detail.
- 4.9 Ready For Customer Service (RFCS) Date.** The SMC System should be operational and ready for customer service within 24 (twenty four) months from the date of awarding License.
- 4.10 Location of DCLS.** DCLS is to be located on the coastal belt of general area Khulna or Patuakhali or Barishal or Chittagong and the route of the proposed SMC may preferably be wide apart from the SEA-ME-WE-4 Branch Line, as far as possible. DCLSs, under this licensing provision, shall not be located in the same place. The exact location of the DCLS will finally be decided by the Commission, in consultation with the Licensee, after evaluating the Marine Survey Report and other essentials.
- 4.11 National Security, Emergencies and National Needs.**
- 4.11.1 The location of the cable (in the route) may have to be changed/ shifted or necessary additional protection measures shall have to be ensured, if so required for National Security, Gas or Oil Exploration, Harbor development considerations and for any other National needs.
- 4.11.2 Licensee shall facilitate and cooperate with all relevant government bodies, departments and official agencies in the event of national emergencies or where issues of national security arise.
- 4.11.3 In the event of any war or war situation, internal national disorder, urgent state of affairs or situations demanding national security, the Government may use equipment and the system used by the Licensee.
- 4.12 Environmental Impact Assessment.** The Commission reserves the right to require the licensee to file environmental assessment by an independent agency should it determine that the cable route, landing of the cable at the specific locations and construction of necessary cable landing stations may impact the environment within the meaning of regulations issued by concerned government authorities.
- 4.13 Access, Co-location and Landing Facilities.** Provide access, co-location and landing facilities, to other licensee(s), as and when required by the Commission.
- 4.14 Additional Licenses, Permits, Authorizations etc.** Licensee will remain responsible to obtain all necessary domestic (in Bangladesh) and international licenses, permits, authorization, permissions etc. in connection with this licensing provision. The Commission may render assistance to obtain the foregoing from Bangladeshi Authorities only.
- 4.15 Interruptions to the Licensed Services.** The Licensee shall not interrupt or suspend the operation of its international telecommunications facilities (or any part thereof) in the normal course of business, without having first obtained the prior written approval of the Commission and provide reasonable advance notice to all stake holders to be affected by such interruption or suspension.
- 4.16 Quality of Service Requirements.**
- 4.16.1 The Licensee shall achieve the QoS standards as set out by the International Telecommunication Union (ITU) and also by the Commission from time to time and maintain records of the same. The Commission may inspect these records and the

Licensee shall furnish certified copies of such reports to the Commission upon demand or at scheduled intervals.

- 4.16.2 The Commission may vary, change, amend, modify or revise the QoS standards from time to time without prior notice and the Licensee shall comply with the new QoS standards imposed within the time period stipulated by the Commission.
- 4.16.3 If the Licensee does not meet the QoS standards, the Commission may impose the penalties set out by the Commission from time to time.

4.17 Inspection and Access to Information.

- 4.17.1 The Commission or its authorized representative(s) shall have the right to enter and inspect all places, premises and cable laying or maintenance ships related to the Bangladesh portion of the SMC System, under this License.
- 4.17.2 The Commission or any person authorized by the Commission shall take copies of records, documents and other information relating to the Licensee's business for the purpose of enabling the Commission to perform its functions under the Act and provisions in the License, whenever deem necessary.

4.18 Law Applicable. All Agreements/Memorandums of Understanding executed by the applicant, related to the licensing conditions provided in the instant guidelines, shall be exclusively governed as to all matters, including validity, construction and performance, by and under the laws of Bangladesh.

4.19 Arbitration.

4.19.1 **If both parties are Bangladeshi.** All disputes between the parties arising out of the Agreements/Memorandums of Understanding executed by the applicant, or anything arising out of such Agreements/Memorandums of Understanding shall be settled amicably within 90 (ninety) days from the date of arising the dispute, or in case of enhancement of the time limit, within so many days, as the parties shall settle mutually, on failure of which, the same shall, in accordance with the Arbitration Act, 2001, be referred to arbitration. Any decision of the Arbitral Tribunal shall be final and binding upon both the parties.

4.19.2 **If either of the parties is foreign.** Any controversy or claim arising out of the Agreements/Memorandums of Understanding executed by the applicant or its breach or regarding the interpretation of any clause thereof shall only be settled amicably within 90 (ninety) days from the date of arising of the dispute or, in case of requirement to enhance the time limit, so many days as is settled with the written consent of both parties.

Failing an amicable settlement as stated above, any dispute shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said Rules. The arbitration award shall be final and binding on both parties. The place of arbitration shall be Dhaka and the language of arbitration shall be English. The arbitrators shall not be any of the employees or shall not have any interest in the business of the parties to the dispute, and shall have to be professionally qualified to deal with the intricacies and technicalities of the dispute. The parties shall bear the cost of the arbitration equally. The right to arbitrate disputes shall survive the termination of such Agreements/Memorandums of Understanding.

4.20 Filing for IPO. The licensee has to file for Initial Public Offering (IPO) within 03 (three) years of RFCS date. The licensee shall not be allowed to transfer any share before issuance of IPO without prior written permission from the Commission.

5. **LAST DAY OF SUBMISSION OF BIDDING DOCUMENTS.**

9 weeks from the date of Invitation for Proposals.

6. **FEES AND CHARGES.**

6.1 **Fees and Charges**

1.	Application Fee	Taka 50,000.00 (Tk. Fifty thousand)
2.	License Acquisition fee	Will be decided through auction.
3.	Annual License Fee	Taka 5 (five) crore
4.	Gross Revenue Sharing	10% (ten percent) for each year
5.	Performance Bank Guarantee	Taka 15 (fifteen) crore

6.2 The Licensee shall pay all the required fees within the stipulated time frame given hereafter. All fees, charges etc. paid by the Licensee are non-refundable and are payable in favour of Bangladesh Telecommunication Regulatory Commission in the form of bank draft or pay order from any scheduled bank of Bangladesh mentioned in the Bangladesh Bank Order 1972.

6.3 **Application fee.** The Application fee shall be Taka 50,000.00 (taka fifty thousand) only in the form of pay order/bank draft.

6.4 **The License Acquisition Fee.** The License Acquisition Fee will be fixed through auction. The license will be issued after payment of 50% (fifty percent) of the said amount within 30 (thirty) working days after notification of award of license. The rest 50% (fifty percent) amount shall be paid within 01 (one) year from the date of license awarding notification, in two equal installments.

6.5 The Licensee, after the payment of the License Acquisition fee (to be fixed through auction), shall for the second and subsequent years of operation, from RFCS date, pay annual License fees comprising of the,

6.5.1 **Annual License Fee.** A sum of Taka 5 crore (BDT 50 Million) payable by the Licensee in advance on each anniversary of the date of the License; and

6.5.2 **Gross Revenue Sharing.** No Revenue (0%) shall be shared for the first year of operation (from RFCS date). A sum equivalent to 10% (ten percent) of the annual audited gross revenue of the Licensee shall be paid on a quarterly basis within the first 10 (ten) days at the end of each quarter. The total amount shall be reconciled on an annual basis based on the Licensee's audited accounts for that year and if there has been any underpayment, the balance must be paid within 90 (ninety) days of the financial year-end of the Licensee. In the event of any overpayment by the Licensee, the Licensee may set off any excess amount against quarterly payments in the next year. The percentage of revenue to be shared may be changed from time to time by the Commission and the licensee shall abide by it.

6.5.3 The annual license fee and the amount of revenue to be shared has to be paid within due time. The amount due may be paid till 60 (sixty) days after the due date by paying late fee at the rate of 15% (fifteen percent) per annum as compensation to the Commission. If the amount is not paid within the 60 (sixty) days as stipulated, then the license shall stand as cancelled.

7. PERFORMANCE BANK GUARANTEE.

- 7.1 The licensee shall submit Bank Guarantee of Taka 15 (fifteen) crore (BDT 150 million) in favour of Bangladesh Telecommunication Regulatory Commission within 30 (thirty) working days from the date of issue of the license.
- 7.2 As security for the performance of the Licensee's obligation, the Licensee shall deliver to the Commission an unconditional Bank Guarantee for the amount of Taka 15 (fifteen) crore (BDT 150 million) only with a minimum validity of 03 (three) years from the date on which the license shall come into force, in a prescribed form as designed by the Commission issued by a scheduled bank [Schedule to the Bangladesh Bank Order, 1972 (P.O. No. 127 of 1972)].
- 7.3 After establishment of the submarine cable system the Licensee must come to operation from RFCS date to the satisfaction of the Commission as per the requirements of the Commission as stated in the Guidelines, 50% (fifty percent) of the Bank Guarantee will be released to the Licensee within 90 (ninety) days from the RFCS date, the remaining amount will be retained by the Commission till the expiry of the validity of the license. The total Bank Guarantee will be encashed, if the Licensee fails to come to the operation within the stipulated RFCS date.
- 7.4 The Licensee for convenience may replace the rest 50% (fifty percent) of the Bank Guarantee with a new one periodically with minimum 02 (two) years validity.

8. SECURITY DEPOSIT

- 8.1 The Applicant(s) shall submit Taka 5 (five) crore as security deposit in the form of bank draft or pay order to the Commission while submitting the application. This security deposit will be refunded to the unsuccessful applicants within 30 (thirty) working days of the auction date without bearing any liability towards interest, indexation, inflation or deflation.
- 8.2 The bid security money of the successful applicant(s) will be adjusted towards the License acquisition fee.

9. TARIFFS AND PRICING

- 9.1 The Licensee shall, before selling or leasing Capacity or provide facilities, like providing access, co-location, etc. submit to the Commission in writing:
- (i) A tariff chart / schedule containing the maximum and minimum charges that it proposes to charge for such purposes, and its justification for the charges;
 - (ii) The description of the sale or lease and facilities, the terms and conditions and all other relevant information which it proposes to publish to its customers. The information to be published must be in a form that is readily available, current and easy to understand.
 - (iii) Application forms for all types of capacity sale and for providing facilities.
- 9.2 The Licensee shall not sale or lease capacity or provide any facilities before obtaining the written approval of the Commission for its tariff and shall comply with conditions as may be imposed by the Commission.
- 9.3 The Licensee shall obtain the written approval of the Commission before making any changes to the approved tariff charges.

10. ACCOUNTING SYSTEM

- 10.1 The Licensee shall maintain separate accounts and other records, in accordance with acceptable accounting practices. The Licensee shall at all times, maintain full and accurate books of accounts and other records reflecting all financial matters, in accordance with the sound and acceptable accounting practices. The Commission reserves the right to issue accounting guidelines to the Licensee from time to time.
- 10.2 The Licensee shall submit certified copies of its financial records and yearly audited accounts to the Commission. The Commission shall have the access to originals of such records and accounts as and when required.
- 10.3 The Licensee shall provide an auditing facility that can be accessed by the Commission to verify the reported services revenues. The Commission shall have the access to computerized accounting system of the licensee as and when deemed necessary by the Commission.
- 10.4 All financial transactions (in local and foreign currency) in relation to the License must be through Scheduled Bank(s) mentioned in the Bangladesh Bank Order, 1972. The Licensee shall inform the Commission of the details of the accounts in operation. The Licensee shall have to submit monthly statement of all the accounts to the Commission within 10th day of the following Gregorian calendar month.

11. CHANGES IN MANAGEMENT STRUCTURE

- 11.1 The Licensee shall seek written approval of the Commission before making any change in its ownership or shareholding. Any change in the ownership or shareholding shall not be valid or effective without the prior written approval of the Commission.
- 11.2 The Licensee shall neither transfer any share nor issue new shares without prior written permission of the Commission.
- 11.3 Any breach of the above conditions contained in this license shall result in cancellation of the license.

12. CONFIDENTIALITY OF THE ROUTE SURVEY AND BURIAL ASSESSMENT REPORT.

All reports associated with route survey and cable burial assessment, along with its drafts, must not be provided to any third party without the prior permission of the Commission.

13. PERFORMANCE MONITORING & LAWFUL INTERCEPTION (LI) COMPLIANCE

LI compliance will be decided in consultation with the National Monitoring Centre (NMC) and the considerations for performance monitoring will be decided by the Commission .These will be communicated to the Licensee.

14. PROVIDING AND SHARING OF FACILITIES

- 14.1 Unless expressly exempted, the Licensee shall be bound to obtain necessary permissions under Section 40 of the Act for sharing or leasing of any of its installations or systems or any apparatus, infrastructure or facilities.

- 14.2 The Licensee shall obtain necessary permission and comply with the directions of the Commission before providing facilities like access, co-location, landing etc. and sharing other facilities.
- 14.3 Where it deems necessary, the Commission may direct the Licensee to share facilities and/or infrastructure with other Licensees and the Licensee shall cooperate and work with other Licensees to submit plan for sharing of facilities/infrastructure to the Commission.

15. APPLICATION FORM

The applicant shall submit Application for the License to the Commission in the prescribed form duly filled in, signed and sealed, together with all the necessary documents and information as will be indicated in the Application Information Instructions. The prescribed Application Form along with the Application Information Instructions has been placed herewith as APPENDIX: 2 and APPENDIX: 3, respectively.

16. AFFIDAVIT

The applicant shall be required to submit Affidavit attested by Notary Public according to the format provided as APPENDIX: 4, to these guidelines.

17. MANDATORY REQUIREMENTS FOR APPLICATIONS

The mandatory information/documents to be provided by the applicants have been mentioned at APPENDIX: 5.

18. PROBABLE SCOPE OF WORK

A guideline on probable scope of work relating to build, operate and maintain SMC System has been placed as APPENDIX: 6, to outline the essentials.

19. MISCELLANEOUS

Each Licensee shall comply with the provisions of the Act, the terms and conditions of its License, and any regulations or guidelines issued by the Commission. The Commission has the right in its sole discretion to change, amend, vary or revoke any of the terms and conditions of the guidelines. This guideline is provided for information only as an indication of the format and types of provisions that may be included in the final guideline. The final terms of the guidelines are matters solely for the Commission to determine and shall contain in the final guidelines issued by the Commission.

- 19.1 The Licensee shall comply with all terms and conditions of this License, applicable legislation including the Bangladesh Telecommunication Act, 2001 and any applicable subsidiary legislation and all directions issued by the Commission from time to time.
- 19.2 The Licensee shall also comply with the provisions of any existing enactment, the rules and regulations made there under by the Government and/or the Commission, and the changes and modifications including any new enactments as may be considered expedient and necessary from time to time.

- 19.3 The Commission reserves exclusive right and authority to explain or interpret any provision of this License. If any confusion arises regarding the actual sense or import of any provision of this License the explanation of the Commission shall be final and binding on the Licensee.
- 19.4 The Commission reserves the right to cancell the License for violation of any of the conditions of the License .

20. STATUS

- 20.1 The information contained in this document is intended to assist interested parties in applying for the Licenses. It does not bind the Commission to any particular course of action in relation to the handling of any application, or to the terms of any License to be granted, or to grant any License to any party.
- 20.2 The Commission reserves the right to change these Licensing guidelines and/or to amend this document without prior notice.

DEFINITIONS, INTERPRETATIONS AND ABBREVIATIONS

1. Definitions & Interpretations of Terms

Unless the context otherwise requires, the different terms and expression used in the License shall have the following meaning assigned to them.

- 1.1 **“Act”** means the Bangladesh Telecommunication Act, 2001 (Act No. XVIII of 2001).
- 1.2 **“Application form”** means a form prescribed for applying for the license to build, operate and maintain SMC System in Bangladesh.
- 1.3 **“Bangladeshi”** means Any Bangladeshi National.
- 1.4 **“Bangladeshi Company”** means any Company registered under Joint Stock of Companies and Firms, in Bangladesh.
- 1.5 **Beach Joint:** The cable joint made between the optical fiber submarine cable and the optical fiber land cable.
- 1.6 **Branching Unit (BU):** Equipment that permits interconnection between three (3) cable sections in Wet Segment and provides the optical fiber and power conductor between such 3 cable sections. Applications for the optical submarine branching may include optical signal path switching, signal regeneration or amplification and power path switching.
- 1.7 **“BSCCL”** means the Bangladesh Submarine Cable Company Limited and any of its successors.
- 1.8 **Cable burial:** The operation consisting in burying the cable in the seabed so as to provide better cable protection. The burial operation may be carried out either during installation or as a post-lay activity.
- 1.9 **Cable laying:** The operation of laying cable.
- 1.10 **Cable Landing Point:** Cable Landing Point shall be the beach joint at the respective cable landing locations or mean low watermark of ordinary spring tides line if there is no beach joint.
- 1.11 **Cable-Lightweight:** Cable suitable for laying, recovery and operation, where no special protection is required.
- 1.12 **Cable-Lightweight Protected:** Lightweight cable with an additional protective layer. This cable is suitable for laying, recovery and operation in areas where cable erosion or fish-bite risk is significant.
- 1.13 **Cable-Single Armoured:** A cable with a single layer of protective armour. This cable is suitable for laying, burial, recovery and operation and is suitably protected for specific area in shallow water.
- 1.14 **Cable-Double Armoured:** A cable with a double layer of protective armour. This cable is suitable for laying, burial, recovery and operation and is suitably protected for specific area in shallow water.
- 1.15 **Cable-Rock Armoured:** A cable with a multiple layer of protective armour (usually two), the outer layer being wound with a small pitch. This cable is suitable for laying, recovery and operation and is suitably protected for specific area in shallow water.
- 1.16 **Cable Terminating Unit (CTU):** The equipment providing the interface between the optical fiber from the TTE and the optical fiber cable, and the interface between the power feeding line from the PFE and the power feeding conductor from the optical fiber cable. The CTU is usually part of the PFE.

- 1.17 **Capacity:** Capacity shall be categorized as follows:
- 1.17.1 **Design Capacity.** The ultimate capacity of Wet Segment of submarine cable.
 - 1.17.2 **Initial Equipped Capacity.** The initial equipped capacity of wet segment of submarine cable at RFCS date.
 - 1.17.3 **Equipped Capacity.** The amount of capacity physically provided in submarine cable at any given time.
- 1.18 **“Commission”** means the Bangladesh Telecommunication Regulatory Commission established under the Bangladesh Telecommunication Act 2001.
- 1.19 **“Consortium”** means an association of three or more companies/organizations/participating entities.
- 1.20 **Deep water:** Water depths exceeding the limit of shallow water.
- 1.21 **Dense Wavelength Division Multiplexing (DWDM):** An aggregate of large number of LOCs to be carried through part or the whole of the submarine line on the same line fiber.
- 1.22 **Expected Ship Repair Number:** The mean number of repairs by cable ship (statistical expectation) due to system failures during the system design life. This excludes faults due to external aggression.
- 1.23 **“Family”** means the husband or a wife, the dependent father, mother, brother or sister, son or daughter.
- 1.24 **“Government”** means the Government of the People’s Republic of Bangladesh.
- 1.25 **“ILDTS Policy 2007”** means the International Long Distance Telecommunication Services Policy 2007 of Bangladesh.
- 1.26 **“Interconnection”** means the visible or invisible or physical or logical linking of more than one telecommunication network in order to enable the users of one network to communicate among themselves or to communicate with the users of another network or to avail themselves of the service of the other network.
- 1.27 **“ITU”** means International Telecommunication Union.
- 1.28 **“License”** means an authorization issued by the Commission under Section 36 of the Act, and Regulations issued by the Commission to build, operate and maintain SMC System for Bangladesh.
- 1.29 **“Licensee”** means the holder of the License to build, operate and maintain SMC System in Bangladesh i.e. the person titled as “.....”to whom the Commission has issued this License.
- 1.30 **Line Optical Channel (LOC):** A bidirectional optical data channel carried on a specific optical frequency/wavelength for each transmission direction.
- 1.31 **Land Portion:** The portion between the system interface in the terminal station, and the beach joint or landing point when it exists. It includes the optical fiber land cable, land joints, and the system terminal equipment.
- 1.32 **Line Terminal Equipment (LTE):** LTE includes SLTE with Order Wire (OW) Equipment if required and the internal ODF, PFE including CTU and the Maintenance Controller (MC).
- 1.33 **“Operator”** means an organization or a person licensed for establishing or operating a telecommunication system or providing telecommunication service or operating a system which is the combination or more than one of those facilities.
- 1.34 **Optical Fiber Submarine Cable:** The submarine cable using optical fibers as transmission line.
- 1.35 **Optical Fiber Submarine Cable Link:** A link which interconnects two terminal stations using a single optical fiber submarine cable system or an integrated system using system portions supplied by different suppliers.
- 1.36 **Optical Fiber Submarine Cable Network:** A network which interconnects three or more terminal stations using a single optical fiber submarine cable system or an integrated system made of system portions supplied by different suppliers.
- 1.37 **Optical Submarine Repeater:** An equipment essentially including one or more regenerators or amplifiers and associated devices, in the submarine portion.

- 1.38 **“PBG”** means Performance Bank Guarantee from a scheduled Bank mentioned in Bangladesh Bank Order 1972 (P.O. No. 127 of 1972).
- 1.39 **PFE Earth Protection Equipment:** A protective device that automatically routes the power feeding current to the station earth under abnormal PFE earth conditions.
- 1.40 **Power Feeding Equipment (PFE):** The equipment providing, through a power conductor in the optical fiber submarine cable, a stabilized constant electrical current for powering optical submarine repeaters and/or optical submarine branching units.
- 1.41 **“Quarter”** means a period of three months.
- 1.42 **“Regulation”** means, regulations made or will be made in the future by the Commission under the Act.
- 1.43 **Repeatered Submarine Cable:** An electrically powered underwater optical fiber cable, designed for repeatered applications, and suitable for shallow and deep water use, which has been extensively tested to show it can be installed and repaired in situ, even in worst weather conditions, without any impairment of optical, electrical or mechanical performance or reliability.
- 1.44 **Ready for Customer Service (RFCS) date:** The date on which the SMC system will be ready to go into operation for customer service.
- 1.45 **Ready for Provisional Acceptance (RFPA) Date:** The date on which the SMC system is Ready for Provisional Acceptance.
- 1.46 **Route Position List (RPL):** RPL contains route positions expressed as longitude/ latitude and Universal Transverse Mercator (UTM), route distance, bearing, cable lengths, cable slack, cable types, water depth, etc.
- 1.47 **SDH Interconnection Equipment (SIE):** The SIE cross-connects STM-64 optical signals between the SLTE and terrestrial networks.
- 1.48 **SLD:** The System SLD is a linear diagram of the SMC system showing the followings:
- 1.48.1 Length and types of cables and the slack assignment
 - 1.48.2 Length of each repeater and BU section
 - 1.48.3 The number and position of repeaters
 - 1.48.4 Length and position of special types of cable, if any
 - 1.48.5 The water depth of the cable transitions, repeaters as BUs.
 - 1.48.6 The installation splices and the direction of the laying operation(s)
- 1.49 **Shallow Water:** Water depths down to a given limit, corresponding to the depths of fishing activity, or more generally of marine activity, creating a risk of cable fault. The limit of shallow water is of the order of 1000 metres.
- 1.50 **Shunt Fault:** A shunt fault is a current leakage path between the power conductor and the sea water without a break in the power conductor.
- 1.51 **Single Wavelength Systems (SWS):** A bidirectional optical system that carries on only one LOC.
- 1.52 **System design life:** The period of time over which the optical fiber submarine cable system is designed to operate in conformance with its performance specification.
- 1.53 **System Surveillance Equipment (SSE):** The SSE is the network management system, which allows the operator to monitor and control the entire submarine system; the SLTE, PFE, and submerged equipment.
- 1.54 **Submarine Line Terminal Equipment (SLTE):** The equipment combines all incoming optical signals into an optical output after adapting for transmission over the SMC and to perform the reverse operation in the opposite direction.
- 1.55 **Submarine Portion:** The portion of the system laying on the seabed, between the beach joints or landing points, which includes the optical fiber submarine cable and the submarine equipment (e.g., optical submarine repeater(s), optical submarine branching unit(s), and optical submarine cable jointing box (es)).
- 1.56 **Supervisory of an Optical Fiber Submarine Cable System:** The function provided by the supervisory system of the optical fiber submarine cable system so as to permit fault localization, repeater performance monitoring and remote-controlled redundancy switching.

- 1.57 Supervisory System:** The whole of equipment and sub assemblies commonly providing one or more of the following functions:
- 1.57.1 Monitoring the performance of the submarine equipment and sub assemblies;
 - 1.57.2 Monitoring the performance of the system terminal equipment;
 - 1.57.3 Monitoring the end-to-end performance of the digital line sections;
 - 1.57.4 Enabling fault location inside the submarine plant, to within one repeater section, where possible;
 - 1.57.5 Controlling redundancy switching, if provided inside the submarine portion;
 - 1.57.6 Providing interfaces to other management facilities.
- 1.58 “Telecommunication”** means transmission and reception of any speech, sound, sign, signal, writing, visual image and any other intellectual expression by the way of using electricity or electro-magnetic or electro chemical or electro-mechanical energy through cable, radio, optical fiber or other electro- magnetic or electro chemical or electro-mechanical or satellite communication system.
- 1.59 “Telecommunication Service”** means any of the following services:
- 1.59.1 Transmission or reception, with the help of a telecommunication system, or anything that falls within the purview of the definition of telecommunication.
 - 1.59.2 Any value added telecommunication service (e.g. fax, voice mail, paging service).
 - 1.59.3 Internet services.
 - 1.59.4 Supply of information or directory relating to a telecommunication system for the convenience of using a service mentioned in (1.59.1), (1.59.2) and (1.59.3) above.
 - 1.59.5 A service for installation or a service relating to the adjustment, alteration, repair, moving or replacement of such apparatus.
- 1.60 “Telecommunication System”** means a combination of the telecommunication apparatus (e.g. switching system, transmission apparatus, terminal apparatus, satellite, etc.) whether or not these equipment are visibly connected with one another, or whether or not they are combined in using the transmission or reception of any information or message.
- 1.61 Terminal Station:** The telecommunication station usually located in the vicinity of the landing point and housing the optical fiber submarine cable system terminal equipment and that of associated terrestrial systems.
- 1.62 Terminal Station Equipment (TSE):** TSE comprises all the equipment in a terminal station provided as part of the system, i.e., Line Terminal Equipment, SDH equipment and Electrical Energy Equipment.
- 1.63 Wavelength Division Multiplexing (WDM):** An aggregate of several LOCs to be carried through part or the whole of submarine line on the same line fiber.

2. Abbreviations

The following abbreviations are relevant:

BMH	Beach Manhole
BSCCL	Bangladesh Submarine Cable Company Limited
BTRC	Bangladesh Telecommunication Regulatory Commission
BU	Branching Unit
CBL	Cable Breaking Load
CDMA	Code Division Multiple Access (CDMA)
CDR	Call Detail Record
CLS	Cable Landing Station
CTU	Cable Terminating Unit
DCLS	Domestic Cable Landing Station
DCN	Data Communication Network
DSCR	Debt Service Coverage Ratio
DSF	Dispersion Shifted single-mode Fiber
DWDM	Dense Wavelength Division Multiplexing
DWDMS	Dense Wavelength Division Multiplexing System
FCLS	Foreign Cable Landing Station
FEC	Forward Error Correction
FFD-BU	Full Fiber Drop Branching Unit
Gbps	Giga bits per second
GSM	Global System for Mobile communication
ICT	Information and Communication Technology
ICX	Interconnection Exchange
IGW	International Gateways
ILDTS	International Long Distance Telecommunication Services
IP	Internet Protocol
IPO	Initial Public Offering
IPLC	International Private Leased Circuit
IRR	Internal Rate of Return
IRU	Indefeasible Right of Use
ITU	International Telecommunication Union
Kbps	Kilo bits per second
LEA	Law Enforcing Agencies
LTE	Line Terminal Equipment
LI	Lawful Interception
LOC	Line Optical Channel
Mbps	Mega bits per second
MC	Maintenance Controller
MOPT	Ministry of Post and Telecommunication
MOU	Memorandum Of Understanding
NA	Network Administrator
NGN	Next Generation Network
NIX	National Internet Exchange
NMC	National Monitoring Centre
NMS	National Monitoring System
NOC	Network Operation Center
OFC	Optical Fiber Cable
OFA	Optical Fiber Amplifier
PBP	Pay Back Period
PFE	Power Feeding Equipment
POI	Point of Interconnection

POP	Point of Presence
RFCS	Ready For Customer Service
RPL	Route Position List
RPOA	Remotely Pumped Optical Amplifier
SCOI	Submarine Cable Optical Interface
SCS	Single Channel System
SCTTE	Submarine Cable Transmission Terminal Equipment
SDH	Synchronous Digital Hierarchy
SDLS	Submarine Digital Line Section
SEA-ME-WE 4	South East Asia-Middle East-West Europe 4 (SMC System)
SEOI	Submarine Electro-Optic Interface
SIE	SDH Interconnection Equipment
SLA	Service Level Agreement
SLD	Straight Line Diagram
SLTE	Submarine Line Terminal Equipment
SMF	Single-Mode Fiber
SSE	System Surveillance Equipment
STE	System Terminal Equipment
STM 64	Synchronous Transport Module 64
STM-x	Synchronous Transfer Mode (Fiber Channel Card)
SWS	Single Wavelength Systems
THE COMMISSION	Bangladesh Telecommunication Regulatory Commission
TNTTE	Terrestrial Network Transmission Terminal Equipment
TSE	Terminal Station Equipment
TTE	Terminal Transmission Equipment
WD	Wavelength Demultiplexer
WDM	Wavelength Division Multiplexing
WDM-BU	Wavelength Division Multiplex-Branching Unit
WDMs	Wavelength Division Multiplexing System
WDM-TTE	Wavelength Division Multiplex-Terminal Transmission Equipment
WM	Wavelength Multiplexer

BANGLADESH TELECOMMUNICATION REGULATORY COMMISSION

APPLICATION FORM

[Section 36(5) of the Act 2001]

For License to Build, Operate and Maintain SMC System in Bangladesh

Information Requirement

SL	Information required	Information furnished/compliance
01	<p>Identity of Applicant(s)</p> <p>Name of Person/ Company/ Firm/ Partnership/ Consortium/Society as the case may be.</p>	
02	<p>Business Address and Registered Office Address and telephone number, facsimile number, e-mail and website details.</p>	
03	<p>Business or Company's Structure Details</p> <p>For Applicant(s) that are corporate entities, include/submit copies of Certified true copies of Memorandum and Articles of Association and Certificate of Incorporation/registration or other equivalent documents.</p> <p>If Applicant(s) company is in the name of a consortium which includes one or more corporate members or partnerships, include/submit documents for each corporate member or partnership as applicable along with up to date clearance certificate of Income Tax (if applicable) for each and individual member of the consortium.</p> <p>If Applicant(s) company is a partnership, provide copy of partnership deed or equivalent documents.</p> <p>If Applicant(s) is a society or other organization, provide rules of society or equivalent documents.</p> <p>If the Applicant(s) is a Company/firm, provide documents of registration from the Registrar of Joint Stock Companies and Firms, as well as from the concerned Chamber of Commerce and Industries or equivalent trade bodies and also submit a clearance certificate of Income Tax paid (if applicable).</p>	
04	<p>Contact Person's Name and Position</p> <p>The person should be an appropriate senior level individual i.e. Chairman, Managing Director, Chief Operating Officer, Chief Executive Officer, Chief Technical Officer, Chief Commercial Officer, who would be an appropriate point of contact for general and/or technical enquiries.</p>	

05	Contact Person's Passport No. and Country of Issue With photocopy of the first six pages of the passport	
06	Contact Number of the Contact Person (Telephone, Fixed & Mobile, Facsimile and E-mail)	
07	Business Proposal and other Information	
08	All Documents and Information as described in APPENDIX: 5 shall be provided	

I/we declare that all the information furnished in this application form is true and correct. I/we understand that approval from the Commission for this application is based on information as declared in this application. Should any of the information as declared be incorrect, then any License granted by the Commission may be cancelled.

I/we also declare that I/we have read, understood and undertake to comply, with all the terms and conditions outlined or referred to in the Commission document entitled Regulatory and Licensing Guidelines for invitation of application for granting of license to Build, Operate and Maintain SMC System in Bangladesh, and those terms and conditions included in the License to be issued to us/me, if this application is approved by the Commission.

Name & Designation & Company Stamp

Date

INSTRUCTIONS FOR COMPLETING THE APPLICATION FORM FOR LICENSE TO BUILD, OPERATE AND MAINTAIN SUBMARINE CABLE (SMC) SYSTEM IN BANGLADESH.

1. The prescribed application form annexed as APPENDIX: 2 is the first and foremost instrument for obtaining License to Build, Operate and Maintain SMC System in Bangladesh.
2. Unless otherwise indicated, all sections in the application form must be completed together with the supporting affidavit in APPENDIX: 4. The completed application form and any supporting documents required should be sent to the address of the Commission in duplicate, together with one soft copy in CD containing the complete application in non scanned PDF Format. The application form and all supporting documents must be in English. All copies of original documents e.g. certificates of incorporation, must be certified as true copies by a notary public of Bangladesh.
3. The application must be made by the applicant/applicant(s)'s authorized personnel. The Commission reserves the right to reject the application if it is found that the information or documents provided for, in this application are untrue, inaccurate or incomplete.
4. The License shall be granted subject to the payment of License acquisition fee and any other relevant fees as laid down in the Licensing Guidelines.
5. All other fees and security deposit for the License shall be as per these guidelines.
6. The License fees and other fees payable in connection with this application and the License shall be paid in the form of Bank Draft/ Pay Order made in favour of Bangladesh Telecommunication Regulatory Commission. All payments must be made in BDT on/before the due date for payment.
7. The Commission reserves the right either to accept or reject any application submitted without assigning any reason thereof.
8. Consideration for approval of the application shall be based on information declared in the application form. Where it thinks fit, the Commission may seek clarification or request additional information from any applicant/entity arising from the application. Any delay in notification or response may also affect the time for a decision on the application including declaration as non responsive.
9. The Commission reserves the right to disclose any information submitted by applicant(s) to any competent authority if the Commission deems the same necessary.
10. Checklist of documentation must be provided with all applications. Full details are described in this guideline. This is only a checklist for reference:
 - 10.1 The applicant(s) will submit 2 (two) copies of its application/offer with all relevant documents of which 01(one) will be original while the other will be copy along with one soft copy in CD containing the complete application in non scanned PDF Format. Each page of the application including tender documents has to be authenticated/ signed by authorized personnel.
 - 10.2 Certified copies of Memorandum and Articles of Association and Certificate of Incorporation for corporate applicant(s).
 - 10.3 Certified copies of share certificates demonstrating ownership interest in application (if applicable).

- 10.4 List of Directors with details of their shareholdings, and relation to other Operators and Applicant(s) for a License along with bio-data and photo.
- 10.5 List of Shareholders with details of equity ownership.
- 10.6 Summaries of financial results for the last five years (if any)
- 10.7 Up to date Income Tax Clearance Certificate (if applicable) and TIN/BIN Certificate (attested photocopy).
- 10.8 Business and implementation plan.
- 10.9 Application Fee.
- 10.10 Other mandatory documents/information to be provided by the applicant as stated in APPENDIX: 5.

AFFIDAVIT

The undersigned, _____, of legal age, and residing at

(Name of Official/Individual Applicant(s))

_____ after having been duly sworn deposed states:

(Address)

1. That he/she is the _____
(Official Capacity)

of _____,

(Name of company/consortium/partnership/society/individual (the Applicant(s)))

duly organized under the laws of _____.

(Name of Country)

OR

That he/she is the Applicant(s) for the License referred to below (the Applicant(s)), a citizen of

The Peoples Republic of Bangladesh.

2. That personally, and as _____ for and on behalf of the Applicant(s)
(Official Capacity)

he/she hereby certifies:

a) That all statements made in the Applicant(s)'s application for a License to Build, Operate and Maintain Submarine Cable (SMC) System in Bangladesh and in the required attachments to that application are true and correct;

b) That this certification is made for the expressed purpose of an application by _____ for License to Build, Operate and Maintain SMC
(name)

System in Bangladesh from the Bangladesh Telecommunication Regulatory Commission;

c) The Applicant(s) will make available to the Commission or any other of its authorized agencies any information they may find necessary to verify any item in the application or regarding its competence and general reputation;

d) That the Applicant(s) (where the Applicant(s) is an individual) or the owner of the Applicant(s) or any of its directors or partners (where the Applicant(s) is a company, consortium, partnership or society):

- (i) he is not an insane person,
 - (ii) he has not been sentenced by a court under any law, other than the Act, to imprisonment for a term of 2 (two) years or more, and a period of 5 (five) years has not elapsed since his release from such imprisonment;
 - (iii) he has not been sentenced by a court for committing any offence under the Act and a period of 5 (five) years has not elapsed since his release from such imprisonment;
 - (iv) he has not been declared bankrupt by the Court and has not been discharged from the liability of bankruptcy;
 - (v) he has not been identified or declared by the Bangladesh Bank, by the court or by a bank or financial institution as a loan defaulter of that bank or institution;
 - (vi) any license of his has not been cancelled by the Commission at any time during the last 5 (five) years.
 - (vii) No prosecution is going on against the applicant or its owner(s) or any of its director(s) or partner(s) for any violation of the Act or license conditions or any other illegal activities.
- e) That no shareholder/director or a member of his/her family of the Applicant(s) in the capacity of an owner, shareholder, director or partner of any other company holds International Gateway (IGW), International Internet Gateway (IIG), Interconnection Exchange (ICX), Broadband Wireless Access (BWA) and Mobile (CDMA/GSM) Operator license from Bangladesh Telecommunication Regulatory Commission.

That the undersigned is the Applicant(s) or is duly authorized by the Applicant(s) to make these representations and to sign this affidavit.

 Director/Secretary/Partner/Duly Authorized Representative/Attorney/Individual
 as or on behalf of the Applicant(s)

WITNESSES

1. _____ 2. _____

Subscribed and sworn to before me

this _____ day of _____ 20 ____ at _____.

 Notary Public

MANDATORY INFORMATION /DOCUMENTS TO BE PROVIDED BY THE APPLICANT**1. General Documents/Information:**

Applicant(s) must furnish the following information/documents (in English) as is applicable:

- 1.1 Letter of Application (in letterhead pad).
- 1.2 Application Form (duly filled in, signed and sealed)
- 1.3 Applicant(s)'s Details
- 1.4 Shareholders of the Applicant(s);
- 1.5 List of the license(s) from the Commission (if any)
- 1.6 Telecommunications Sector Experience (where relevant);
- 1.7 Experience related to Submarine Cable (SMC) System (if any);
- 1.8 Commitments and Guarantees;
- 1.9 Supplementary documents to support Applicant(s)'s proposals (if any).
- 1.10 Original receipt of the bid document

2. Applicant(s)' Details

The following information in relation to the Applicant(s) must contain in the Application:

- 2.1 Name, registered office, date and place of incorporation, from the companies register (if applicable);
- 2.2 The issued share details of shareholders as at the date of lodging the application, along with any proposals in this area;
- 2.3 Full names and addresses of all directors, identifying executive and non-executive positions, along with photocopy of first six pages of passport/Voter ID Card of each director;
- 2.4 Disclosure of any criminal record or personal bankruptcy of any person;
- 2.5 Certified copy of Memorandum and Articles of Association.
- 2.6 Descriptions of principal business activity and principal place of business;
- 2.7 Attested copy of the last three years annual audited accounts (if any);
- 2.8 Summaries of financial results for the last five years (if any);
- 2.9 The name of a nominated contact person with his duly attested signature including email, telephone, facsimile and postal contact details;
- 2.10 Any other matter which Applicant(s) consider the disclosure or non-disclosure of which might materially affect the Commission's decision to make the award of the license.

3. Shareholders of Applicant(s)

Applicant(s) must provide information concerning their identity and composition of the Company. For each shareholder, holder of options, warrants, preference or loan capital or other security issued by the Applicant(s) the following information is sought:

- 3.1 Name, registered office, date and place of incorporation;
- 3.2 Principal place of business and description of principal business activity;
- 3.3 Ultimate holding company;
- 3.4 Attested copies of last three years annual audited accounts (if any);
- 3.5 Summaries of financial results for the last five years (if any);
- 3.6 Photocopy of first six pages of passport/Voter ID Card of each shareholder.

Where any party holds shares or other securities in the Applicant(s) as a trustee or nominee, this must be declared and the details requested above must be provided for the beneficial owner.

Where the Applicant(s) has a large number of share holders, the above information must be provided for major shareholders. Broad details for the minority shareholdings, i.e. those with a small investment, will suffice. The Commission may request further information in this regard if it is thought to be necessary.

Where the shareholder is a part of a group, consolidated group financial information is also required.

4. Consortium Information

Where the Applicant(s) is a consortium or joint venture the following additional information is required:

- 4.1 The role and contribution of each consortium member in terms of resources, experience or expertise;
- 4.2 The nature of the relationship between members including a copy and details of any joint venture agreement, memorandum of understanding or shareholder agreement;
- 4.3 The Applicant(s)'s details for the proposed management structure and corporate governance in the event it is awarded the License.

5. Profile of the Company Supplying Equipment/Cable.

Company profile should include all relevant information including experiences. Certified copy of the MOU between the applicant and the Supplier is to be provided. If the Supplying Company is more than one then certified copy of MOUs are to be provided for all. Detail time frame for the supply of equipment / cable including manufacturing, PSI, shipment, installation, ready date etc. are to be mentioned in the MOU.

6. Profile of the Cable Laying Company.

Company profile should include all relevant information including experiences. Certified copy of MOU between the applicant and the Cable Laying Company is to be provided. Where the Cable Laying Company is providing turnkey solution then all information relating to the time frame for the supply and installation are to be mentioned in the MOU.

7. Ownership Arrangement

- 7.1 In any arrangement other than International Consortium, at least 51% (fifty one percent) of shares are to be held by Bangladeshi(s).

- 7.2 In International Consortium arrangement Bangladeshi ownership should be minimum 25% (twenty five percent).
- 7.3 Bangladeshi ownership should also include ownership of capacity from beyond the System's last Foreign Cable Landing Station (FCLS), for further connectivity, in long term lease or Indefeasible Right of Use (IRU) form.

8. Business Proposal with Prospects.

To include the followings:

- 8.1 Outline Proposal.
- 8.2 Project Cost (CAPEX & OPEX) with segment wise details.
- 8.3 Overall Business Plan with Financial Projection, including assessment on Internal Rate of Return (IRR), Pay Back Period (PBP), Debt Service Coverage Ratio (DSCR) etc.

9. Cable Route Study (Desktop) Report.

A Cable Route Study (Desktop) report is to be submitted, covering all essentials and pertinent aspect of the proposed SMC System including submarine physiography of the area to support general planning of the route, seismic activity and its related side effects, fault history analysis of previous and existing SMC in the area to support route planning and selection of cable protection, fishing and trawling activities, current and predicted off-shore oil, gas and mineral mining activities, shipping activities including anchorages, climatology and currents, analyzed weather data, seabed conditions, preliminary burial assessment, environmental factors, existing cables & pipelines, recommended cable route(s) and landing sites, requirement of licenses, permit & permissions, threat assessment, any other recommendations, etc.

10. Description of the Routes and Landing Sites.

Proposed routes and sites should be described and shown on maps (separately in large and small scale). Justification for selection of routes and sites are to be mentioned. Provisional Straight Line Diagram (SLD) is to be provided and must be updated later, as necessary, until the Provisional Acceptance date.

11. Technical Overview of the System.

Provide information on the followings:

11.1 System Configuration

11.1.1 Capacity Plan.

- I. **Design Capacity.** Minimum two fiber pair (fp) with minimum 64λ in each. Per wavelength capacity should be 10 Gbps or more.
- II. **Initial Lit Capacity.** Minimum one fp with 40 Gbps capacity.
- III. **Upgradation.** Tentative Road Map for upgrading the System is to be provided. System to be upgraded on nearing consumption of 80% (eighty percent) of existing capacity, till design capacity is reached, so as to ensure availability of capacity all the time.

11.1.2 Marine Configuration.

- I. Marine Cable length
- II. Land Cable length (Beach Manhole to Cable Landing Station)
- III. Repeater & Equalizers
- IV. Details of branching unit (if any)

11.1.3 Submarine Line Terminal Equipment (SLTE)

11.1.4 System Surveillance Equipment (SSE)

- 11.1.5 Synchronous Digital Hierarchy (SDH) Equipment
- 11.1.6 Network Management System (NMS)
- 11.1.7 Maintenance Controller (MC)
- 11.1.8 Cable including Provisional Fiber Route Map (types of fiber along the route)
- 11.1.9 Power Feeding Equipment (PFE) including standby arrangements
- 11.1.10 Data Communication Network (DCN)
- 11.1.11 Cable Landing Station (CLS) Installation
- 11.1.12 Beach Manhole (BMH)
- 11.1.13 System, Station & Rack Earthing/Grounding
- 11.1.14 Main Power Supply to the CLS. Power supply plan and provisions along with skeleton diagram showing main power transmission system including related power lines, stations, substations and voltages, are also to be included.

11.2 Plan and Schedule of Marine Route Survey

11.3 Plan and Schedule of Burial Assessment Survey

11.4 System Protection

11.5 Arrangements for Technical Training for Local Operational and Maintenance personnel.

12. Network Administrator (NA) and Network Operation Center (NOC).

Provide detail information on the NA and NOC. At least, alternative NOC is to be located in Bangladesh. Planning, procedure and execution related to overall operation of the system are to be mentioned.

13. Basic System Requirements.

The system should provide redundancy to our existing SMW-4 Cable System, restoration of utilized capacities of SMW-4, provide diversity in terms of connectivity and enhance capacities.

13.1 **Redundancy.** SMC connectivity to any International telecom hub through additional SMC System is the basic requirement as it will provide redundancy in terms of the concerned branch line and express way of SMW-4. The proposed system may also plan to arrange it's own redundancy through SMW-4.

13.2 **Restoration.** The system should provide functional level of restoration facilities to the utilized capacities of SMW-4 by arranging onward capacity to Mumbai, Jeddah, Fujairah, Palermo, Marseilles, Singapore and any other destinations. This capacity can be swapped through separate arrangement with Bangladesh Submarine Cable Company Limited (BSCCL).

13.3 **Diversity.** Diversity should be achieved by arranging long term lease or IRU of reasonable capacities up to USA West Coast on the East and USA East Coast on the West. Both the Coasts are to be connected to provide ring arrangement.

13.4 **Capacity Enhancement.** The additional SMC System should have reasonably updated design and initial bandwidth capacity.

14. Redundancy and Capacity Restoration of the Proposed System. Redundancy and capacity restoration plan and provisions are to be described. Arrangement with Bangladesh Submarine Cable Company Limited (for SMW-4) may be considered in this regard.

15. Security Considerations.

Security planning and considerations for the followings are to be outlined:

- 15.1 CLS (Separately for operational, administrative and logistic segment) including Power Supply.
- 15.2 BMH
- 15.3 Earthing
- 15.4 Land Cable
- 15.5 Anchor Block and near shore cable
- 15.6 Undersea Cable
- 15.7 Cable Burial
- 15.8 Any other

16. Maintenance of the System.

- 16.1 Outline of overall maintenance arrangement is to be provided.
- 16.2 **Maintenance arrangement of the dry portion of the System.** CLS, BMH, Land Cable, PFE including generators etc. are to be mentioned.
- 16.3 **Maintenance arrangement of the wet portion of the System.** Probable arrangements including responsibilities are to be highlighted.

17. Plan to Arrange Backhaul upto Dhaka.

A detail plan and provisions showing the route and time frame are to be mentioned regarding the proposed backhaul. The capacity of the backhaul should relate to the design and initial capacity of the SMC System. Applicant may arrange or built OFC for backhaul as per the provisions of Infrastructure sharing guidelines. Plan and provisions regarding the redundancy of the backhaul must be mentioned.

18. Land Procurement Plan for DCLS and BMH. Provide details of the plan including possible arrangements.

19. Time Frame

The time frame should reflect the Road Map of the Proposed System.

19.1 Launching

- 19.1.1 Tentative contract signing schedule with all Contractors/ Suppliers.
- 19.1.2 Tentative time frame for obtaining necessary licenses, permits and permissions from all concerned.
- 19.1.3 IRU arrangement schedule, for onward connectivity.
- 19.1.4 Dry and Wet maintenance arrangement schedule.

19.2 Schedule of Supply of Equipment and Cable. Probable dates are to be mentioned.

19.3 Laying of Cable, installation of Equipment and Construction. Probable dates are to be mentioned for the following:

- 19.3.1 Tentative schedule for laying SMC.
- 19.3.2 Construction of CLS.
- 19.3.3 Installation of all CLS equipment, including LTE and SDH.
- 19.3.4 Construction of BMH.

19.4 Power Supply. Arrangement schedule for power supply at CLS.

19.5 **Ready for Provisional Acceptance Test Date.** Tentative date should be mentioned indicating the readiness of the system for acceptance.

19.6 **RFCS Date.** This date should be within 24 (twenty four) months from the date of awarding License.

20. Post License Award Necessities.

Furnish Time Frame for the submission of followings:

20.1 Plan of Work.

20.2 Procurement Schedules of Cables, CLS Equipment, Repeaters and all other Equipment.

20.3 Marine Operations schedule including Marine Survey, Burial Assessment Survey and Marine Installation.

20.4 SLD.

20.5 Route Position List (RPL) and Fiber Route Map.

20.6 Charts in separate scale for shallow and deep water (post survey cartographic works). Chart scales are required to be 1:100000 for the deep water portion of the route and 1:25000/10000/5000, (as appropriate) for water depths less than 1000 meters.

20.7 Copy of Agreements with all Provisioners and Suppliers.

20.8 Copy of Agreement related to Power Supply Arrangement.

20.9 Documents related to procurement of lands for DCLS and BMH.

20.10 Copy of Wet Segment Maintenance Agreement.

20.11 Copy of Technical Handbooks including System Description Handbook, Terminal Equipment Handbooks, Submersible Plant Handbooks, Training Handbooks and Manufacture's other relevant literature.

20.12 Operation and Maintenance Handbook.

20.13 Additional information on any other related matter may be sought later.

21. Justifications for Deviations. All deviations from the Preliminary Proposals are to be justified with reasoning.

22. Executive Summary. Executive summary is to be provided highlighting the essentials.

PROBABLE SCOPE OF WORK

1. **GENERAL**

- 1.1 Design, engineering, planning, management, co-ordination and implementation of the System.
- 1.2 Security requirements during all phases of work, where ever applicable.
- 1.3 Arrangement for warranty repairs during the Warranty Period.
- 1.4 Arrangement for Post-Warranty support including capability to provide Post-Warranty repairs and technical support for the System throughout its design life.
- 1.5 Procurement of lands for CLS and BMH.

2. **BETWEEN LANDING POINTS**

- 2.1 The manufacture of submarine cables, cable joints, cable transitions and cable terminations (couplers), including spares.
- 2.2 The manufacture of optical submarine repeaters and branching unit (if necessary), including spares.
- 2.3 The cable jointing and the System assembly, including testing.
- 2.4 The loading of the submersible plant and spares on-board the laying ship(s).
- 2.5 The marine operations as per paragraph 4 here below.
- 2.6 The off-loading of the submersible spares in the selected cable depot(s).
- 2.7 The testing during manufacture, assembly, loading and laying, including burial.

3. **BETWEEN LANDING POINTS AND TERMINAL STATIONS**

- 3.1 Surveys of the landing beaches, land cable routes and terminal stations and system earth location.
- 3.2 The manufacture of the optical fiber land cable, the system earth cable, and power feed cable (including spares).
- 3.3 The on-site delivery of the items under 3.2 above.
- 3.4 Installation of the optical fiber land cable, system earth cable, and power feeding cable.
- 3.5 The jointing of optical fiber land cable, system earth cable, and power feeding cable.
- 3.6 The land cable and beach works including the supply and installation of the necessary cable protections.
- 3.7 The beach joint.
- 3.8 The post installation testing of the land cables.
- 3.9 The provision, installation, jointing and testing of the System Earth.
- 3.10 Necessary permits and authorizations from the appropriate authorities for the installation of the above items.

4. **MARINE OPERATIONS**

- 4.1 Cable Route Study (Desktop).
- 4.2 Electronic Survey of the SMC route.
- 4.3 Burial Assessment Survey.
- 4.4 Cable Route Clearance.
- 4.5 Pre-lay Grapnel Run.
- 4.6 Laying including Burial.
- 4.7 Inspection of the buried cable areas.
- 4.8 Post lay cable burial.

- 4.9 Pipeline and cable crossing.
- 4.10 The shore end installation and the supply and installation of the necessary cable protection.
- 4.11 Necessary licenses, permits and authorizations from the appropriate authorities for the cable laying operations, and other associated marine activities, including, but not limited to environmental studies, surveys in the land territories and territorial waters.
- 4.12 Necessary permits and authorizations from the appropriate authorities for import and installation of equipment necessary for the construction of the System.

5. **IN EACH TERMINAL STATION**

The Work includes the work specified in the Contract documents. This includes but is not limited to:

- 5.1 Site Surveys, including land sections of the segments to allow all necessary engineering to be completed
- 5.2 Design, development, manufacture, installation and testing of, all Terminal Station Equipment.
- 5.3 Delivery of all Terminal Station Equipment, all plant and all spare items to the required site(s)
- 5.4 Provision of all materials, test equipment, labor-and services.
- 5.5 Provision of all documentations.
- 5.6 Installation and testing of all Terminal Station Equipment, including cable racking and other support equipment as required
- 5.7 The connection of the equipment to existing Terminal Station power sources, Station Earth, and optical/electric distribution frames (according to results of site survey).
- 5.8 Installation and testing of the submerged plant, to include PFE earth grids (System Earth).
- 5.9 Testing of all Spares.
- 5.10 Integration of the SDH Equipment with the Submarine Line Terminal Equipment.
- 5.11 Configuration of initial traffic paths on the System in accordance with the traffic requirements at Provisional Acceptance
- 5.12 The Data Communication Network (DCN) equipment required to allow management of the System.
- 5.13 DC Power Equipment (as required).
- 5.14 Station Alarm System.

6. **ACCEPTANCE TESTS**

- 6.1 For the Product Design Acceptance for all major items to be used in the System, by qualification testing and life testing where appropriate, for items not previously qualified for submarine use.
- 6.2 For the Factory Release of the cable sections, repeaters, branching units and all pieces of TSE and SDH Equipment (including spares and software).
- 6.3 After the installation, at each terminal site of each piece of TSE, SDH Equipment, the land cable and the System Earth (including spares).
- 6.4 For the Provisional Acceptance of the System, including integration of all equipment provided.
- 6.5 For the End for Warranty of the System.

7. **DOCUMENTATION AND TRAINING**

The complete technical documentation and training must be provided.

Bangladesh Telecommunication Regulatory Commission

IEB Bhaban (5, 6 & 7 Floor), Ramna, Dhaka-1000

No. BTRC/LL/SMC/2008-

Date: 06-01-2009

BIDDING AND AUCTION PROCESS

1. The auction shall be based on an open outcry (the British System) onat
2. Only 5 (five) representatives of each qualified bidder shall be allowed. The names, photos and designation of these persons should be submitted to the Commission beforehand by the given date, and the Commission shall issue Identity Cards to those persons. No one else will be allowed to enter the room. The Signatory (the person who signed the main application form) should be one of the representatives. If for some reason that person is unavailable, then the representatives with proper Power of Attorney shall attend. The representatives must bring the Company seal.
3. The qualified bidders shall nominate and authorize only 1 (one) of its representatives to sign the auction bid. His specimen signature shall be submitted to the Commission by the given date. The specimen signature of the nominee (who shall sign the bidding forms) shall be attested by the signatory (who signed the main application form) and shall be verified by the Submarine Cable (SMC) Auction Committee during the auction.
4. On the day of the Auction, the bidders shall register their names. The registration shall start at..... The representatives shall take their seat inside the Auction room by Upon registration they would be given a number (at random).
5. Only 1 (one) representative of the qualified bidder (apart from the one who will sign the bidding forms) shall be allowed to bid by pushing the electronic button once the auction starts.
6. The bidders shall bid for the License Acquisition Fee. The floor price is set at Tk. 35 crore (BDT 350 million).
7. Each subsequent bid increment shall be for Tk. 1 crore (taka one crore) (BDT 10 million) only.
8. After each Bid, the bidding and Bidder's details will be recorded before the next Bid. For each increment the name of only one bidder (the bidder to push the electronic button first) shall be recorded.
9. After every 4 (four) bids, there will be a short break. The Auctioneer may give a break/pause/stop the auction process at any time as and when necessary.
10. While the bidding shall go on, all mobile phones must be switched off. But only during the breaks those may be turned on.
11. The bidder shall push the electronic button as an outcry his bid and his nominated associate shall write it on the prescribed form duly signed by the Authorized Representative and hand it over to the Auction Committee.

12. The Auction Committee if at any time before or during any bid, considers it necessary to cancel, suspend or abandon that Round due to any circumstance, the Committee will notify all Bidders:
 - 12.1 that such bid will not proceed or will be suspended or abandoned (as the case may be); and
 - 12.2 of the time at which such bid will restart.
13. The bidders may participate in the bidding at any time. It is not necessary that each bidder has to participate in every bid.
14. The auction shall continue until there are no further bids.
15. The final bid will be determined by the fall of the hammer.
16. When there are no further bids, the Auction Committee shall announce the final bid and the names of the Bidders in order of their bid amount, i.e. from higher to lower.
17. After the announcement of the highest Bidder, no further offers to obtain the license shall be entertained by the Commission.
18. The commission then shall announce the Winning bid and the bidder's name.
19. The second highest Bidder (i.e. the last recorded bidder) will be asked to match the Auction Winning Bid and if he agrees, he shall qualify for the second License.
20. In case the second highest Bidder is unwilling to match the Auction Winning Bid, the second License shall be offered at the Auction Winning Bid to the other Bidders in order of their bid amounts, i.e. from higher to lower until Auction winning Bid is matched. If no other Bidder is ready to match the Auction Winning Bid, the Bidding session will be cancelled and a future date of fresh bid and auction will be announced by the Commission.
21. All the qualified bidders shall accept any decision given by the Auction Committee as final.
22. The Commission reserves the right to modify/temporarily stop/terminate the bid process at any time including the auction period, in its sole discretion.
23. **Disqualifications.**

The Commission may, on the recommendation of the Auction committee, disqualify any Bidder and forfeit its money for any of the reasons set out below:

- 23.1 Illegal conduct in the bid procedure and auction process or improper attempts to influence the outcome, or delay or disrupt the process.
- 23.2 Any "corrupt practice" meaning the offering, giving, receiving or soliciting of anything of value to influence the action of a public official/Auctioneer in relation to licensing process provided in the guidelines.
- 23.3 Any "fraudulent practice" or misrepresentation of the facts in order to influence the results of the licensing process established by the Guideline.