



GUIDELINES FOR INVITATION TO PROPOSALS/OFFERS

FOR

ASSIGNMENT OF SPECTRUM FROM 2100MHz, 1800MHz & E-GSM (900
MHz) BAND TO CELLULAR MOBILE PHONE SERVICE OPERATORS

AND

ISSUING RADIO COMMUNICATIONS APPARATUS LICENSE
IN BANGLADESH

JUNE 2017



BANGLADESH TELECOMMUNICATION REGULATORY COMMISSION

IEB BHABAN, RAMNA, DHAKA-1000

No. BTRC/.....

Date:

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Part A:

FOR ASSIGNMENT OF SPECTRUM FROM 2100MHz BAND
AND
ISSUING RADIO COMMUNICATIONS APPARATUS LICENSE



**BANGLADESH TELECOMMUNICATION
REGULATORY COMMISSION**
IEB BHABAN, RAMNA, DHAKA-1000

**GUIDELINES FOR SPECTRUM ASSIGNMENT FROM 2100 MHz BAND TO THE
CELLULAR MOBILE PHONE SERVICE OPERATORS AND ISSUING RADIO
COMMUNICATIONS APPARATUS LICENSE**

1. INTRODUCTION

- 1.01 Bangladesh witnessed a booming growth of mobile subscriptions for last ten years. Mobile voice and data traffic are increasing rapidly and generating huge traffic in the cellular mobile communication networks. Currently assigned spectrum to the cellular mobile operators from IMT bands are not sufficient to carry the enormous traffic and ensure the quality of services. Therefore, the Bangladesh Telecommunication Regulatory Commission (Commission) is preparing to assign additional spectrum from 2100 MHz band and award Cellular Mobile Phone Service Operator License for providing 3G and 4G/LTE services.
- 1.02 The Government has authorized the Bangladesh Telecommunication Regulatory Commission (Commission) to issue the approved guidelines. As such the Commission has been empowered by the Government and under the Section 36 of the Bangladesh Telecommunication Regulation Act, 2001 (Act) with the prior approval of the Government to issue Licenses for the operation and provision of telecommunication services.
- 1.03 Having given due consideration to the principles of transparency, fairness, non-discrimination and all other relevant principles, the Commission has decided to issue this Guideline for those applicants who intend to bid for additional spectrum through 2100 MHz band spectrum auction and acquire license as applicable to provide 'Cellular Mobile Phone Services' using 3G and 4G/LTE technology in Bangladesh.
- 1.04 The Act specifically provides, under Section 55 that the establishment, operation or use of radio apparatus for the purpose of radio communication services in Bangladesh without a License is an offence, punishable with imprisonment or a fine or both. The Act also provides for right and authority of the Commission in determining any and all issues in relation to assignment of spectrum and issuance of Radio Communications Apparatus License and any other related matters.
- 1.05 This Guideline may be withdrawn, revised, updated or amended from time to time, according to Section 34 of Bangladesh Telecommunication Regulation Act, 2001 to take into consideration various factors including, but not limited to, any threat to public health, national security and statutory or Court orders.

1.06 This Guideline is approved by the Government and shall come into effect from the date of issuance by Bangladesh Telecommunication Regulatory Commission.

2. OBJECTIVES AND INTERPRETATION

2.01 This Guideline is intended to provide an overview of assignment of spectrum from 2100 MHz band to provide and operate 3G and 4G/LTE Services in Bangladesh under respective Cellular Mobile Phone Operator License.

2.02 This Guideline is also intended to provide an overview of the Licensing and Regulatory Framework for Applicant(s) seeking to obtain a License to provide and operate 'Cellular Mobile Phone Services' using 3G and 4G/LTE technology in Bangladesh, wherein the subscribers will be allowed to use their equipment as mobile.

3. LEGAL REQUIREMENTS

The legal statutes governing the telecommunication industry in Bangladesh which will be applicable to all applicants including 2G, 3G and 4G/LTE Cellular Mobile Phone Services Licensee are given below:

- (a) The Bangladesh Telecommunication Regulation Act, 2001 (as amended).
- (b) The Wireless Telegraphy Act, 1933 and The Telegraph Act, 1885, for matters which are not covered by the Bangladesh Telecommunication Regulation Act, 2001 (as amended).
- (c) Any Act or Ordinance or Rules or Regulation(s) made by the Government/Commission.
- (d) The Guidelines/Directives/Orders/Instructions and Decisions issued under the Act.

4. TITLE

This guideline is to be termed as 'Guidelines for Assignment of Spectrum from 2100 MHz, 1800 MHz & E-GSM (900 MHz) Band to Cellular Mobile Phone Service Operators and Issuing Radio Communications Apparatus License' in Bangladesh.

5. ELIGIBILITY

5.01 Existing Cellular Mobile Phone Operators may apply for assignment of spectrum as mentioned in this guideline in order to provide and operate 3G and 4G/LTE Services in Bangladesh having respective Cellular Mobile Phone Operator License.

5.02 New Entrants will be eligible to participate in the auction process subject to their success during the primary evaluation of the applications/offers on the basis of the required qualifications and documents/information mentioned in Appendix 4. The winning new entrant in the auction of 2100 MHz band, if any, will be eligible to participate in the auction of E-GSM (900 MHz)band and 1800 MHz band to operate as a Cellular Mobile Phone Services Operator to provide 2G, 3G, 4G/LTE services having respective licenses.

6. SPECTRUM BLOCK AND NUMBER OF LICENSE TO BE ISSUED

6.01 The Commission will issue 05 (five) spectrum blocks, each of (5 + 5) MHz from 2100 MHz

band through open auction to the existing cellular mobile phone service operators and to the new entrant who is eligible as per provisions stipulated in this guideline.

- 6.02 If any new entrant and any existing 2G Cellular Mobile Phone Service Operator (having no 3G Cellular Mobile Phone Service Operator License) win the spectrum bidding from 2100 MHz band, the Commission will issue Cellular Mobile Phone Service Operator Licenses for providing 3G and 4G/LTE services. The operators will also be issued with Radio Communication Equipment /Apparatus License for 3G and 4G/LTE services. The generic forms of 3G and 4G/LTE Cellular Mobile Phone Services Operator License and ‘Radio Communications Apparatus License for 3G and 4G/LTE services’ are appended below (whichever is applicable):

3G Cellular Mobile Phone Service Operator License	Appendix 5 of the Regulatory and Licensing Guidelines No. BTRC/LL/3G Guidelines (394) Part-1/2012-148 Date: 14-02-2013
4G/LTE Cellular Mobile Phone Service Operator License	Appendix 4 of the Regulatory and Licensing Guidelines For 4G/LTE Cellular Mobile Phone Services In Bangladesh, 2017, subjected to the approval from the Government.
Radio Communication Apparatus License for Technology Neutral Spectrum	Appendix 5 of Guidelines for Assignment of Spectrum from 2100 MHz, 1800 MHz and EGSM (900 MHz) Band to Cellular Mobile Phone Service Operators and Issuing Radio Communications Apparatus License in Bangladesh, subject to the approval from the Government.

7. DISQUALIFICATIONS

7.01 An applicant shall be disqualified from obtaining License if-

- (a) in the case of an individual-
- (i) he is an insane person;
 - (ii) he has been sentenced by a Court under any law, other than this Act, to imprisonment for a term of minimum 2 (two) years or more, and a period of 5 (five) years has not elapsed since his release from such imprisonment;
 - (iii) he has been sentenced by any Court for committing of any offence under the Act and period of 5 (five) years has not elapsed since his release from such imprisonment;
 - (iv) he has been declared bankrupt by any Court and has not been discharged from the liability of bankruptcy;
 - (v) he has been identified or declared by the Bangladesh Bank or by a Court or by a bank or financial institution as a defaulter loan of that bank or institution;
 - (vi) his License has been cancelled by the Commission at any time during the last 5 (five) years;

- (vii) he is convicted for any violation of the Act or any License condition;
 - (b) The applicant being a partnership firm or company or corporation or society or other organizations:-
 - (i) any provision of Sub-Clause (i) to (v) of Clause (a) above is applicable to its owner, or to any of its shareholder directors or partners; or
 - (ii) Sub-Clause (vi) of Clause (a) above is applicable to it.
- 7.02 No entity shall be eligible to apply if it has any outstanding dues to the Commission on the date of submission of the application under this Guideline, unless the matter is pending before any Court of law along with an interim order in favour of the applicant.

8. DURATION OF SPECTRUM ASSIGNMENT

- 8.01 The duration of the spectrum assignment, shall remain valid exclusively for the term till the validity of 4G/LTE Cellular Mobile Phone Services Operator License. All the terms and conditions of the Cellular Mobile Operator License and the Radio Communication Equipment/Apparatus License for Technology Neutral Spectrum shall be applicable to this assignment.
- 8.02 The duration of the spectrum assignment, shall initially be for a term of 15 (fifteen) 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 Government, payment of necessary fees and charges including VAT, and to such terms and conditions, as may be specified herein and/or by the Government at the time of each renewal.

9. AVAILABILITY OF THE GUIDELINE

This Guideline is available in the BTRC website: www.btrc.gov.bd for information only. The prospective applicant willing to submit the proposals/offers, shall purchase a copy of this Guideline from the Commission by submitting an application to the Chairman of the Commission, endorsing BDT 5,000 (five thousand) without applicable VAT and Taxes in the form of pay order or bank draft in favour of Bangladesh Telecommunication Regulatory Commission.

10. APPLICATION FORM

- 10.01 The applicant shall submit application for spectrum assignment from 2100 MHz spectrum band to the Commission in the prescribed application form duly filled in, signed and sealed, together with all the necessary documents and information. The detailed requirements for submission of documents along with the prescribed application form are appended with this guideline at APPENDIX -1.
- 10.02 The new entrant shall submit application for 4G/LTE and/or 3G Cellular Mobile Phone Service Operator Licenses and spectrum assignment to the Commission in the prescribed form duly filled in, signed and sealed, together with all the necessary documents and information within 60 (Sixty) working days from the date of obtaining spectrum from

Commission. The terms and conditions including fees and charges (with applicable VAT) of the guideline shall be binding on the new entrant. The detailed requirements for submission of documents along with the prescribed application form are appended as follows:

3G Cellular Mobile Phone Service Operator License	Appendix 1 of the Regulatory and Licensing Guidelines No. BTRC/LL/3G Guidelines (394) Part-1/2012-148 Date: 14-02-2013
4G/LTE Cellular Mobile Phone Service Operator License	Appendix 1 of the Regulatory and Licensing Guidelines For 4G/LTE Cellular Mobile Phone Services In Bangladesh, 2017 subjected to the approval from the Government.

11. SUBMISSION OF DOCUMENTS

- 11.01 The application in applicant's letter head pad shall include duly completed letter of transmittal as appended in APPENDIX-1 with supporting documents along with an affidavit duly attested by notary public as per APPENDIX-2 and letter of authorization and declaration at APPENDIX-3. Each page of the application along with purchased guidelines and all other supporting documents shall be signed and sealed by the applicant's authorized personnel.
- 11.02 In case of the existing Cellular Mobile Phone Operator who has no License for 3G Cellular Mobile Phone Services and the new entrant shall apply in their letter head pad duly completed Letter of Transmittal appended in the APPENDIX-1 with supporting documents along with an Affidavit duly attested by Notary Public as per attached format appended in APPENDIX-2 of the regulatory and licensing guidelines No. BTRC/LL/3G Guidelines (394) Part-1/2012-148 Date: 14-02-2013. Each page of the application along with purchased guidelines and all other supporting documents shall have to be signed and sealed by the applicant's authorized personnel.
- 11.03 The applicant shall submit the application/processing fee of BDT 5,00,000 (five hundred thousand) payable in favour of Bangladesh Telecommunication Regulatory Commission in the form of bank draft or pay order from any scheduled bank of Bangladesh.
- 11.04 The applicant(s) shall submit 2 (two) copies of its applications with all relevant documents of which 01 (one) copy shall be original. The applicant(s) shall also submit soft copy of all the documents in portable device (non scanned/ scanned PDF) to the Commission.
- 11.05 The Commission reserves the right and authority to reject the application if it is found that the information or documents provided with the application is/are untrue, inaccurate or incomplete.

12. APPLICATION PROCESSING

- 12.01 The Bidding/Auction Committee will evaluate the proposals/offers on the basis of the documents/information submitted by the applicant(s). The Commission will announce names of the applicants who are eligible to participate in the open auction process at appropriate time.

- 12.02 The Commission will inform the selected applicant(s) in writing (by courier, letter, fax or e-mail etc.) about their eligibility to participate in the auction. The selected applicants will be entitled to participate in the bidding process subject to the submission of Bid Earnest Money amounting BDT 1,500 (One thousand five hundred) million.
- 12.03 On credited of the Bid Earnest Money into the BTRC's designated bank account; the Commission will inform the applicant of the acceptance of the same.
- 12.04 In the event the Commission requires 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.
- 12.05 While inviting applications the Commission will declare a time schedule including that of the pre-bid meeting(s), submission of proposals/offers, auction and awarding of spectrum.

13. RADIO COMMUNICATION APPARATUS LICENSE

- 13.01 The generic form of the Radio Communication Apparatus License for Technology Neutral spectrum is appended with this Guideline as APPENDIX-5 which will be issued to the winning bidders having Cellular Mobile Phone Services Operator License for 3G and/or 4G/LTE services.

14. SPECTRUM ASSIGNMENT

- 14.01 Total 25 MHz spectrum from 2100 MHz band will be auctioned for providing Cellular Mobile Phone Services for 3G and 4G/LTE Services.
- 14.02 The (25 +25) MHz of spectrum is available in 05(Five) blocks. The blocks are as follows –
- (i) 1920 – 1925 MHz/2110 – 2115 MHz
 - (ii) 1925 – 1930 MHz/2115 – 2120 MHz
 - (iii) 1930 –1935 MHz/2120 – 2125 MHz
 - (iv) 1970 – 1975 MHz/2160 – 2165 MHz
 - (v) 1975 – 1980 MHz/2165 – 2170 MHz
- 14.03 During the first round of the auction, an existing 3G Cellular Mobile Phone Service Operators already possessing spectrum in 2100 MHz band can have maximum 01 (One) block through the auction process. The new entrant and the Cellular Mobile Phone Service Operators not having spectrum in 2100 MHz band can obtain more than one block through the auction process. After the first round of the auction, if any block of spectrum remains unsold, all bidders may participate for that unsold block. However, at the end of the auction, a Cellular Mobile Phone Service Operator (existing or new entrant) can obtain maximum (20+20) MHz of spectrum from 2100 MHz band.
- 14.04 For any other cases, to sell the unsold blocks to the participating bidders, the Commission may make recommendation to the government to make decision within the 6 (Six) months

from the date of auction taking place. In such cases the unsold blocks shall be sold at highest auctioned price.

- 14.05 The spectrum assignment will be inclusive of guard bands to avoid interference with adjacent operating frequency bands.
- 14.06 In case of cancellation or termination or suspension of the 3G and 4G/LTE Cellular Mobile Phone Service Operator Licenses for any reason whatsoever, the spectrum assignment shall be cancelled or suspended.

15. SPECTRUM RE-ARRANGEMENT

The Commission will re-arrange the spectrum of 2100 MHz band for contiguous assignment after the auction process if required. The licensee shall abide by the decision of the Commission.

16. TECHNOLOGY NEUTRALITY

The IMT 2100 MHz- band will be considered as Technology Neutral.

17. AUCTION PROCESS AND AWARDED OF SPECTRUM

- 17.01 The Auction shall be based on an open outcry (the British system). The Commission shall declare the detailed procedure and time schedule of the auction. The Commission shall arrange one pre-bid meeting before the auction.
- 17.02 The Auction will be held in multiple rounds through open outcry. The following procedure shall be followed:
 - (a) The Commission shall form an Auction Committee to conduct the auction.
 - (b) Multiple Rounds through open outcry method will be used for the auction process. The Base Price for auction is USD 27 (twenty seven) million per MHz of spectrum. The minimum and maximum slab of bid increment shall be determined by the Commission while preparing the auction details.
 - (c) Each bidder shall deposit Bid Earnest Money as mentioned in Clause 12.02 of the guideline within the time schedule determined by the Commission. If the Bid Earnest Money is accepted by the Commission, it will be considered that the bidder must attend the auction and he/she agrees to pay the base price for one block of spectrum. In case of failure to attend the auction, the Bid Earnest Money of the bidder shall stand forfeited. In case of less than 02 (two) qualified bidders appearing on the auction date, the matter will be decided by the Auction Committee accordingly.
 - (d) Each of the qualified bidders shall accept the decision given by the Auction Committee as final and binding.
 - (e) Each of the Winning Bidders shall deposit 60% of the total amount of Spectrum Assignment Fee as Bid Deposit in BTRC's designated bank account in US Dollar or its equivalent in BDT within 30 (Thirty) Gregorian calendar days from the date of Auction Result Notification Date. The conversion rate will be the exchange rate of Dollar and BDT shall be

the cash selling rate of the auction date of Sonali Bank Limited or any other Bank decided by the Commission. The Bid Earnest Money will be adjusted against the bid deposit.

- (f) The remaining 40% of the total amount of Spectrum Assignment Fee shall be paid by four equal installments within four years from the date of Auction Result Notification Date in US Dollar or its equivalent in BDT to be converted at the cash selling rate of the auction date of Sonali Bank Limited or any other Bank decided by the Commission.
- (g) If any of the Winning Bidders fails to make any of the payments as referred to above within the stipulated time, the next higher bidder in the order of their bids will be offered the Spectrum on the Auction Winning Price and on the same terms and conditions subject to submission of written undertaking and Bid Earnest Money of BDT 1,500 (one thousand and five hundred) million.
- (h) The Commission will forfeit the Bid Earnest Money and all other amounts received from the defaulting bidder(s).
- (i) The successful or Winning Bidder may deposit 100% of auction winning price at a time as Bid Deposit in BTRC's designated bank account in US Dollars or its equivalent in BDT at any time during office hours in any working day within the time limit mentioned in clause 17.02 (e) of the guideline.
- (j) The Spectrum shall be assigned after payment of 60% of the Spectrum Assignment Fee subject to fulfillment of other terms and conditions stipulated in this Guideline.

18. DISQUALIFICATION FOR OBTAINING SPECTRUM

18.01 Without prejudice to any other remedy that may be available to it, the Commission reserves the right and authority, on the recommendation of the Bidding Committee, to disqualify any Bidder and forfeit its money for any of the reasons mentioned in clause -7 of this Guideline including the following:

- (a) If a Winning Bidder abandons the bid or fails to pay first 60% of the total amount of the Spectrum Assignment Fee within 30 (Thirty) Gregorian calendar days or remaining 40% within the time limit mentioned in clause 17.02(f);
- (b) Inaccuracy or misrepresentation of any facts in any part of the application which is mala-fide;
- (c) Illegal conduct, disruption during the auction, or indulgence in improper attempts to influence the outcome, or delay the process;
- (d) Any "corrupt practice" meaning the offering, giving, receiving or soliciting of anything of value to influence a public official in relation to auction process; or
- (e) Any fraudulent practice or misrepresentation of facts in order to influence the results of the auction process established by the guidelines;

- (f) If the successful bidder (new entrant and existing 2G Cellular Mobile Phone Service Operator having no 3G Cellular Mobile Phone Service Operator License) fails to obtain Cellular Mobile Phone Service Operators License (4G/LTE and/or 3G) within the 60 (Sixty) Gregorian calendar days from the date of Auction Result Notification Date;

18.02 In case a bidder is disqualified under the above sub-clause 18.01 or any other provision of this guideline, the spectrum assigned under clause 14 here in above, shall stand cancelled.

19. OWNERSHIP DISCLOSURE REQUIREMENTS

All bidders must disclose their ownership information in as separate sheet. No two bidders shall have any common directorship on their respective boards.

20. CHANGES IN COMPOSITION OF APPLICANTS

Any change in the composition of a bidder, as per clause 19, is not allowed following the submission of application at least till the date of awarding spectrum.

21. COLLUSION

In case there is any evidence of collusion, the Commission reserves the right and authority to disqualify that bidder from the auction process.

22. INFORMATION PROVIDED BY THE COMMISSION

22.01 The information contained in this Guideline and any other information provided to Applicants during the Application process, in writing, is intended to assist bidders in preparation of their bids and shall be binding on them in the course of bidding.

22.02 The Commission has made and will continue to make reasonable efforts to include accurate and current information in the Guidelines and in any other document provided to Applicants. However, neither the Commission nor any of its employees, representatives or consultants shall have any liability whatsoever to any Applicant or any of its shareholders or members or any other person resulting from use of or reliance on any of the information so provided. Applicants are advised to undertake their own verification of any information supplied by the Commission prior to use of or reliance on that information.

23. OTHER COMMUNICATIONS

All deliveries, notices or other communications made to Applicants in connection with the Application process shall be sent by designated fax or e-mail or letter (courier) to the contact officer of the Applicant(s), as specified by the Applicant to the Commission in his Application.

24. COSTS ASSOCIATED WITH BID AND BIDDING

The applicants shall bear all their costs associated with the preparation and submission of their Bids and the Commission shall in no way be responsible for these or any other costs, regardless of the conduct or outcome of the application process.

25. POWER TO ISSUE DIRECTIVES AND RESERVATION OF RIGHTS

- 25.01 The Commission may issue directives consistent with this Guideline to ensure that the auction process is carried out in a fair, open and transparent manner, in accordance with law and to discourage collusion and predatory bidding that may block the entry of potential bidders into the bidding process.
- 25.02 The Commission reserves the right and authority to terminate the auction process at any time in its sole discretion. In such an event, Bid Earnest Money would be returned to the bidder within 30 (thirty) working days without bearing any liability for damages.

26. FEES AND CHARGES

26.01 Applicants/Licensees will be required to pay various fees, contribution and charges to the Commission. The following table summarizes the fees structure. The fees are excluding of fees, charges, VAT and Taxes imposed by any other competent authority of the Government.

Application Fee/Processing Fee	BDT 5,00,000 (five hundred thousand)
Bid Earnest Money	BDT 1,500 (one thousand and five hundred) million
Spectrum Assignment Fee	To be fixed by auction
Spectrum Assignment Fee payment schedule	60% of the total amount of Spectrum Assignment Fee to be paid within 30 (Thirty) Gregorian calendar days from the Auction Result Notification Date
	Remaining 40% of the total amount of Spectrum Assignment Fee to be paid by four equal installments within four years from the Auction Result Notification Date, in US Dollar.
Base Price for Auction	USD 27(twenty seven) million per MHz bandwidth
Annual Spectrum Fees for Access and Microwave Frequency	As per the Spectrum formula described in 3G and 4G/LTE Cellular Mobile Phone Service Operator License

- 26.02 In addition of the fees and charges mentioned in the clause no 26.01 of the guidelines, the New Entrant and Existing Operator shall pay fees and charges (if applicable) as per the Cellular Mobile Phone Operator Guideline for 3G, 4G/LTE.
- 26.03 The Licensee shall pay all the required fees within the stipulated time frame given in this Guideline. 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.
- 26.04 **Application fee/Processing fee:** The Application fee/Processing fee shall be BDT 5,00,000 (five hundred thousand). The application fee shall be payable in the form of pay order/bank draft issued from any scheduled bank of Bangladesh in favour of the Bangladesh Telecommunication Regulatory Commission along with the application.

26.05 **Bid Earnest Money:** The Bid Earnest Money shall be BDT 1,500 (one thousand and five hundred) million payable in the form of pay order/bank draft. The Bid Earnest Money of the successful bidder(s) will be adjusted with the payable Spectrum Assignment Fee, while the Bid Earnest Money of the unsuccessful bidders shall be returned within 30 (thirty) Gregorian calendar days of the bidding date without bearing any liability towards interest, indexation, inflation or deflation.

26.06 **The Spectrum Assignment Fee:** The Spectrum Assignment Fee for Cellular Mobile Phone Services will be fixed through auction.

26.07 **Annual Spectrum Fees and Charges :**The Licensees shall pay annual spectrum fee without any deduction to the Commission as mentioned below for in total duration of license. The fees are excluding of fees, charges and taxes imposed by any other competent authority of the Government.

Annual Spectrum Fees/Price for Access Frequency	As per the Spectrum formula as mentioned below
Annual Spectrum Fees/Price for Micro Wave Frequency	As per the Spectrum formula as mentioned below

The Licensee, after the payment of the spectrum assignment fee, shall pay annual spectrum fees for both Access and Micro Wave frequencies according to the formula as stated below. The annual spectrum fees shall be paid on a quarterly basis within the first 10 days at the end of each quarter in advance. The total amount shall be reconciled on an annual basis based on the Licensee’s audited accounts for that year and if any underpaying found, 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 adjust any excess amount against quarterly payments with the approval of the Commission in the next year.

(a) The spectrum charges (excluding VAT & Tax) shall be calculated by using the following formula:

Spectrum charges in BDT = STU X CF X BW X AF X BF

Where, (i) STU = Spectrum Tariff Unit BDT 70.00 per MHz per Sq. Km.

(ii) CF = Contribution Factor for Access Frequency has been fixed considering assignment of frequency, use of assigned frequency and subscriber.

SL.	Subscriber base related to use of frequency (lower limit inclusive & upper limit exclusive)	CF
1.	Up to 2 million	0.7
2.	2 million to 5 million	1.2
3.	5 million to 10 million	1.7
4.	10 million to 15 million	2.2
5.	15 million to 20 million	2.7
6.	20 million to 25 million	3.2
7.	25 million to 30 million	3.7
8.	30 million to 35 million	4.2
9.	35 million to 40 million	4.7

10.	40 million to 45 million	5.2
11.	45 to 50 million	5.7
12.	50 to 55 million	6.2
13.	55 to 60 million	6.7
14.	60 to 65 million	7.2
15.	65 to 70 million	7.7
16.	70 million and above	8.0

(iii) CF= Contribution Factor for Microwave Frequency = 1

(iv) BW = Bandwidth Assigned for Access Frequency in MHz

(v) BW = Bandwidth occupied for Microwave Frequency in MHz

(vi) AF = Area Factor for Access Frequency = 1,47,570 Sq. km

(vii) AF = Area Factor for Microwave Frequency Point to Point link = Link Length²
x 0.273 (Minimum Distance for link length shall be considered from 10 km)

(viii) BF = Band Factor:

SL.	Band	BF
1.	VLF/LF/MF (3-3000 kHz)	1.00
2.	HF (3-30 MHz)	1.50
3.	VHF (30-300 MHz)	1.00
4.	UHF1 (300-806 MHz)	0.75
5.	UHF2 (806-2690MHz)	0.50
6.	SHF1 (2.69-16 GHz)	0.25
7.	SHF2 (16-31GHz)	0.15
8.	EHF1 (31-65 GHz)	0.10
9.	EHF2 (65-275 GHz)	0.05

(b) Short term charges for new microwave links depending on date of Installing will be applicable as follows:

SL.	Date of Installation	Percentage
1.	January-March	100%
2.	April-June	75%
3.	July-September	50%
4.	October-December	25%

(c) The Licensee shall follow this same CF table for calculating 3G and 4G/LTE spectrum charges with 3G and 4G/LTE subscribers respectively. Those subscribers shall be considered 4G/LTE subscribers whose profiles are updated for 4G/LTE subscription. Similarly, those subscribers shall be considered 3G subscribers whose profiles are updated for 3G subscription, but not 4G/LTE subscriptions. All other subscribers shall be considered as 2G subscribers. A subscriber shall be considered active on a particular day if the subscriber performed any activity or consumed any service within previous 90 Gregorian calendar days. This definition of subscriber shall supersede all the definitions given or agreed earlier.

For paying the quarterly access spectrum fees in advance, the Licensee shall use the active subscriber base as on the last date of each quarter. After the year-end, the

Licensee shall recalculate the annual access spectrum fee with the active subscriber base as of the last day of the year and reconcile with the total access spectrum fee paid for last four quarters. The Licensee shall pay the additional fee within 90 Gregorian calendar days from the year-end. If the Licensee made overpayment of the access spectrum fee, the Licensee can adjust the paid amount in the next quarterly payment.

- (d) The Licensee shall calculate the distance between two coordinates $u(\phi_1, \lambda_1)$ and $v(\phi_2, \lambda_2)$ of microwave antenna as designated with latitude (ϕ) and longitude (λ) with the following Haversing formula:

$$\text{Distance} = 2 * r * \arcsin \sqrt{\sin^2(\Delta\phi/2) + \cos\phi_1 * \cos\phi_2 * \sin^2(\Delta\lambda/2)}$$

Where,

$$\Delta\lambda = \lambda_2 - \lambda_1,$$

$$\Delta\phi = \phi_2 - \phi_1$$

r is earth's radius (mean radius=6,371 Km), and ϕ and λ are in radians.

The Licensee shall submit to the Commission the coordinates (latitude, longitude) of all microwave antennas with the quarterly spectrum fee payment. The Licensee shall submit to the Commission the microwave link database with all the fields to calculate the microwave spectrum fee in Excel format in DVD.

- (e) In case of using new access frequency for a fractional year in the first year, the Licensee shall follow the short-term charge policy of new microwave links.

26.08 **Taxes and VAT:** All kinds of TAX and VAT shall have to be paid as set out by the competent authority of the Government.

26.09 The fees and charges as described above shall have to be paid within the stipulated time. The due amount may be paid within 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, necessary actions shall be taken by the Commission as per the provisions of the License and the Act.

26.10 The foreign partner of the applicant shall invest foreign currency directly equal to its percentage of ownership and no loan from any Bangladeshi Scheduled Bank/Financial Institution/Leasing Company can be raised for the foreign part of the investment to pay spectrum assignment fee under this Guideline.

27. MISCELLANEOUS

For the development, operation and roll out of 3G and 4G/LTE Services, 100% of FDI (Foreign Direct Investment) or Foreign Partnership or Joint Venture or investment from NRB (Non-Resident Bangladeshi) is permitted for existing Cellular Mobile Phone Service Operator including new entrant. The foreign partner shall invest foreign currency directly equal to its percentage of ownership and no loan from any Bangladeshi Schedule Bank/Financial Institution/Leasing Company can be raised for the foreign part of the

investment to pay license fee, spectrum acquisition fee and to purchase equipment (hardware and software) and services from abroad during the roll-out period. The rules, regulations and instructions of Bangladesh Bank, Board of Investment and any other competent authority of the Government shall be binding to the licensee regarding the operational financing.

28. ADDRESS FOR CORRESPONDENCE

All correspondence relating to this Guideline, Investor’s Conference, submission of Application documents, Auction procedure and assignment of spectrum shall be duly marked “**2100 MHz Spectrum Auction**” and should be addressed to:

Director
Spectrum Division
Bangladesh Telecommunication Regulatory Commission
IEB Bhaban, Ramna, Dhaka-1000, Bangladesh
Phone: +88029553710, Fax: +88029556677, +88029513391
E-mail: dirsm@btrc.gov.bd

29. BIDDING AND AUCTION PROCESS TIME TABLE

The tentative timetable for submission of proposals/offers, auctions and awarding of spectrum has been set as shown in the table below. However, the Commission reserves the right and authority to change the overall timetable of the bidding and auction, taking into account of the circumstances prevailing at that time.

Indicative Timetable		
SL	Description	Date
1.	Invitation for Application	09 July 2017
2.	Submission of the queries (if any)	12 July 2017
3.	Pre-Bid Meeting	16 July 2017
4.	Submission of Application to the Commission	23 July 2017
5.	Publish list of qualified Applicants for the Auction	25 July 2017
6.	Consultation on Auction Procedure	27 July 2017
7.	Submission of Bid Earnest Money	02 August 2017
8.	Letter of acceptance/rejection to participate in the bidding	07 August 2017
9.	Mock Auction	09 August 2017
10.	Auction	10 August 2017
11.	Notification to winning applicants	10 August 2017

Part B:

FOR ASSIGNMENT OF SPECTRUM FROM 1800MHz BAND
AND
ISSUING RADIO COMMUNICATIONS APPARATUS LICENSE



**BANGLADESH TELECOMMUNICATION
REGULATORY COMMISSION**
IEB BHABAN, RAMNA, DHAKA-1000

**GUIDELINES FOR SPECTRUM ASSIGNMENT FROM 1800 MHz BAND TO THE
CELLULAR MOBILE PHONE SERVICE OPERATORS AND ISSUING RADIO
COMMUNICATIONS APPARATUS LICENSE**

1 INTRODUCTION

- 1.01 Bangladesh witnessed a booming growth of mobile subscriptions for last ten years. Mobile voice and data traffic are increasing rapidly and generating huge traffic in the cellular mobile communication networks. Currently assigned spectrum to the cellular mobile operators from IMT bands are not sufficient to carry the enormous traffic and ensure the quality of services. Therefore, the Bangladesh Telecommunication Regulatory Commission (Commission) is preparing to assign additional spectrum from 1800 MHz band and award Cellular Mobile Phone Service Operator License for providing 2G, 3G and 4G/LTE services.
- 1.02 The Government has authorized the Bangladesh Telecommunication Regulatory Commission (Commission) to issue the approved guidelines. As such the Commission has been empowered by the Government and under the Section 36 of the Bangladesh Telecommunication Regulation Act, 2001 (Act) with the prior approval of the Government to issue Licenses for the operation and provision of telecommunication services.
- 1.03 Having given due consideration to the principles of transparency, fairness, non-discrimination and all other relevant principles, the Commission has decided to issue this Guideline for those applicants who intend to bid for additional spectrum through 1800 MHz band spectrum auction and acquire license as applicable to provide ‘Cellular Mobile Phone Services’ using 2G, 3G and 4G/LTE technology in Bangladesh.
- 1.04 The Act specifically provides, under Section 55 that the establishment, operation or use of radio apparatus for the purpose of radio communication services in Bangladesh without a License is an offence, punishable with imprisonment or a fine or both. The Act also provides for right and authority of the Commission in determining any and all issues in relation to assignment of spectrum and issuance of Radio Communications Apparatus License and any other related matters.
- 1.05 This Guideline, may be withdrawn, revised, updated or amended from time to time, according to Section 34 of Bangladesh Telecommunication Regulation Act, 2001 to take into consideration various factors including, but not limited to, any threat to public health, national security and statutory or Court orders.

- 1.06 This Guideline is approved by the Government and shall come into effect from the date of issuance by Bangladesh Telecommunication Regulatory Commission (BTRC).

2 OBJECTIVES AND INTERPRETATION

- 2.01 This Guideline is intended to provide an overview of assignment of spectrum from 1800 MHz band to operate 2G, 3G and 4G/LTE Services in Bangladesh having respective Cellular Mobile Phone Operator License.
- 2.02 This Guideline is also intended to provide an overview of the Licensing and Regulatory Framework for Applicant(s) seeking to obtain a License to provide and operate Cellular Mobile Phone for 2G, 3G and 4G/LTE Services in Bangladesh, wherein the subscribers will be allowed to use their equipment as mobile.

3 LEGAL REQUIREMENTS

The legal statutes governing the telecommunication industry in Bangladesh which will be applicable to all applicants and 2G, 3G and 4G/LTE Cellular Mobile Phone Services Licensee are given below:

- (a) The Bangladesh Telecommunication Regulation Act, 2001 (as amended).
- (b) The Wireless Telegraphy Act, 1933 and The Telegraph Act, 1885, for matters which are not covered by the Bangladesh Telecommunication Regulation Act, 2001 (as amended).
- (c) Any Act or Ordinance or Rules or Regulation(s) made by the Government/Commission.
- (d) The guidelines/directives/orders/instructions and decisions issued under the Act.

4. TITLE

This guideline is to be termed as ‘Guidelines for Assignment of Spectrum from 2100 MHz, 1800 MHz & E-GSM (900 MHz) Band to Cellular Mobile Phone Service Operators and Issuing Radio Communications Apparatus License’ in Bangladesh.

5. ELIGIBILITY

- 5.01 Existing Cellular Mobile Phone Operators may apply for assignment of spectrum as mentioned in this guideline in order to provide and operate 2G, 3G and 4G/LTE Services in Bangladesh having respective Cellular Mobile Phone Operator License.
- 5.02 The new entrant selected through the auction process of 2100 MHz band will be eligible to participate in the auction for 1800 MHz band.

6. SPECTRUM BLOCK AND NUMBER OF LICENSE TO BE ISSUED

- 6.01 The Commission will award 04 (four) spectrum blocks; (5.6 + 5.6) MHz, (5 + 5) MHz, (5+ 5) MHz and (2.4+2.4) MHz in 1800 MHz band through open auction.
- 6.02 The Commission will issue Cellular Mobile Phone Operator License for 2G, 3G and 4G/LTE Services to the new entrant, based on his application and winning the spectrum bidding from 2100 and 1800 MHz band, in the same terms and conditions of the existing

2G, 3G and 4G/LTE Cellular Mobile Phone Service Operator License. The new entrant will also be issued with Radio Communication Apparatus License for Technology Neutral Spectrum for 2G, 3G and 4G/LTE services. Existing operators winning the spectrum bidding from 1800 MHz band will be issued Radio Communication Apparatus License for Technology Neutral Spectrum. The generic forms of 2G, 3G and 4G/LTE Cellular Mobile Phone Services Operator License and 'Radio Communications Apparatus License for Technology Neutral Spectrum are appended below (whichever is applicable):

2G Cellular Mobile Phone Service Operator License	Appendix 3 of the Regulatory and Licensing Guidelines No. BTRC/LL/Mobile/License Renewal (342)/2009-563 Date: 11-09-2011
3G Cellular Mobile Phone Service Operator License	Appendix 5 of the Regulatory and Licensing Guidelines No. BTRC/LL/3G Guidelines (394) Part-1/2012-148 Date: 14-02-2013
4G/LTE Cellular Mobile Phone Service Operator License	Appendix 4 of the Regulatory and Licensing Guidelines For 4G/LTE Cellular Mobile Phone Services In Bangladesh, 2017, subjected to the approval from the Government.
Radio Communication Apparatus License for Technology Neutral Spectrum (for 2G, 3G and 4G/LTE services)	Appendix 5 of Guidelines for Assignment of Spectrum from 2100 MHz, 1800 MHz EGSM (900 MHz)Band to Cellular Mobile Phone Service Operators and Issuing Radio Communications Apparatus License in Bangladesh, subject to the approval from the Government.

7 DISQUALIFICATIONS

7.01 An applicant shall be disqualified from obtaining License if-

(a) in the case of an individual-

- (i) he is an insane person;
- (ii) he has been sentenced by a Court under any law, other than this Act, to imprisonment for a term of minimum 2 (two) years or more, and a period of 5 (five) years has not elapsed since his release from such imprisonment;
- (iii) he has been sentenced by any 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;
- (iv) he has been declared bankrupt by any Court and has not been discharged from the liability of bankruptcy;
- (v) he has been identified or declared by the Bangladesh Bank or by a Court or by a bank or financial institution as a defaulter loan of that bank or institution;
- (vi) his License has been cancelled by the Commission at any time during the last 5 (five) years;

- (vii) he is convicted for any violation of the Act or any License condition;
 - (b) The applicant being a partnership firm or company or corporation or society or other organizations:-
 - (i) any provision of Sub-Clause (i) to (v) of Clause (a) above is applicable to its owner, or to any of its shareholder directors or partners; or
 - (ii) Sub-Clause (vi) of Clause (a) above is applicable to it.
- 7.02 No entity shall be eligible to apply if it has any outstanding dues to the Commission on the date of submission of the application under this guideline, unless the matter is pending before any Court of law along with an interim order in favour of the applicant.

8. DURATION OF SPECTRUM ASSIGNMENT

- 8.01 The duration of the spectrum assignment, shall remain valid exclusively for the term till the validity of 4G/LTE Cellular Mobile Phone Services Operator License. All the terms and conditions of the Cellular Mobile Operator License and the Radio Communication Equipment/Apparatus License for 2G, 3G and 4G/LTE services shall be applicable to this assignment.
- 8.02 The duration of the spectrum assignment, shall initially be for a term of 15 (fifteen) 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 Government, payment of necessary fees and charges, including VAT, and to such terms and conditions, as may be specified herein and/or by the Government at the time of each renewal.

9. AVAILABILITY OF THE GUIDELINE

This Guideline is available in the BTRC website: www.btrc.gov.bd for information only. The prospective applicant willing to submit the proposals/offers, shall purchase a copy of this Guideline from the Commission by submitting an application to the Chairman of the Commission, endorsing BDT 5,000 (five thousand) without applicable VAT and Taxes in the form of pay order or bank draft in favour of Bangladesh Telecommunication Regulatory Commission.

10. APPLICATION FORM

- 10.01 The applicant shall submit application for spectrum assignment from 1800 MHz spectrum band to the Commission in the prescribed application form duly filled in, signed and sealed, together with all the necessary documents and information. The detailed requirements for submission of documents along with the prescribed application form are appended with this guideline at APPENDIX -1.
- 10.02 The new entrant shall submit Application for 4G/LTE and/or 2G/3G or both Cellular Mobile Phone Service Operator Licenses and spectrum assignment to the Commission in the prescribed form duly filled in, signed and sealed, together with all the necessary documents and information within 60 (Sixty) working days from the date of obtaining spectrum from Commission. The terms and conditions including fees and charges (with applicable VAT) of

the guideline shall be binding on the new entrant. The detailed requirements for submission of documents along with the prescribed Application Form are appended as follows:

2G Cellular Mobile Phone Service Operator License	Related documents of Appendix 1 of the Regulatory and Licensing Guidelines No. BTRC/LL/Mobile/License Renewal (342)/2009-563 Date: 11-09-2011
3G Cellular Mobile Phone Service Operator License	Appendix 1 of the Regulatory and Licensing Guidelines No. BTRC/LL/3G Guidelines (394) Part-1/2012-148 Date: 14-02-2013
4G/LTE Cellular Mobile Phone Service Operator License	Appendix 1 of the Regulatory and Licensing Guidelines For 4G/LTE Cellular Mobile Phone Services In Bangladesh, 2017 subjected to the approval from the Government.

11. SUBMISSION OF DOCUMENTS

- 11.01 The application in applicant's letter head pad shall include duly completed letter of transmittal as appended in APPENDIX-1 with supporting documents along with an affidavit duly attested by notary public as per APPENDIX-2 and letter of authorization and declaration at APPENDIX-3. Each page of the application along with purchased guidelines and all other supporting documents shall be signed and sealed by the applicant's authorized personnel.
- 11.02 The new entrant shall apply in their letter head pad duly completed Letter of Transmittal appended in the APPENDIX-1 with supporting documents along with an Affidavit duly attested by Notary Public as per attached format appended in APPENDIX-2 of the regulatory and licensing guidelines No. BTRC/LL/3G Guidelines (394) Part-1/2012-148 Date: 14-02-2013. Each page of the application along with purchased guidelines and all other supporting documents shall have to be signed and sealed by the applicant's authorized personnel.
- 11.03 The applicant shall submit the application/processing fee of BDT 5,00,000 (five hundred thousand) payable in favour of Bangladesh Telecommunication Regulatory Commission in the form of bank draft or pay order from any scheduled bank of Bangladesh.
- 11.04 The applicant shall submit 2 (two) copies of its application with all relevant documents of which 01 (one) copy shall be original. The applicant shall also submit soft copy of all the documents in portable device (non scanned/ scanned PDF) to the Commission.
- 11.05 The Commission reserves the right and authority to reject the application if it is found that the information or documents provided with the application is/are untrue, inaccurate or incomplete.

12. APPLICATION PROCESSING

- 12.01 The Bidding/Auction Committee will evaluate the proposals/offers on the basis of the documents/information submitted by the applicant(s). The Commission will announce names of the applicants who are eligible to participate in the open auction process at appropriate time.

- 12.02 The Commission will inform the selected applicant(s) in writing (by courier, letter, fax or e-mail etc.) about their eligibility to participate in the auction. The selected applicants will be entitled to participate in the bidding process subject to the submission of Bid Earnest Money amounting BDT 1,500 (One thousand five hundred) million.
- 12.03 On credit of the Bid Earnest Money into the BTRC's designated bank account; the Commission will inform the applicant of the acceptance of the same.
- 12.04 In the event the Commission requires 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.
- 12.05 While inviting applications the Commission will declare a time schedule including that of the pre-bid meeting(s), submission of proposals/offers, auction and awarding of spectrum.

13. RADIO COMMUNICATION APPARATUS LICENSE

The generic form of the Radio Communication Apparatus License for Technology Neutral spectrum is appended with this guideline as APPENDIX-5 which will be issued to the winning bidders having Cellular Mobile Phone Services Operator License for 2G and/or 3G and/or 4G/LTE (or as applicable) services.

14. SPECTRUM ASSIGNMENT

- 14.01 The IMT 1800 MHz band will be considered as Technology Neutral. Total 18.0 MHz spectrum from 1800 MHz band will be auctioned for providing Cellular Mobile Phone Services for 2G, 3G and 4G/LTE Services.
- 14.02 The (18+18) MHz of spectrum is available in 04 (Four) blocks. The blocks are as follows –
 - (a) 1762.0 MHz – 1767.60 MHz/1857.0 MHz – 1862.60 MHz = (5.6 + 5.6) MHz
 - (b) 1767.60 MHz – 1772.60 MHz/1862.60 MHz – 1867.6 MHz = (5.0 + 5.0) MHz
 - (c) 1777.60 MHz – 1782.60 MHz /1872.60 MHz – 1877.6 MHz = (5.0 + 5.0) MHz
 - (d) 1782.60 MHz – 1785.00 MHz /1877.60 MHz – 1880.0 MHz = (2.4 + 2.4) MHz
- 14.03 During the first round of the auction, an individual licensee among the existing 2G Cellular Mobile Phone Service Operators already possessing spectrum in 1800 MHz band can have maximum of 01 (One) block through the auction process. Rest of the bidders not having spectrum in 1800 MHz band can obtain more than one block through the auction process. However, after the first round of the auction, if any block of spectrum remains unsold, all bidders may participate for that unsold block.
- 14.04 For any other cases, to sell the unsold blocks to the participating bidders, the Commission may make recommendation to the government to make decision within the 6 (Six) months

from the date of auction taking place. In such cases the unsold blocks shall be sold at the highest auctioned price.

- 14.05 The spectrum assignment will be inclusive of guard bands to avoid interference with adjacent operating frequency bands.
- 14.06 In case of cancellation or termination or suspension of the 2G, 3G and 4G/LTE Cellular Mobile Operator Licenses for any reason whatsoever, the spectrum assignment shall be cancelled or suspended.

15. SPECTRUM RE-ARRANGEMENT

The Commission may re-arrange the spectrum of 1800 MHz band for contiguous assignment after the auction process if required. The licensee shall abide by the decision of the Commission.

16. TECHNOLOGY NEUTRALITY

- 16.01 The IMT 1800 MHz- band will be considered as Technology Neutral by complying with the condition mentioned in Clause 16.02 of the guidelines.
- 16.02 Cellular Mobile Phone Operator(s) shall have the obligation to convert its existing 1800 MHz spectrum into technology neutral spectrum by paying conversion fees/charges with applicable VAT and by following the terms, conditions and time frame stipulated by the Commission. After the payment of the conversion fees/charges with applicable VAT, respective Cellular Mobile Phone Operator(s) will be issued with a new Radio Communication Apparatus License mentioning the list of already assigned microwave frequencies and converted access frequencies as Technology Neutral spectrum.

17. CONVERSION FEE FOR TECHNOLOGY NEUTRALITY

- 17.01 The Government of Bangladesh has already approved guidelines for the auction price of 1800 and 2100 MHz band vide the letter no. 14.00.0000.010.22.01823-103; Dated: 18th February 2016 with base price of USD 25 (Twenty Five) million per MHz where Technology Neutrality was not included. This guideline for auction facilitates Technology Neutrality of Spectrum in 1800 MHz band. The base price for Technology Neutral spectrum in 1800 MHz band is USD 35 (Thirty Five) million per MHz.
- 17.02 The conversion fee/charge of per MHz of existing spectrum in 1800 MHz bands will be USD 10 (ten) million for 15 (fifteen) years.

18. AUCTION PROCESS AND AWARDED OF SPECTRUM

- 18.01 The Auction shall be based on an open outcry (the British system). The Commission shall declare the detailed procedure and time schedule of the auction. The Commission shall arrange one pre-bid meeting before the auction.
- 18.02 The Auction will be held in multiple rounds through open outcry. The following procedure shall be followed:

- (a) The Commission shall form an auction Committee to conduct the auction.
- (b) Multiple Rounds through open outcry method will be used for the auction process. The Base Price for auction is USD 35 (Thirty Five) million per MHz of spectrum. The minimum and maximum slab of bid increment shall be determined by the Commission while preparing the auction details.
- (c) Each bidder shall deposit Bid Earnest Money as mentioned in Clause 12.02 of the guideline within the time schedule determined by the Commission. If the Bid Earnest Money is accepted by the commission, it will be considered that the bidder must attend the auction and he/she agrees to pay the base price for one block of spectrum. In case of failure to attend the Auction, the Bid Earnest Money of the bidder shall stand forfeited. In case of less than 02 (two) qualified bidders appearing on the Auction Date, the matter will be decided by the Auction Committee accordingly.
- (d) Each of the qualified bidders shall accept the decision given by the Auction Committee as final and binding.
- (e) Each of the Winning Bidders shall deposit 60% of the total amount of payable Spectrum Assignment Fee as Bid Deposit in BTRC's designated bank account in US Dollar or its equivalent in BDT within 30 (Thirty) Gregorian calendar days from the date of Auction Result Notification Date. The conversion rate will be the exchange rate of US Dollar and BDT shall be the cash selling rate of the auction date of Sonali Bank Limited or any other Bank decided by the Commission. The Bid Earnest Money will be adjusted against the bid deposit.
- (f) The remaining 40% of the total amount of payable Spectrum Assignment Fee shall be paid by 04 (Four) equal installments within four years from the date of Auction Result Notification Date in US Dollar or its equivalent in BDT to be converted at the cash selling rate of the auction date of Sonali Bank Limited or any other Bank decided by the Commission.
- (g) If any of the Winning Bidders fails to make any of the payments as referred to above within the stipulated time, the next higher bidder in the order of their bids will be offered the Spectrum on the Auction Winning Price and on the same terms and conditions subject to submission of written undertaking and Bid Earnest Money of BDT 1,500 (one thousand and five hundred) million.
- (h) The Commission will forfeit the Bid Earnest Money and all other amounts received from the defaulting bidder(s).
- (i) The successful or Winning Bidder may deposit 100% of the payable Spectrum Assignment Fee at a time as Bid Deposit in BTRC's designated bank account in US Dollar or its equivalent in BDT at any time during office hours in any working day within the time limit mentioned in clause 18.02(e) of the guideline.
- (j) The spectrum shall be assigned after payment of 60% of the payable spectrum Assignment Fee subject to fulfillment of other terms and conditions stipulated in this guideline.

19. DISQUALIFICATION FOR OBTAINING SPECTRUM

19.01 Without prejudice to any other remedy that may be available to it, the Commission reserves the right and authority, on the recommendation of the Bidding Committee, to disqualify any Bidder and forfeit its money for any of the reasons mentioned in clause -7 of this Guideline including the following:

- (a) If a Winning Bidder abandons the bid or fails to pay first 60% of the total amount of the payable Spectrum Assignment Fee within 30 (Thirty) Gregorian calendar days or remaining 40% within the time limit mentioned in clause 18.02(f).
- (b) Inaccuracy or misrepresentation of any facts in any part of the Application which is mala-fide;
- (c) Illegal conduct, disruption during the auction, or indulgence in improper attempts to influence the outcome, or delay the process;
- (d) Any “corrupt practice” meaning the offering, giving, receiving or soliciting of anything of value to influence a public official in relation to auction process; or
- (e) Any fraudulent practice or misrepresentation of facts in order to influence the results of the auction process established by the guidelines.
- (f) If the successful bidder (new entrant) fails to obtain Cellular Mobile Phone Service Operators License (2G,3G,4G/LTE, as applicable) within the 60 (Sixty) Gregorian calendar days from the date of Auction Result Notification Date.

19.02 In case a bidder is disqualified under the above sub-clause 19.01 or any other provision of this guideline, the spectrum assigned under clause 14 hereinabove, shall stand cancelled.

20. OWNERSHIP DISCLOSURE REQUIREMENTS

All bidders must disclose their ownership information in a separate sheet. No two bidders shall have any common directorship on their respective boards.

21. CHANGES IN COMPOSITION OF APPLICANTS

Any change in the composition of a bidder, as per clause 20, is not allowed following the submission of application at least till the date of awarding spectrum.

22. COLLUSION

In case there is any evidence of collusion, the Commission reserves the right and authority to disqualify that bidder from the auction process.

23. INFORMATION PROVIDED BY THE COMMISSION

23.01 The information contained in this guideline and any other information provided to applicants during the application process, in writing, is intended to assist bidders in preparation of their bids and shall be binding on them in the course of bidding.

23.02 The Commission has made and will continue to make reasonable efforts to include accurate and current information in the Guidelines and in any other document provided to applicants. However, neither the Commission nor any of its employees, representatives or consultants shall have any liability whatsoever to any applicant or any of its shareholders or members or any other person resulting from use of or reliance on any of the information so provided. Applicants are advised to undertake their own verification of any information supplied by the Commission prior to use of or reliance on that information.

24. OTHER COMMUNICATIONS

All deliveries, notices or other communications made to applicants in connection with the application process shall be sent by designated fax or e-mail or letter (courier) to the contact officer of the applicant(s), as specified by the applicant to the Commission in his application.

25. COSTS ASSOCIATED WITH BID AND BIDDING

The applicants shall bear all their costs associated with the preparation and submission of their bids and the Commission shall in no way be responsible for these or any other costs, regardless of the conduct or outcome of the application process.

26. POWER TO ISSUE DIRECTIVES AND RESERVATION OF RIGHTS

26.01 The Commission may issue directives consistent with this Guideline to ensure that the auction process is carried out in a fair, open and transparent manner, in accordance with law and to discourage collusion and predatory bidding that may block the entry of potential bidders into the bidding process.

26.02 The Commission reserves the right and authority to terminate the auction process at any time in its sole discretion. In such an event, Bid Earnest Money would be returned to the bidder within 30 (thirty) working days without bearing any liability for damages.

27. FEES AND CHARGES

27.01 Applicants/Licensees will be required to pay various fees, contribution and charges to the Commission. The following table summarizes the fees structure. The fees and charges are excluding of fees, charges, VAT and Taxes imposed by any other competent authority of the Government.

Application Fee/Processing Fee	BDT 5,00,000 (five hundred thousand)
Bid Earnest Money	BDT 1,500 (one thousand and five hundred) million
Spectrum Assignment Fee	To be fixed by auction
Spectrum Assignment Fee payment schedule	60% of the total amount of payable Spectrum Assignment Fee to be paid within 30 (thirty) Gregorian calendar days from the Auction Result Notification Date
	Remaining 40% of the total amount of payable Fee shall be paid by 04 (Four) equal installments within four years from the Auction Result Notification Date, in US

	Dollar or its equivalent in BDT to be converted at the Foreign Currency selling rate of Bangladesh Bank as on the auction date.
Base Price for Auction	USD 35 (thirty five) million per MHz bandwidth
Annual Spectrum Fees for Access and Microwave Frequency	As per the Spectrum formula described in Cellular Mobile Phone Operator License for 2G, 3G and 4G/LTE services.
Conversion Fee of existing per Megahertz of Spectrum for technology neutrality	USD 10 (ten) million/MHz for 15 years.

- 27.02 In addition of the fees and charges mentioned in the clause no 27.01 of the guidelines, the New Entrant and Existing Operator shall pay fees and charges (if applicable) as per the Cellular Mobile Phone Operator Guideline for 2G, 3G, 4G/LTE.
- 27.03 The Licensee shall pay all the required fees within the stipulated time frame given in this Guideline. 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.
- 27.04 **Application Fee/Processing Fee:** The Application fee/Processing fee shall be BDT 5,00,000 (five hundred thousand) . The application fee shall be payable in the form of pay order/bank draft issued from any scheduled bank of Bangladesh in favour of the Bangladesh Telecommunication Regulatory Commission, along with the application.
- 27.05 **Bid Earnest Money:** The Bid Earnest Money shall be BDT 1,500 (one thousand and five hundred) million payable in the form of pay order/bank draft. The Bid Earnest Money of the successful bidder(s) will be adjusted with the payable Spectrum Assignment Fee, while the Bid Earnest Money of the unsuccessful bidders shall be returned within 30 (thirty) Gregorian calendar days of the bidding date without bearing any liability towards interest, indexation, inflation or deflation.
- 27.06 **The Spectrum Assignment Fee:** The Spectrum Assignment Fee for Cellular Mobile Phone Services will be fixed through auction.
- 27.07 **Annual Spectrum Fees and Charges :** The Licensees shall pay annual spectrum fee without any deduction to the Commission as mentioned below for in total duration of license. The fees are excluding of fees, charges and taxes imposed by any other competent authority of the Government.

Annual Spectrum Fees/Price for Access Frequency	As per the Spectrum formula as mentioned below
Annual Spectrum Fees/Price for Micro Wave Frequency	As per the Spectrum formula as mentioned below

The Licensee, after the payment of the spectrum assignment fee, shall pay annual spectrum fees for both Access and Micro Wave frequencies according to the formula as stated below.

The annual spectrum fees shall be paid on a quarterly basis within the first 10 days at the end of each quarter in advance. The total amount shall be reconciled on an annual basis based on the Licensee's audited accounts for that year and if any underpaying found, 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 adjust any excess amount against quarterly payments with the approval of the Commission in the next year.

- (a) The spectrum charges (excluding VAT & Tax) shall be calculated by using the following formula:

$$\text{Spectrum charges in BDT} = \text{STU} \times \text{CF} \times \text{BW} \times \text{AF} \times \text{BF}$$

Where, (i) STU = Spectrum Tariff Unit BDT 70.00 per MHz per Sq. Km.

(ii) CF = Contribution Factor for Access Frequency has been fixed considering assignment of frequency, use of assigned frequency and subscriber.

SL.	Subscriber base related to use of frequency (lower limit inclusive & upper limit exclusive)	CF
1.	Up to 2 million	0.7
2.	2 million to 5 million	1.2
3.	5 million to 10 million	1.7
4.	10 million to 15 million	2.2
5.	15 million to 20 million	2.7
6.	20 million to 25 million	3.2
7.	25 million to 30 million	3.7
8.	30 million to 35 million	4.2
9.	35 million to 40 million	4.7
10.	40 million to 45 million	5.2
11.	45 to 50 million	5.7
12.	50 to 55 million	6.2
13.	55 to 60 million	6.7
14.	60 to 65 million	7.2
15.	65 to 70 million	7.7
16.	70 million and above	8.0

(iii) CF= Contribution Factor for Microwave Frequency = 1

(iv) BW = Bandwidth Assigned for Access Frequency in MHz

(v) BW = Bandwidth occupied for Microwave Frequency in MHz

(vi) AF = Area Factor for Access Frequency = 1,47,570 Sq. km

(vii) AF = Area Factor for Microwave Frequency Point to Point link = $\text{Link Length}^2 \times 0.273$ (Minimum Distance for link length shall be considered from 10 km)

(viii) BF = Band Factor:

SL.	Band	BF
1.	VLF/LF/MF (3-3000 kHz)	1.00
2.	HF (3-30 MHz)	1.50
3.	VHF (30-300 MHz)	1.00

4.	UHF1 (300-806 MHz)	0.75
5.	UHF2 (806-2690MHz)	0.50
6.	SHF1 (2.69-16 GHz)	0.25
7.	SHF2 (16-31GHz)	0.15
8.	EHF1 (31-65 GHz)	0.10
9.	EHF2 (65-275 GHz)	0.05

- (b) Short term charges for new microwave links depending on date of Installing will be applicable as follows:

SL.	Date of Installation	Percentage
1.	January-March	100%
2.	April-June	75%
3.	July-September	50%
4.	October-December	25%

- (c) The Licensee shall follow this same CF table for calculating 2G, 3G and 4G/LTE spectrum charges with 2G, 3G and 4G/LTE subscribers respectively. Those subscribers shall be considered 4G/LTE subscribers whose profiles are updated for 4G/LTE subscription. Similarly, those subscribers shall be considered 3G subscribers whose profiles are updated for 3G subscription, but not 4G/LTE subscriptions. All other subscribers shall be considered as 2G subscribers. A subscriber shall be considered active on a particular day if the subscriber performed any activity or consumed any service within previous 90 Gregorian calendar days. This definition of subscriber shall supersede all the definitions given or agreed earlier.

For paying the quarterly access spectrum fees in advance, the Licensee shall use the active subscriber base as on the last date of each quarter. After the year-end, the Licensee shall recalculate the annual access spectrum fee with the active subscriber base as of the last day of the year and reconcile with the total access spectrum fee paid for last four quarters. The Licensee shall pay the additional fee within 90 Gregorian calendar days from the year-end. If the Licensee made overpayment of the access spectrum fee, the Licensee can adjust the paid amount in the next quarterly payment.

- (d) The Licensee shall calculate the distance between two coordinates $u(\phi_1, \lambda_1)$ and $v(\phi_2, \lambda_2)$ of microwave antenna as designated with latitude (ϕ) and longitude (λ) with the following Haversing formula:

$$\text{Distance} = 2 * r * \arcsin \sqrt{\sin^2(\Delta\phi/2) + \cos\phi_1 * \cos\phi_2 * \sin^2(\Delta\lambda/2)}$$

Where,

$$\Delta\lambda = \lambda_2 - \lambda_1,$$

$$\Delta\phi = \phi_2 - \phi_1$$

r is earth's radius (mean radius=6,371 Km), and ϕ and λ are in radians.

The Licensee shall submit to the Commission the coordinates (latitude, longitude) of all microwave antennas with the quarterly spectrum fee payment. The Licensee shall

submit to the Commission the microwave link database with all the fields to calculate the microwave spectrum fee in Excel format in DVD.

- (e) In case of using new access frequency for a fractional year in the first year, the Licensee shall follow the short-term charge policy of new microwave links.

27.08 **Taxes and VAT:** All kinds of Taxes and VAT shall have to be paid as set out by the competent authority of the Government.

27.09 The fees and charges as described above shall have to be paid within the stipulated time. The due amount may be paid within 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, necessary actions shall be taken by the Commission as per the provisions of the License and the Act.

27.10 The foreign partner of the applicant shall invest foreign currency directly equal to its percentage of ownership and no loan from any Bangladeshi Scheduled Bank/Financial Institution/Leasing Company can be raised for the foreign part of the investment to pay spectrum assignment fee under this Guideline.

28 MISCELLANEOUS

The new entrant and the existing Cellular Mobile Phone Services Operators are permitted to seek for 100% of FDI (Foreign Direct Investment) or Foreign Partnership or Joint Venture or investment from NRB (Non-Resident Bangladeshi) for the development, operation and roll out of 2G, 3G and 4G/LTE Services. The foreign partner shall invest foreign currency directly equal to its percentage of ownership and no loan from any Bangladeshi Schedule Bank/Financial Institution/Leasing Company can be raised for the foreign part of the investment to pay license fee, spectrum acquisition fee and to purchase equipment (hardware and software) and services from abroad during the roll-out period. The rules, regulations and instructions of Bangladesh Bank, Board of Investment and any other competent authority of the Government shall be binding to the licensee regarding the operational financing.

29 ADDRESS FOR CORRESPONDENCE

All correspondence relating to this Guideline, Investors' Conference, submission of application documents, Auction procedure and assignment of spectrum shall be duly marked with '**1800 MHz Auction**' and should be addressed to:

Director
Spectrum Division
Bangladesh Telecommunication Regulatory Commission
IEB Bhaban, Ramna, Dhaka-1000, Bangladesh
Phone: +88029553710, Fax: +88029556677, +88029513391
E-mail: dirsm@btrc.gov.bd

30 BIDDING AND AUCTION PROCESS TIME TABLE

The tentative timetable for submission of proposals/offers, auctions and awarding of spectrum has been set as shown in the table below. However, the Commission reserves the

right and authority to change the overall timetable of the bidding and auction, taking into account of the circumstances prevailing at that time.

Indicative Timetable		
SL	Description	Date
1.	Invitation for Application	09 July 2017
2.	Submission of the queries (if any)	12 July 2017
3.	Pre-Bid Meeting	16 July 2017
4.	Submission of Application to the Commission	23 July 2017
5.	Publish list of qualified Applicants for the Auction	25 July 2017
6.	Consultation on Auction Procedure	27 July 2017
7.	Submission of Bid Earnest Money	02 August 2017
8.	Letter of acceptance/rejection to participate in the bidding	07 August 2017
9.	Mock Auction	09 August 2017
10.	Auction	10 August 2017
11.	Notification to winning applicants	10 August 2017

Part C:

FOR ASSIGNMENT OF SPECTRUM FROM E-GSM (900MHz) BAND
AND
ISSUING RADIO COMMUNICATIONS APPARATUS LICENSE



**BANGLADESH TELECOMMUNICATION
REGULATORY COMMISSION**
IEB BHABAN, RAMNA, DHAKA-1000

**GUIDELINES FOR SPECTRUM ASSIGNMENT FROM E-GSM (900 MHz) BAND TO
THE CELLULAR MOBILE PHONE SERVICE OPERATORS AND ISSUING RADIO
COMMUNICATIONS APPARATUS LICENSE**

1 INTRODUCTION

- 1.01 Bangladesh witnessed a booming growth of mobile subscriptions for last ten years. Mobile voice and data traffic are increasing rapidly and generating huge traffic in the cellular mobile communication networks. Currently assigned spectrum to the cellular mobile operators from IMT bands are not sufficient to carry the enormous traffic and ensure the quality of services. Therefore, the Bangladesh Telecommunication Regulatory Commission (Commission) is preparing to assign additional spectrum from E-GSM (900 MHz) band and award Cellular Mobile Phone Service Operator License for providing 2G, 3G and 4G/LTE services.
- 1.02 The Government has authorized the Bangladesh Telecommunication Regulatory Commission (Commission) to issue the approved guidelines. As such the Commission has been empowered by the Government and under the Section 36 of the Bangladesh Telecommunication Regulation Act, 2001 (Act) with the prior approval of the Government to issue Licenses for the operation and provision of telecommunication services.
- 1.03 Having given due consideration to the principles of transparency, fairness, non-discrimination and all other relevant principles, the Commission has decided to issue this guideline for those applicants who intend to bid for additional spectrum through E-GSM (900 MHz) band spectrum auction and acquire license as applicable to provide ‘Cellular Mobile Phone Services’ using 2G, 3G and 4G/LTE technology in Bangladesh.
- 1.04 The Act specifically provides, under Section 55 that the establishment, operation or use of radio apparatus for the purpose of radio communication services in Bangladesh without a License is an offence, punishable with imprisonment or a fine or both. The Act also provides for right and authority of the Commission in determining any and all issues in relation to assignment of spectrum and issuance of Radio Communications Apparatus License and any other related matters.
- 1.05 This guideline may be withdrawn, revised, updated or amended from time to time, according to Section 34 of Bangladesh Telecommunication Regulation Act, 2001 to take into consideration various factors including, but not limited to, any threat to public health, national security and statutory or Court orders.

- 1.06 This guideline is approved by the Government and shall come into effect from the date of issuance by Bangladesh Telecommunication Regulatory Commission (BTRC).

2 OBJECTIVES AND INTERPRETATION

- 2.01 This Guideline is intended to provide an overview of assignment of spectrum from E-GSM (900 MHz) band to operate 2G, 3G and 4G/LTE Services in Bangladesh having respective Cellular Mobile Phone Operator License.
- 2.02 This guideline is also intended to provide an overview of the Licensing and Regulatory Framework for Applicant(s) seeking to obtain a License to provide and operate Cellular Mobile Phone for 2G, 3G and 4G/LTE Services in Bangladesh, wherein the subscribers will be allowed to use their equipment as mobile.

3 LEGAL REQUIREMENTS

The legal statutes governing the telecommunication industry in Bangladesh, which will be applicable to all applicants and 2G, 3G and 4G/LTE Cellular Mobile Phone Services Licensee are given below:

- (a) The Bangladesh Telecommunication Regulation Act, 2001 (as amended).
- (b) The Wireless Telegraphy Act, 1933 and The Telegraph Act, 1885, for matters which are not covered by the Bangladesh Telecommunication Regulation Act, 2001 (as amended).
- (c) Any Act or Ordinance or Rules or Regulation(s) made by the Government/Commission.
- (d) The guidelines/directives/orders/instructions and decisions issued under the Act.

4 TITLE

This guideline is to be termed as ‘Guidelines for Assignment of Spectrum from 2100 MHz, 1800 MHz & E-GSM (900 MHz) Band to Cellular Mobile Phone Service Operators and Issuing Radio Communications Apparatus License’ in Bangladesh.

5 ELIGIBILITY

- 5.01 Existing Cellular Mobile Phone Operators may apply for assignment of spectrum as mentioned in this guideline in order to provide and operate 2G, 3G and 4G/LTE Services in Bangladesh having respective Cellular Mobile Phone Operator License.
- 5.02 The new entrant selected through the auction process of 2100 MHz band will be eligible to participate in the auction for E-GSM (900 MHz) band.

6 SPECTRUM BLOCK AND NUMBER OF LICENSE TO BE ISSUED

- 6.01 The Commission will award 02 (two) spectrum blocks: (1.8 + 1.8) MHz, (1.6 + 1.6) MHz in E-GSM (900 MHz) band through open auction.
- 6.03 The Commission will issue Cellular Mobile Phone Operator License for 2G, 3G and 4G/LTE Services to the new entrant, based on his application and winning the spectrum

bidding from 2100 and 900 MHz band, in the same terms and conditions of the existing 2G, 3G and 4G/LTE Cellular Mobile Phone Service Operator License. The new entrant will also be issued with Radio Communication Apparatus License for Technology Neutral Spectrum for 2G, 3G and 4G/LTE services. Existing operators winning the spectrum bidding from EGSM (900 MHz) band will be issued Radio Communication Apparatus License for Technology Neutral Spectrum. The generic forms of 2G, 3G and 4G/LTE Cellular Mobile Phone Services Operator License and 'Radio Communications Apparatus License for Technology Neutral Spectrum are appended below (whichever is applicable):

2G Cellular Mobile Phone Service Operator License	Appendix 3 of the Regulatory and Licensing Guidelines No. BTRC/LL/Mobile/License Renewal (342)/2009-563 Date: 11-09-2011
3G Cellular Mobile Phone Service Operator License	Appendix 5 of the Regulatory and Licensing Guidelines No. BTRC/LL/3G Guidelines (394) Part-1/2012-148 Date: 14-02-2013
4G/LTE Cellular Mobile Phone Service Operator License	Appendix 4 of the Regulatory and Licensing Guidelines For 4G/LTE Cellular Mobile Phone Services In Bangladesh, 2017, subjected to the approval from the Government.
Radio Communication Apparatus License for Technology Neutral Spectrum (for 2G, 3G and 4G/LTE services)	Appendix 5 of Guidelines for Assignment of Spectrum from 900 MHz Band to Cellular Mobile Phone Service Operators and Issuing Radio Communications Apparatus License in Bangladesh, subject to the approval from the Government.

7. DISQUALIFICATIONS

7.01 An applicant shall be disqualified from obtaining License if-

(a) in the case of an individual-

- (i) he is an insane person;
- (ii) he has been sentenced by a Court under any law, other than this Act, to imprisonment for a term of minimum 2 (two) years or more, and a period of 5 (five) years has not elapsed since his release from such imprisonment;
- (iii) he has been sentenced by any 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;
- (iv) he has been declared bankrupt by any Court and has not been discharged from the liability of bankruptcy;
- (v) he has been identified or declared by the Bangladesh Bank or by a Court or by a bank or financial institution as a defaulter loan of that bank or institution;
- (vi) his License has been cancelled by the Commission at any time during the last 5 (five) years;
- (vii) he is convicted for any violation of the Act or any License condition;

(b) The applicant being a partnership firm or company or corporation or society or other organizations:-

(i) any provision of Sub-Clause (i) to (v) of Clause (a) above is applicable to its owner, or to any of its shareholder directors or partners; or

(ii) Sub-Clause (vi) of Clause (a) above is applicable to it.

7.02 No entity shall be eligible to apply if it has any outstanding dues to the Commission on the date of submission of the application under this guideline, unless the matter is pending before any Court of law along with an interim order in favour of the applicant.

8. DURATION OF SPECTRUM ASSIGNMENT

8.01 The duration of the spectrum assignment, shall remain valid exclusively for the term till the validity of 4G/LTE Cellular Mobile Phone Services Operator License. All the terms and conditions of the Cellular Mobile Operator License and the Radio Communication Equipment/Apparatus License for 2G, 3G and 4G/LTE services shall be applicable to this assignment.

8.02 The duration of the spectrum assignment, shall initially be for a term of 15 (fifteen) 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 Government, payment of necessary fees and charges, including VAT and to such terms and conditions, as may be specified herein and/or by the Government at the time of each renewal.

9. AVAILABILITY OF THE GUIDELINE

This guideline is available in the BTRC website: www.btrc.gov.bd for information only. The prospective applicant willing to submit the proposals/offers, shall purchase a copy of this guideline from the Commission by submitting an application to the Chairman of the Commission, endorsing BDT 5,000 (five thousand) without applicable VAT and Taxes in the form of pay order or bank draft in favour of Bangladesh Telecommunication Regulatory Commission.

10. APPLICATION FORM

10.01 The applicant shall submit application for spectrum assignment from E-GSM (900 MHz) spectrum band to the Commission in the prescribed application form duly filled in, signed and sealed, together with all the necessary documents and information. The detailed requirements for submission of documents along with the prescribed application form are appended with this guideline at APPENDIX -1.

10.02 The new entrant shall submit Application for 4G/LTE and/or 2G/3G or both Cellular Mobile Phone Service Operator Licenses and spectrum assignment to the Commission in the prescribed form duly filled in, signed and sealed, together with all the necessary documents and information within 60 (Sixty) working days from the date of issuance of notification letter of obtaining spectrum from Commission. The terms and conditions including fees and charges (with applicable VAT) of the guideline shall be binding on the new entrant. The

detailed requirements for submission of documents along with the prescribed Application Form are appended as follows:

2G Cellular Mobile Phone Service Operator License	Related documents of Appendix 1 of the Regulatory and Licensing guidelines No. BTRC/LL/Mobile/License Renewal (342)/2009-563 Date: 11-09-2011
3G Cellular Mobile Phone Service Operator License	Appendix 1 of the Regulatory and Licensing guidelines No. BTRC/LL/3G Guidelines (394) Part-1/2012-148 Date: 14-02-2013
4G/LTE Cellular Mobile Phone Service Operator License	Appendix 1 of the Regulatory and Licensing Guidelines For 4G/LTE Cellular Mobile Phone Services in Bangladesh, 2017 subjected to the approval from the Government.

11 SUBMISSION OF DOCUMENTS

- 11.01 The application in applicant's letter head pad shall include duly completed letter of transmittal as appended in APPENDIX-1 with supporting documents along with an affidavit duly attested by notary public as per APPENDIX-2 and letter of authorization and declaration at APPENDIX-3. Each page of the application along with purchased guidelines and all other supporting documents shall be signed and sealed by the applicant's authorized personnel.
- 11.02 The new entrant shall apply in their letter head pad duly completed Letter of Transmittal appended in the APPENDIX-1 with supporting documents along with an Affidavit duly attested by Notary Public as per attached format appended in APPENDIX-2 of the regulatory and licensing guidelines No. BTRC/LL/3G guidelines (394) Part-1/2012-148 Date: 14-02-2013. Each page of the application along with purchased guidelines and all other supporting documents shall have to be signed and sealed by the applicant's authorized personnel.
- 11.03 The applicant shall submit the application/processing fee of BDT 5,00,000 (five hundred thousand) payable in favour of Bangladesh Telecommunication Regulatory Commission in the form of bank draft or pay order from any scheduled bank of Bangladesh.
- 11.04 The applicant shall submit 2 (two) copies of its application with all relevant documents of which 01 (one) copy shall be original. The applicant shall also submit soft copy of all the documents in portable device (non scanned/ scanned PDF) to the Commission.
- 11.05 The Commission reserves the right and authority to reject the application if it is found that the information or documents provided with the application is/are untrue, inaccurate or incomplete.

12 APPLICATION PROCESSING

- 12.01 The Bidding/Auction Committee will evaluate the proposals/offers on the basis of the documents/information submitted by the applicant(s). The Commission will announce names of the applicants who are eligible to participate in the open auction process at appropriate time.

- 12.02 The Commission will inform the selected applicant(s) in writing (by courier, letter, fax or e-mail etc.) about their eligibility to participate in the auction. The selected applicants will be entitled to participate in the bidding process subject to the submission of Bid Earnest Money amounting BDT 1,500 (One thousand five hundred) million.
- 12.03 On credit of the Bid Earnest Money into the BTRC's designated bank account; the Commission will inform the applicant of the acceptance of the same.
- 12.04 In the event the Commission requires 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.
- 12.05 While inviting applications the Commission will declare a time schedule including that of the pre-bid meeting(s), submission of proposals/offers, auction and awarding of spectrum.

13. RADIO COMMUNICATION APPARATUS LICENSE

The generic form of the Radio Communication Apparatus License for Technology Neutral spectrum is appended with this guideline as APPENDIX-5 which will be issued to the winning bidders having Cellular Mobile Phone Services Operator License for 2G and/or 3G and/or 4G/LTE (or as applicable) services.

14. SPECTRUM ASSIGNMENT

- 14.01 The IMT E-GSM (900 MHz)- band will be considered as Technology Neutral. Total 3.4 MHz spectrum from E-GSM (900 MHz) band will be auctioned for providing Cellular Mobile Phone Services for 2G, 3G and 4G/LTE Services.
- 14.02 The (3.4+3.4) MHz of spectrum is available in 02 (Two) blocks. The following blocks will be taken from 885.0-890.0/ 930.0-935 MHz spectrum band:
- (a) (1.8+1.8) MHz
 - (b) (1.6+1.6) MHz
- 14.03 During the first round of the auction, an individual licensee among the existing 2G Cellular Mobile Phone Service Operators already possessing spectrum in E-GSM (900 MHz) band can have maximum of 01 (One) block through the auction process. Rest of the bidders not having spectrum in E-GSM (900 MHz) band can obtain more than one block through the auction process. However, after the first round of the auction, if any block of spectrum remains unsold, all bidders may participate for that unsold block.
- 14.04 For any other cases, to sell the unsold blocks to the participating bidders, the Commission may make recommendation to the government to make decision within the 6 (Six) months from the date of auction taking place. In such cases the unsold blocks shall be sold at highest auctioned price.

- 14.05 The spectrum assignment will be inclusive of guard bands to avoid interference with adjacent operating frequency bands.
- 14.06 The actual position of the blocks of the successful bidders will be determined through lottery by the Commission amongst the successful bidders and existing operator in the E-GSM (900 MHz) (E-GSM).
- 14.07 In case of cancellation or termination or suspension of the 2G, 3G and 4G/LTE Cellular Mobile Operator Licenses for any reason whatsoever, the spectrum assignment shall be cancelled or suspended.

15. SPECTRUM RE-ARRANGEMENT

The Commission may re-arrange the spectrum of E-GSM (900 MHz) band for contiguous assignment after the auction process if required. The licensee shall abide by the decision made by the Commission on this issue.

16. TECHNOLOGY NEUTRALITY

- 16.01 The IMT 900 MHz and E-GSM spectrum (within 885-890/930-935 MHz) will be considered as Technology Neutral by complying with the condition mentioned in Clause 16.02 of the guidelines.
- 16.02 Cellular Mobile Phone Operator(s) shall have the obligation to convert its existing IMT 900 MHz and E-GSM spectrum (within 885-890/930-935 MHz) into Technology Neutral spectrum by paying a conversion fees/charges with applicable VAT and by following the terms, conditions and time frame stipulated by the Commission. After the payment of the conversion fees/charges with applicable VAT, respective Cellular Mobile Phone Operator(s) will be issued with a new Radio Communication Apparatus License mentioning the list of already assigned microwave frequencies and converted access frequencies as Technology Neutral spectrum.

17. CONVERSION FEE FOR TECHNOLOGY NEUTRALITY

The conversion fee/charge of per MHz of existing spectrum in E-GSM (900 MHz) bands will be USD 10 (ten) million for 15 (fifteen) years.

18 AUCTION PROCESS AND AWARDING OF SPECTRUM

- 18.01 The Auction shall be based on an open outcry (the British system). The Commission shall declare the detailed procedure and time schedule of the auction. The Commission shall arrange one pre-bid meeting before the auction.
- 18.02 The Auction will be held in multiple rounds through open outcry. The following procedure shall be followed:
- (a) The Commission shall form an auction Committee to conduct the auction.
 - (b) Multiple Rounds through open outcry method will be used for the auction process. The Base Price for auction is USD 30 (Thirty) million per MHz of spectrum. The minimum and

maximum slab of bid increment shall be determined by the Commission while preparing the auction details.

- (c) Each bidder shall deposit Bid Earnest Money as mentioned in Clause 12.02 of the guideline within the time schedule determined by the Commission. If the Bid Earnest Money is accepted by the commission, it will be considered that the bidder must attend the auction and he/she agrees to pay the base price for one block of spectrum. In case of failure to attend the Auction, the Bid Earnest Money of the bidder shall stand forfeited. In case of less than 02 (two) qualified bidders appearing on the Auction Date, the matter will be decided by the Auction Committee accordingly.
- (d) Each of the qualified bidders shall accept the decision given by the Auction Committee as final and binding.
- (e) Each of the Winning Bidders shall deposit 60% of the total amount of payable Spectrum Assignment Fee as Bid Deposit in BTRC's designated bank account in US Dollar or its equivalent in BDT within 30 (Thirty) Gregorian calendar days from the date of Auction Result Notification Date. The conversion rate will be the exchange rate of US Dollar and BDT shall be the cash selling rate of the auction date of Sonali Bank Limited or any other Bank decided by the Commission. The Bid Earnest Money will be adjusted against the bid deposit.
- (f) The remaining 40% of the total amount of payable Spectrum Assignment Fee shall be paid by 04 (Four) equal installments within four years from the date of Auction Result Notification Date in US Dollar or its equivalent in BDT to be converted at the cash selling rate of the auction date of Sonali Bank Limited or any other Bank decided by the Commission.
- (g) If any of the Winning Bidders fails to make any of the payments as referred to above within the stipulated time, the next higher bidder in the order of their bids will be offered the Spectrum on the Auction Winning Price and on the same terms and conditions subject to submission of written undertaking and Bid Earnest Money of BDT 1,500 (one thousand and five hundred) million.
- (h) The Commission will forfeit the Bid Earnest Money and all other amounts received from the defaulting bidder(s).
- (i) The successful or Winning Bidder may deposit 100% of the payable Spectrum Assignment Fee at a time as Bid Deposit in BTRC's designated bank account in US Dollar or its equivalent in BDT at any time during office hours in any working day within the time limit mentioned in clause 18.02(e) of the guideline.
- (j) The spectrum shall be assigned after payment of 60% of the payable spectrum Assignment Fee subject to fulfillment of other terms and conditions stipulated in this guideline.

19 DISQUALIFICATION FOR OBTAINING SPECTRUM

- 19.01 Without prejudice to any other remedy that may be available to it, the Commission reserves the right and authority, on the recommendation of the Bidding Committee, to disqualify any

Bidder and forfeit its money for any of the reasons mentioned in clause -7 of this guideline including the following:

- (a) If a Winning Bidder abandons the bid or fails to pay first 60% of the total amount of the payable Spectrum Assignment Fee within 30 (Thirty) Gregorian calendar days or remaining 40% within the time limit mentioned in clause 18.02(f).
- (b) Inaccuracy or misrepresentation of any facts in any part of the Application which is mala-fide;
- (c) Illegal conduct, disruption during the auction, or indulgence in improper attempts to influence the outcome, or delay the process;
- (d) Any “corrupt practice” meaning the offering, giving, receiving or soliciting of anything of value to influence a public official in relation to auction process; or
- (e) Any fraudulent practice or misrepresentation of facts in order to influence the results of the auction process established by the guidelines.
- (f) If the successful bidder (new entrant) fails to obtain Cellular Mobile Phone Service Operators License (2G, 3G, 4G/LTE, as applicable) within the 60 (Sixty) Gregorian calendar days from the date of Auction Result Notification Date.

19.02 In case a bidder is disqualified under the above sub-clause 19.01 or any other provision of this guideline, the spectrum assigned under clause 14 hereinabove, shall stand cancelled.

20. OWNERSHIP DISCLOSURE REQUIREMENTS

All bidders must disclose their ownership information in a separate sheet. No two bidders shall have any common directorship on their respective boards.

21. CHANGES IN COMPOSITION OF APPLICANTS

Any change in the composition of a bidder, as per clause 20, is not allowed following the submission of application at least till the date of awarding spectrum.

22. COLLUSION

In case there is any evidence of collusion, the Commission reserves the right and authority to disqualify that bidder from the auction process.

23. INFORMATION PROVIDED BY THE COMMISSION

23.01 The information contained in this guideline and any other information provided to applicants during the application process, in writing, is intended to assist bidders in preparation of their bids and shall be binding on them in the course of bidding.

23.02 The Commission has made and will continue to make reasonable efforts to include accurate and current information in the guidelines and in any other document provided to applicants. However, neither the Commission nor any of its employees, representatives or consultants shall have any liability whatsoever to any applicant or any of its shareholders or members or

any other person resulting from use of or reliance on any of the information so provided. Applicants are advised to undertake their own verification of any information supplied by the Commission prior to use of or reliance on that information.

24. OTHER COMMUNICATIONS

All deliveries, notices or other communications made to applicants in connection with the application process shall be sent by designated fax or e-mail or letter (courier) to the contact officer of the applicant(s), as specified by the applicant to the Commission in his application.

25. COSTS ASSOCIATED WITH BID AND BIDDING

The applicants shall bear all their costs associated with the preparation and submission of their bids and the Commission shall in no way be responsible for these or any other costs, regardless of the conduct or outcome of the application process.

26. POWER TO ISSUE DIRECTIVES AND RESERVATION OF RIGHTS

26.01 The Commission may issue directives consistent with this guideline to ensure that the auction process is carried out in a fair, open and transparent manner, in accordance with law and to discourage collusion and predatory bidding that may block the entry of potential bidders into the bidding process.

26.02 The Commission reserves the right and authority to terminate the auction process at any time in its sole discretion. In such an event, Bid Earnest Money would be returned to the bidder within 30 (thirty) working days without bearing any liability for damages.

27. FEES AND CHARGES

27.01 Applicants/Licensees will be required to pay various fees, contribution and charges to the Commission. The following table summarizes the fees structure. The fees and charges are excluding of fees, charges, VAT and Taxes imposed by any other competent authority of the Government.

Application Fee/Processing Fee	BDT 5,00,000 (five hundred thousand)
Bid Earnest Money	BDT 1,500 (one thousand and five hundred) million
Spectrum Assignment Fee	To be fixed by auction
Spectrum Assignment Fee payment schedule	60% of the total amount of payable Spectrum Assignment Fee to be paid within 30 (thirty) Gregorian calendar days from the Auction Result Notification Date
	Remaining 40% of the total amount of payable Fee shall be paid by 04 (Four) equal installments within four years from the Auction Result Notification Date, in US Dollar or its equivalent in BDT to be converted at the Foreign Currency selling rate of Bangladesh Bank as on the auction date.
Base Price for Auction	USD 30 (Thirty) million per MHz bandwidth

Annual Spectrum Fees/Price for Access Frequency	As per the Spectrum formula described in Cellular Mobile Phone Operator License for 2G, 3G and 4G/LTE services.
Conversion Fee of existing per MHz of Spectrum for Technology Neutrality	USD 10 (ten) million/MHz for 15 years

- 27.02 In addition of the fees and charges mentioned in the clause no 27.01 of the guidelines, the New Entrant and Existing Operator shall pay fees and charges (if applicable) as per the Cellular Mobile Phone Operator Guideline for 2G, 3G, 4G/LTE.
- 27.03 The Licensee shall pay all the required fees within the stipulated time frame given in this guideline. 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.
- 27.04 **Application Fee/Processing Fee:** The Application fee/Processing fee shall be BDT 5,00,000 (five hundred thousand). The application fee shall be payable in the form of pay order/bank draft issued from any scheduled bank of Bangladesh in favour of the Bangladesh Telecommunication Regulatory Commission, along with the application.
- 27.05 **Bid Earnest Money:** The Bid Earnest Money shall be BDT 1,500 (one thousand and five hundred) million payable in the form of pay order/bank draft. The Bid Earnest Money of the successful bidder(s) will be adjusted with the payable Spectrum Assignment Fee, while the Bid Earnest Money of the unsuccessful bidders shall be returned within 30 (thirty) Gregorian calendar days of the bidding date without bearing any liability towards interest, indexation, inflation or deflation.
- 27.06 **The Spectrum Assignment Fee:** The Spectrum Assignment Fee for Cellular Mobile Phone Services will be fixed through auction.
- 27.07 **Annual Spectrum Fees and Charges :** The Licensees shall pay annual spectrum fee without any deduction to the Commission as mentioned below for in total duration of license. The fees are excluding of fees, charges and taxes imposed by any other competent authority of the Government.

Annual Spectrum Fees/Price for Access Frequency	As per the Spectrum formula as mentioned below
Annual Spectrum Fees/Price for Microwave Frequency	As per the Spectrum formula as mentioned below

The Licensee, after the payment of the spectrum assignment fee, shall pay annual spectrum fees for both Access and Microwave frequencies according to the formula as stated below. The annual spectrum fees shall be paid on a quarterly basis within the first 10 days at the end of each quarter in advance. The total amount shall be reconciled on an annual basis based on the Licensee's audited accounts for that year and if any underpaying found, 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 adjust any excess amount against quarterly payments with the approval of the Commission in the next year.

- (a) The spectrum charges (excluding VAT & Tax) shall be calculated by using the following formula:

$$\text{Spectrum charges in BDT} = \text{STU} \times \text{CF} \times \text{BW} \times \text{AF} \times \text{BF}$$

Where, (i) STU = Spectrum Tariff Unit BDT 70.00 per MHz per Sq. Km.

(ii) CF = Contribution Factor for Access Frequency has been fixed considering assignment of frequency, use of assigned frequency and subscriber.

SL.	Subscriber base related to use of frequency (lower limit inclusive & upper limit exclusive)	CF
1.	Up to 2 million	0.7
2.	2 million to 5 million	1.2
3.	5 million to 10 million	1.7
4.	10 million to 15 million	2.2
5.	15 million to 20 million	2.7
6.	20 million to 25 million	3.2
7.	25 million to 30 million	3.7
8.	30 million to 35 million	4.2
9.	35 million to 40 million	4.7
10.	40 million to 45 million	5.2
11.	45 to 50 million	5.7
12.	50 to 55 million	6.2
13.	55 to 60 million	6.7
14.	60 to 65 million	7.2
15.	65 to 70 million	7.7
16.	70 million and above	8.0

(iii) CF= Contribution Factor for Microwave Frequency = 1

(iv) BW = Bandwidth Assigned for Access Frequency in MHz

(v) BW = Bandwidth occupied for Microwave Frequency in MHz

(vi) AF = Area Factor for Access Frequency = 1,47,570 Sq. Km

(vii) AF = Area Factor for Microwave Frequency Point to Point link = Link Length² x 0.273 (Minimum Distance for link length shall be considered from 10 km)

(viii) BF = Band Factor:

SL.	Band	BF
1.	VLF/LF/MF (3-3000 kHz)	1.00
2.	HF (3-30 MHz)	1.50
3.	VHF (30-300 MHz)	1.00
4.	UHF1 (300-806 MHz)	0.75
5.	UHF2 (806-2690MHz)	0.50
6.	SHF1 (2.69-16 GHz)	0.25

7.	SHF2 (16-31GHz)	0.15
8.	EHF1 (31-65 GHz)	0.10
9.	EHF2 (65-275 GHz)	0.05

- (b) Short term charges for new microwave links depending on date of Installing will be applicable as follows:

SL.	Date of Installation	Percentage
1.	January-March	100%
2.	April-June	75%
3.	July-September	50%
4.	October-December	25%

- (c) The Licensee shall follow this same CF table for calculating 2G, 3G and 4G/LTE spectrum charges with 2G, 3G and 4G/LTE subscribers respectively. Those subscribers shall be considered 4G/LTE subscribers whose profiles are updated for 4G/LTE subscription. Similarly, those subscribers shall be considered 3G subscribers whose profiles are updated for 3G subscription, but not 4G/LTE subscriptions. All other subscribers shall be considered as 2G subscribers. A subscriber shall be considered active on a particular day if the subscriber performed any activity or consumed any service within previous 90 Gregorian calendar days. This definition of subscriber shall supersede all the definitions given or agreed earlier.

For paying the quarterly access spectrum fees in advance, the Licensee shall use the active subscriber base as on the last date of each quarter. After the year-end, the Licensee shall recalculate the annual access spectrum fee with the active subscriber base as of the last day of the year and reconcile with the total access spectrum fee paid for last four quarters. The Licensee shall pay the additional fee within 90 Gregorian calendar days from the year-end. If the Licensee made overpayment of the access spectrum fee, the Licensee can adjust the paid amount in the next quarterly payment.

- (d) The Licensee shall calculate the distance between two coordinates $u(\phi_1, \lambda_1)$ and $v(\phi_2, \lambda_2)$ of microwave antenna as designated with latitude (ϕ) and longitude (λ) with the following Haversing formula:

$$\text{Distance} = 2 * r * \arcsin \sqrt{\sin^2(\Delta\phi/2) + \cos\phi_1 * \cos\phi_2 * \sin^2(\Delta\lambda/2)}$$

Where,

$$\Delta\lambda = \lambda_2 - \lambda_1,$$

$$\Delta\phi = \phi_2 - \phi_1$$

r is earth's radius (mean radius=6,371 Km), and ϕ and λ are in radians.

The Licensee shall submit to the Commission the coordinates (latitude, longitude) of all microwave antennas with the quarterly spectrum fee payment. The Licensee shall submit to the Commission the microwave link database with all the fields to calculate the microwave spectrum fee in Excel format in DVD.

- (e) In case of using new access frequency for a fractional year in the first year, the Licensee shall follow the short-term charge policy of new microwave links.

- 27.08 **Taxes and VAT:** All kinds of Taxes and VAT shall have to be paid as set out by the competent authority of the Government.
- 27.09 The fees and charges as described above shall have to be paid within the stipulated time. The due amount may be paid within 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, necessary actions shall be taken by the Commission as per the provisions of the License and the Act.
- 27.10 The foreign partner of the applicant shall invest foreign currency directly equal to its percentage of ownership and no loan from any Bangladeshi Scheduled Bank/Financial Institution/Leasing Company can be raised for the foreign part of the investment to pay spectrum assignment fee under this guideline.

28 MISCELLANEOUS

The new entrant and the existing Cellular Mobile Phone Services Operators are permitted to seek for 100% of FDI (Foreign Direct Investment) or Foreign Partnership or Joint Venture or investment from NRB (Non-Resident Bangladeshi) for the development, operation and roll out of 2G, 3G and 4G/LTE Services. The foreign partner shall invest foreign currency directly equal to its percentage of ownership and no loan from any Bangladeshi Schedule Bank/Financial Institution/Leasing Company can be raised for the foreign part of the investment to pay license fee, spectrum acquisition fee and to purchase equipment (hardware and software) and services from abroad during the roll-out period. The rules, regulations and instructions of Bangladesh Bank, Board of Investment and any other competent authority of the Government shall be binding to the licensee regarding the operational financing.

29 ADDRESS FOR CORRESPONDENCE

All correspondence relating to this guideline, Investors' Conference, submission of application documents, Auction procedure and assignment of spectrum shall be duly marked with '**E-GSM (900 MHz) Auction**' and should be addressed to:

Director
Spectrum Division
Bangladesh Telecommunication Regulatory Commission
IEB Bhaban, Ramna, Dhaka-1000, Bangladesh
Phone: +88029553710, Fax: +88029556677, +88029513391
E-mail: dirsm@btrc.gov.bd

30 BIDDING AND AUCTION PROCESS TIME TABLE

The tentative timetable for submission of proposals/offers, auctions and awarding of spectrum has been set as shown in the table below. However, the Commission reserves the right and authority to change the overall timetable of the bidding and auction, taking into account of the circumstances prevailing at that time.

Indicative Timetable		
SL	Description	Date
1.	Invitation for Application	09 July 2017
2.	Submission of the queries (if any)	12 July 2017
3.	Pre-Bid Meeting	16 July 2017
4.	Submission of Application to the Commission	23 July 2017
5.	Publish list of qualified Applicants for the Auction	25 July 2017
6.	Consultation on Auction Procedure	27 July 2017
7.	Submission of Bid Earnest Money	02 August 2017
8.	Letter of acceptance/rejection to participate in the bidding	07 August 2017
9.	Mock Auction	09 August 2017
10.	Auction	10 August 2017
11.	Notification to winning applicants	10 August 2017

Part D:

APPENDICES

APPENDIX-1

BANGLADESH TELECOMMUNICATION REGULATORY COMMISSION

APPLICATION FORM/LETTER OF TRANSMITTAL

**For the assignment of spectrum from ...2100MHz, 1800MHz &E-GSM (900 MHz)... band to
Build, Operate and Maintain Cellular Mobile Phone Network for ...2G, 3G and 4G/LTE...
services in Bangladesh**

Information Requirement

SL.	Information required	Information furnished/compliance
1.	Letter of Application (in letterhead pad).	
	Name, date and place of incorporation, from the companies register.	
	Business Address and Registered Office Address and telephone number, facsimile number, e-mail and website details.	
2.	Business or Company's structure details The applicant shall submit copies of certified true copies of the corrected version of Memorandum and Articles of Association and Certificate of Incorporation/registration from the Registrar of Joint Stock Companies and Firms and also submit a clearance certificate of Income Tax paid. Copies of the certificate of Board of Investment (BoI) should be submitted with the application.	
3.	i) List of the license(s) from the Commission ii) Disclosure of any criminal record or personal bankruptcy of any person.	
4.	i) Shareholders of Applicant(s) ii) Applicant(s) must provide information concerning their identity and composition of the Company. The shareholder details, any changes of shareholders after acquisition of the license. Relevant documents such as form XII, Form 117 etc shall have to submit to the Commission.	
5.	Statement of Income Tax, VAT and other taxes already provided during License tenure with supporting documents.	
6.	History of non-compliance or violation of Act/Regulation/License condition/Circulars/ Directives/Orders of the Commission.	
7.	Information of assigned access and microwave frequency and RF plan.	
8.	Affidavit as mentioned in Appendix-2	

9.	Letter of Authorization and Declaration as mentioned in Appendix-3	
10.	Documents as per Appendix-4 (in case of new entrant)	

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 spectrum assigned by this auction may be cancelled.

I/we also declare that I/we have read, understood and do hereby undertake to comply with all the terms and conditions outlined or referred to in this Guideline for the Assignment of this Spectrum and those terms and conditions included in the Spectrum Assignment Letter, if this application is approved by the Commission.

Signature, Name & Designation & Company Stamp

Date:

APPENDIX-2

Pro-Forma of 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/corporation/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 Spectrum Assignment referred to below (the Applicant(s)), a citizen of the Peoples Republic of Bangladesh.

2. That personally, and as _____ for and on behalf
(Official Capacity)
of the Applicant(s) he/she hereby certifies:

- a) That all statements made in the Applicant(s)'s application for the Spectrum Assignment from ...2100MHz, 1800 MHz, E-GSM (900 MHz)... band 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 _____ (name) _____ for the Spectrum Assignment from ...2100MHz, 1800 MHz, E-GSM (900 MHz)...band 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 any of its directors or partners (where the Applicant(s) is a company):
 - (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) He/it has any outstanding dues to the Commission;
 - (viii) if prosecution is going on against the applicant(s) or its owner(s) or shareholder(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 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 Authorised Representative/Attorney
 as or on behalf of the Applicant(s)

Witnesses

1. _____ 2. _____

Subscribed and sworn to before me

this _____ day of _____ 20 ____ at _____.

 Notary Public

APPENDIX-3
LETTER OF AUTHORIZATION AND DECLARATION/ POWER OF ATTORNEY
[Letterhead of the Company]

I, _____, Company Secretary of *[HERE GIVE FULL NAME AND ADDRESS OF THE APPLICANT ENTITY]* (the “Company”), do hereby certify that the following is a true and correct copy of a resolution duly adopted at a meeting of the Board of Directors of the Company duly convened and held on _____, and that such resolution has not been modified, rescinded or revoked, and is at present in full force and effect;

RESOLVED THAT the Company be and is hereby authorized to apply for the grant of *[here describe the nature of the License being applied for]*, (“the spectrum”) and to comply with all requirements of its application process and the terms of the License, if any, granted as a consequence;

FURTHER RESOLVED THAT Mr. _____ bearing National ID/Passport No _____ resident of _____ *[here give designation of the appointee]* be and is hereby appointed as an attorney of the Company (“the Attorney”), to be and to act as our lawful attorney, for us, in our name and on our behalf to exercise any and all of the powers herein contained, that is to say:

1. to sign, execute or authenticate all applications or other documents required to be submitted to Bangladesh Telecommunication Regulatory Commission (herein after the “BTRC” or “Commission”) and to act for and on our behalf in all matters relating to the spectrum assignment from ...2100MHz, 1800 MHz, E-GSM (900 MHz)... band.
2. to fulfill all the requirements and formalities as may be required to be fulfilled for the grant of the spectrum applied for, on behalf of the Applicant.
3. to attend all hearings before the Commission and to provide all necessary documents and material information or assistance as may be required by the Commission for its satisfaction to issue the spectrum applied for by the Applicant;
4. to sign all applications, correspondence, statements or other documents submitted to the Commission on behalf of the Applicant relating to issuance of the spectrum applied for, by the Applicant;
5. to execute all such documents and undertake all such acts as may be necessary in order to comply with the directions, decisions, decisions and orders of the Commission relating to issuance of spectrum applied for by the Applicant;
6. and generally to do all such acts as may be necessary or incidental for the grant of the spectrum applied for by the Applicant.

Company Secretary

APPENDIX-4

[Clause of the Guidelines]

EVALUATION CRITERIA FOR THE NEW ENTRANT

The evaluation/short listing criteria are as follows:

No.	Item Description	Total Marks
1.	<p>Experience Description of the applying organization. Experience/ knowledge of the company or its shareholders, directors, employees, partners in the field of Cellular Mobile Phone Services, other Telecommunications services, Management, Finance, Marketing, Industries, Business, etc.</p>	10
2.	<p>Global footprint of Foreign Shareholders with supporting documents</p> <ul style="list-style-type: none"> a. Year of experience in cellular mobile phone services globally and list of countries where 2G/3G/4G/LTE cellular mobile services are providing b. System network diagram and technical system configuration of the globally installed 2G/3G/4G/LTE cellular mobile systems c. Capacity of the installed 2G/3G/4G/LTE cellular mobile systems globally (i.e. core, backbone, access, HLR, VLR, IN, etc.) d. Number of 2G/3G/4G/LTE cellular mobile subscribers globally e. Description of 2G/3G/4G/LTE related value added services (VAS) offering in different countries f. Spectrum holding positions in different spectrum bands globally 	30
3.	<p>Project Management and Implementation Plan</p> <ul style="list-style-type: none"> a. System Network Block diagram with description b. Implementation and management plan (detail of all aspects should be covered) c. Implementation schedule (Gantt chart) d. Contingency and backup plan description for timely project implementation 	10
4.	<p>Organogram and Management of the Entity</p> <ul style="list-style-type: none"> a. Organization chart b. Brief responsibility (job description) of personnel and work groups as per the organization chart c. Provide details of key Personnel for following fields <ul style="list-style-type: none"> i. Management & Administration ii. Technical & Operations iii. Financial iv. Marketing, Sales & Customer Care 	10
5.	<p>Technical & System Design</p> <ul style="list-style-type: none"> a. System network diagram with description b. Technical system configuration including technical specification of major equipment. c. Connectivity with other Licensee d. Detail system redundancy. e. Reporting, Monitoring & LI Compliance detail. 	15

	<ul style="list-style-type: none"> f. Connectivity with BTRC and NTMC/LEA. g. Operation Support h. System and Services Availability i. Customer support j. QoS provisioning and ensuring k. Measures to reduce harmful radiation 	
6.	<p>Rollout</p> <p>Rollout plan according to the provisions of the different licenses to to bring all the areas of the country under high speed broadband network and to fulfill the faster growing voice and data market demand by using the efficient use of spectrum.</p>	5
7.	<p>Financial</p> <ul style="list-style-type: none"> a. Details of financial analysis as per technical, operations and marketing plan. This shall include total project cost and cost financing pattern, assumptions for financial analysis, together with projected five years working capital, estimated total annual gross revenue, cost of services, cost of administration and marketing, Profit and Loss calculation, IRR, PBP, DSCR calculation, etc. b. Total proposed investment for the project, ratio of own financing and other sources c. Supporting documentation regarding source of fund mobilization (bank comfort letter, equity source, other financial source detail) 	10
8.	<p>Risk Management Plan</p> <ul style="list-style-type: none"> a. Risk identification b. Risk response strategy & Plan 	5
9.	<p>CSR and Capacity Building</p> <ul style="list-style-type: none"> a. Description the business strategy of the organization. How the proposed strategy will contribute to Bangladesh's Telecom sector and subscribers. b. Description how the applicant proposes to undertake social commitments and participate in nation building. c. Description how the applicant enhance the way of capacity building in multi stakeholders' platform. 	5
Total Marks=		100

APPENDIX-5

GENERIC FORM OF RADIO COMMUNICATIONS APPARATUS LICENSE



**BANGLADESH TELECOMMUNICATION
REGULATORY COMMISSION
IEB BHABAN, RAMNA, DHAKA-1000**

**RADIO COMMUNICATIONS APPARATUS LICENSE FOR
TECHNOLOGY NEUTRAL SPECTRUM**

ISSUED

TO

.....

UNDER

THE BANGLADESH TELECOMMUNICATION REGULATION ACT, 2001

ON THE

..... DAY OF20.....



**BANGLADESH TELECOMMUNICATION
REGULATORY COMMISSION**
IEB BHABAN, RAMNA, DHAKA-1000

**RADIO COMMUNICATIONS APPARATUS LICENSE FOR
TECHNOLOGY NEUTRAL SPECTRUM**

LICENSE NO: **DATE:**

In Exercise of the Powers under section 35 of the
Bangladesh Telecommunication Regulation Act, 2001 (Act No. XVIII of 2001)

BANGLADESH TELECOMMUNICATION REGULATORY COMMISSION

is pleased to issue this License in favour of

.....
represented by its CHAIRMAN/MD/CEO having registered office at
.....

as a
Cellular Mobile Phone Services Operator

in Bangladesh
whereby it is authorized
to establish, maintain and operate the Cellular Mobile Phone Systems and to provide services as
specified in this License
ON NON-EXCLUSIVE BASIS
under the terms and conditions given in the following pages of License
including the schedules annexed hereto.

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**BANGLADESH TELECOMMUNICATION
REGULATORY COMMISSION**
IEB BHABAN, RAMNA, DHAKA-1000

No:.....

Date: - -20...

RADIO COMMUNICATIONS APPARATUS LICENSE
FOR
TECHNOLOGY NEUTRAL SPECTRUM

(Issued under section 55 of the Bangladesh Telecommunication Regulation Act, 2001)

Whereas in pursuance to the “...(2G/3G/4G/LTE)...., Cellular Mobile Phone Services Regulatory and Licensing Guidelines, 20.....” (No., Date:)

for Bangladesh Telecommunication Regulatory Commission (Commission) require to issue License for establishing, operating and maintaining(2G/3G/4G/LTE).... Cellular Mobile Phone Services in Bangladesh.

And whereas by application dated, the Chairman/CEO/MD/CTO has prayed for a License to establish, operate and maintain Radio Communications Apparatus.

And whereas the Commission upon consideration of the application has decided to grant/award such License to the applicant.

Now, therefore, in exercise of the powers under section 55 of the Bangladesh Telecommunication Regulation Act, 2001 Bangladesh Telecommunication Regulatory Commission is pleased to issue-

LICENSE

To

.....represented by its Chairman/CEO/MD/CTO having its registered office at.....

.....
to Operate Radio Communications Apparatus for technology neutral spectrum for establishing, operating and maintaining the(2G/3G/4G/LTE).... Cellular Mobile Phone Services network throughout Bangladesh and provide(2G/3G/4G/LTE).... Cellular Mobile Phone Services to subscribers, subject to the terms and conditions laid down hereinafter.

1. DURATION OF LICENSE

The duration of the Licenses, shall initially be for a term of 15 (fifteen) years. Upon expiry of the initial term, the License may be renewed for subsequent terms, each of 5 years in duration, subject to the approval from the Government, payment of necessary fees and charges and to such terms and conditions, as may be specified herein and/or by the by the Government at the time of each renewal.

2. FEES AND CHARGES

- 2.01 The Licensees shall pay annual spectrum fee without any deduction to the Commission as mentioned below. The fees are excluding of fees, charges and taxes imposed by any other competent authority of the Government.

Annual Spectrum Fees/Price for Access Frequency	As per the Spectrum formula as mentioned below
Annual Spectrum Fees/Price for Microwave Frequency	As per the Spectrum formula as mentioned below

The Licensee, after the payment of the spectrum assignment fee, shall pay annual spectrum fees for both Access and Micro Wave frequencies according to the formula as stated in Clause No. 2.03. The annual spectrum fees shall be paid on a quarterly basis within the first 10 days at the end of each quarter in advance. The total amount shall be reconciled on an annual basis based on the Licensee's audited accounts for that year and if any underpaying found, 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 adjust any excess amount against quarterly payments with the approval of the Commission in the next year.

- 2.02 The fees and charges as described in Clause No. 2 shall have to be paid within the stipulated time. The due amount may be paid within 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, necessary actions shall be taken by the Commission as per the provisions of the License and the Act.

2.03 Annual Spectrum Fees and Charges

- (a) The spectrum charges (excluding VAT & Tax) shall be calculated by using the following formula:

$$\text{Spectrum charges in BDT} = \text{STU} \times \text{CF} \times \text{BW} \times \text{AF} \times \text{BF}$$

Where, (i) STU = Spectrum Tariff Unit BDT 70.00 per MHz per Sq. Km.

(ii) CF = Contribution Factor for Access Frequency has been fixed considering assignment of frequency, use of assigned frequency and subscriber.

SL.	Subscriber base related to use of frequency (lower limit inclusive & upper limit exclusive)	CF
1.	Up to 2 million	0.7
2.	2 million to 5 million	1.2

3.	5 million to 10 million	1.7
4.	10 million to 15 million	2.2
5.	15 million to 20 million	2.7
6.	20 million to 25 million	3.2
7.	25 million to 30 million	3.7
8.	30 million to 35 million	4.2
9.	35 million to 40 million	4.7
10.	40 million to 45 million	5.2
11.	45 to 50 million	5.7
12.	50 to 55 million	6.2
13.	55 to 60 million	6.7
14.	60 to 65 million	7.2
15.	65 to 70 million	7.7
16.	70 million and above	8.0

(iii) CF= Contribution Factor for Microwave Frequency = 1

(iv) BW = Bandwidth Assigned for Access Frequency in MHz

(v) BW = Bandwidth occupied for Microwave Frequency in MHz

(vi) AF = Area Factor for Access Frequency = 1,47,570 Sq. km.

(vii) AF = Area Factor for Microwave Frequency Point to Point link = Link Length²
x 0.273 (Minimum Distance for link length shall be considered from 10 km)

(viii) BF = Band Factor:

SL.	Band	BF
1.	VLF/LF/MF (3-3000 kHz)	1.00
2.	HF (3-30 MHz)	1.50
3.	VHF (30-300 MHz)	1.00
4.	UHF1 (300-806 MHz)	0.75
5.	UHF2 (806-2690MHz)	0.50
6.	SHF1 (2.69-16 GHz)	0.25
7.	SHF2 (16-31GHz)	0.15
8.	EHF1 (31-65 GHz)	0.10
9.	EHF2 (65-275 GHz)	0.05

(b) Short term charges for new microwave links depending on date of Installing will be applicable as follows:

SL.	Date of Installation	Percentage
1.	January-March	100%
2.	April-June	75%
3.	July-September	50%
4.	October-December	25%

(c) The Licensee shall follow this same CF table for calculating 2G, 3G and 4G/LTE spectrum charges with 2G, 3G and 4G/LTE subscribers respectively. Those subscribers shall be considered 4G/LTE subscribers whose profiles are updated for 4G/LTE subscription. Similarly, those subscribers shall be considered 3G subscribers

whose profiles are updated for 3G subscription, but not 4G/LTE subscriptions. All other subscribers shall be considered as 2G subscribers. A subscriber shall be considered active on a particular day if the subscriber performed any activity or consumed any service within previous 90 Gregorian calendar days. This definition of subscriber shall supersede all the definitions given or agreed earlier.

For paying the quarterly access spectrum fees in advance, the Licensee shall use the active subscriber base as on the last date of each quarter. After the year-end, the Licensee shall recalculate the annual access spectrum fee with the active subscriber base as of the last day of the year and reconcile with the total access spectrum fee paid for last four quarters. The Licensee shall pay the additional fee within 90 Gregorian calendar days from the year-end. If the Licensee made overpayment of the access spectrum fee, the Licensee can adjust the paid amount in the next quarterly payment.

- (d) The Licensee shall calculate the distance between two coordinates $u(\phi_1, \lambda_1)$ and $v(\phi_2, \lambda_2)$ of microwave antenna as designated with latitude (ϕ) and longitude (λ) with the following Haversing formula:

$$\text{Distance} = 2 * r * \arcsin \sqrt{\sin^2(\Delta\phi/2) + \cos\phi_1 * \cos\phi_2 * \sin^2(\Delta\lambda/2)}$$

Where,

$$\Delta\lambda = \lambda_2 - \lambda_1,$$

$$\Delta\phi = \phi_2 - \phi_1$$

r is earth's radius (mean radius=6,371 Km), and ϕ and λ are in radians.

The Licensee shall submit to the Commission the coordinates (latitude, longitude) of all microwave antennas with the quarterly spectrum fee payment. The Licensee shall submit to the Commission the microwave link database with all the fields to calculate the microwave spectrum fee in Excel format in DVD.

- (e) In case of using new access frequency for a fractional year in the first year, the Licensee shall follow the short-term charge policy of new microwave links.

3. ASSIGNMENT OF SPECTRUM

3.01 Access Frequency:

3.02 Microwave Frequency (Independent of Technology Neutrality):

4. REASSIGNMENT OF FREQUENCIES

4.01 The Commission may, in order to comply with international radio spectrum co-ordination requirements, ITU assignments or reassignments, or generally in the course of regulating the radio spectrum in the best interests of Bangladesh, reassign radio spectrum assigned to the Licensee or require the Licensee to surrender its rights in respect of radio spectrum assigned to it and which is not reasonably required for the continued operation of the Licensed Services. In such cases, the Licensee shall be entitled to consult with the Commission before any such action is taken and the Licensee shall be entitled to reasonable time and, where

applicable, the assignment of appropriate alternative radio spectrum, to permit the Licensee to carry on its business without unreasonable costs or disruptions.

- 4.02 If, pursuant to Sub-Clause No. 4.01, the Commission requires that the Licensee change the radio spectrum assigned to it, or surrender its rights in respect of radio spectrum assigned to it, and the Commission re-assigns the radio spectrum to another Operator within three years after the date established by the Commission as the last date that the Licensee may use any apparatus or device that emits or receives any radio communication in the band or the radio spectrum, the Commission shall require the other Operator to compensate the Licensee for its reasonable costs incurred as a result of such change or surrender, as determined by the Commission. Detail procedure for re-farming will be provided by the Commission including but not limited to compensation mode etc.

5. RADIO APPARATUS

The Licensee shall operate radio communication apparatus and devices in compliance with all requirements of the Commission pertaining to emissions, frequencies of operation, BTS/e Node B site clearance, technical characteristics, power and aerial characteristics.

6. USE OF SPECTRUM

The Licensee shall comply with the following terms and conditions relating to radio spectrum assigned to the Licensee:

- 6.1 The Licensee shall report to the Commission such information as each of them may require concerning the assigned radio spectrum and its use;
- 6.2 The Licensee shall only use the assigned radio spectrum in its own operations and it shall not lease, sub-license, allocate, assign or otherwise make available the use of the assigned radio spectrum to another Operator;
- 6.3 The Commission shall have the right, exercisable at any time, to terminate the assignment to the Licensee of the radio spectrum described in ...(2G/3G/4G/LTE)... Cellular Mobile Phone Services Operator License if the Commission determines that the Licensee is not complying with the requirements applicable to such spectrum and which are set forth in the provisions of the Radio Communications Apparatus License;
- 6.4 The Licensee shall use assigned radio spectrum in compliance with all national, regional, inter Governmental and international arrangements in effect from time to time that are designed to reduce radio interference among service providers;
- 6.5 At all times, the Licensee shall implement all commercially reasonable measures to optimise the efficiency and effectiveness of its use of the radio spectrum assigned to it;
- 6.6 Unused spectrum assigned to the Licensee may be withdrawn, if the Licensee fails to commence its Services within one year of the Effective Date.

7. TECHNOLOGY NEUTRALITY OF SPECTRUM

Existing Cellular Mobile Phone Operator(s) in Bangladesh who will obtain this License, shall convert its other remaining spectrum in other bands into technology neutral spectrum

by paying conversion fees and/or charges with applicable VAT, Taxes and by following the terms, conditions, fees, charges and time frame provided by the Commission.

8. CELL PLANNING

The network should be designed by following the ITU-R Recommendations and Reports specified for International Mobile Telecommunications (IMT) with sufficient number of small cell (Pico/Hotspot/Femto cell) in the home, office and public area to ensure the adequate network capacity.

9. QUALITY OF SERVICE OBLIGATION

- 9.01 The Licensees shall provide an acceptable quality of service as per the Decisions/Directives/Regulation of the Commission. The Licensee shall have the obligation to ensure the quality of services as stated in the Regulations/Directives/Instructions/Orders/Guidelines for QoS issued by the Commission from time to time.
- 9.02 The Licensee shall ensure that voice and data traffic passes through its network with minimal interference and/or loss and without unauthorized access.
- 9.03 The Licensee shall achieve the QoS standards as set out by the Commission from time to time based on the recommendations/standards of International Telecommunication Union (ITU), other standard organizations, best practices 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.
- 9.04 The Licensee shall provide Cellular Mobile Phone services as per the definition mentioned in concerned guidelines. The minimum data speed will be decided by the Commission from time to time and shall be binding to the Licensee.
- 9.05 The Licensee shall strictly follow and comply with the international standard set forth by the ITU or any other concerned international or regional authority in order to install e Node B. Moreover, the Licensee shall strictly follow and comply with all applicable regulations, guidelines, decisions and directions of the Commission issued from time to time with regard to standard practice relating to install e Node B.
- 9.06 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. The Licensee shall submit to the Commission monthly reports on its compliance with each of the QoS standards within the first five working days of each Gregorian calendar month, in such form as may be stipulated by the Commission.
- 9.07 If the Licensee fails to meet the QoS standards, the Commission may take necessary legal actions and also may impose the penalties set out by the Commission from time to time.
- 9.08 The Licensees are encouraged to ensure spectral efficiency without reducing the QoS. The QoS shall be monitored by the Commission from time to time.
- 9.09 The Licensee may be allowed any exception beyond its reasonable control such as fire, flooding and industrial disputes, provided that it promptly notifies the Commission and/or

where applicable the other Licensees, of the facts and circumstances giving rise to such inability to comply and takes any commercially reasonable action necessary to correct any fault or avoid any such circumstances so as to re-establish compliance with the QoS standards as soon as possible.

- 9.10 The Commission may carry out tests on the quality of the Licensed Services and the Licensed System and the Licensee shall extend full co-operational and assistance for the purpose including provision of test instruments and equipment.
- 9.11 The Licensee shall install the equipment for monitoring its QoS as directed by the Commission from time to time.

10. HEALTH AND ENVIRONMENTAL HAZARDS

- 10.01 The Licensee shall ensure the use of energy efficient, environmental friendly network equipment (Green Telecom) and also ensure proper safety for health hazard issues nearer to their BTS and other locations of installations.
- 10.02 The Licensee shall ensure the use of green technology (in terms of renewable energy, low power consumption etc.) in at least 10% (ten percent) of its Access Nodes (e.g. BTS, e Node B, IBS, Microwave antennas etc.) within 5 (five) years and at least 20% (twenty percent) of the same within 10 (ten) years from the issuance of the License.
- 10.03 The Licensee shall have the obligation to stop all types of radiation which are harmful to the environment and public health. The Licensee shall follow the existing guideline produced by The International Commission on Non-Ionizing Radiation Protection (ICNIRP) and any other related UN organizations for their installed radio equipment (i.e. BTS, e Node B, IBS, microwave antennas etc). The Licensee shall also comply with the directives/instructions/guidelines/decisions regarding health and environmental hazards issued by the Commission from time to time.
- 10.04 The Licensee shall have the equipment for measuring harmful radiation from their installed radio equipment (i.e. BTS, e Node B, IBS, microwave antennas etc). If the Licensee fails to meet the ICNIRP and any other related UN organizations' standards, the Commission may take necessary legal actions and impose the penalties.

11. MISCELLANEOUS

- 11.01 This License is subject to payment of necessary fees and charges, and furnishing of necessary documents in a timely manner.
- 11.02 The Licensee is required to inform the Commission when any links have been established.
- 11.03 Assigned frequency and radio apparatus or any right therewith are not transferable wholly or partly, by any means whatsoever, and, therefore, cannot be sold, let, pledged, hypothecated, mortgaged, charged or encumbered or in any other manner transferred by the Licensee to any person or institution or Company or organization. Any such charge, transfer, hypothecation, pledge or encumbrance of these equipment and any agreement, power of attorney or any other document executed in connection with such desired transaction shall be void *ab initio* and, hence, shall be without lawful authority and of no legal effect. This provision shall survive termination or expiration of this license.

- 11.04 Only equipment models or types approved by the Commission shall be used in licensed radio communications networks and systems. Where an equipment model or type has not been approved, clearance for the use of such equipment must be obtained from the Commission.
- 11.05 All synthesised equipment shall be programmed by the manufacturer on the assigned frequencies prior to Commissioning.
- 11.06 ITU-R recommendations shall generally apply to the use of radio communications equipment.
- 11.07 If interference or other problems result from the operation of a licensed station the Commission reserves the right to withdraw the License and require the station to cease operations.
- 11.08 The Licensee shall inform the Commission, in writing, regarding any problems arising from the use of assigned frequencies.
- 11.09 The Licensee shall require to co-ordinate the use of assigned frequencies with other spectrum Licensee / users, if necessary.
- 11.10 Clearance Certificate from appropriate authority will be required if antenna height is more than the allowable limit as declared by any competent authority.
- 11.11 The coverage area of any station shall not exceed the licensed geographical area for which necessary payments are to be made to the Commission.
- 11.12 Frequencies may be reused subject to any conditions in other clauses dealing with notification and co-ordination.
- 11.13 The assigned frequency shall be cancelled, if it is not used within 01 (One) year from the date of assignment.
- 11.14 The Licensee will be allowed to provide services with this spectrum according to the conditions of the 2G, 3G, 4G/LTE Cellular Mobile Phone Services Operator License.
- 11.15 If any rearrangement in the assignment within the band is required in the future the Commission shall consult with the affected Licensees and the equipment shall have the provision to readjust according to that rearrangement.
- 11.16 The Government reserves the right to make any change in the charges or levies from time to time and the Licensee shall abide by the decision of the Commission.
- 11.17 The Licensee shall not import/purchase any Telecommunication/Radio apparatus for its network without taking prior permission from the Commission.
- 11.18 The Licensee must take prior permission from the Commission before installing BTS/eNodeB within 8 km inside from the international border.
- 11.19 The Radio apparatus and Spurious Emission must conform to ITU recommendation.

- 11.20 The Commission reserves the right to cancel the assignment of the frequency, wholly or partly, for the reasons of National Security or National Interest or any other reasons whatsoever as the Commission deems fit and proper within the scope of Bangladesh Telecommunication Regulation Act-2001.
- 11.21 Out of the assigned frequency band transmission is strictly restricted to avoid interference and the Licensee shall ensure it.
- 11.22 The Commission reserves the right to inspect the telecommunication installations without prior notice.
- 11.23 The Licensee shall abide by all the terms and conditions as mentioned in the 2G/3G/4G/LTE Cellular Mobile Phone Services Operator License.
- 11.24 The Licensee shall keep the necessary guard band between the operators with mutual understanding basis among the operators.
- 11.25 The Commission reserves the right to temporarily suspend the Auction of spectrum of any of the 2100, 1800 and 900 MHz bands if any legal complicity arises. In such cases, the Commission reserves the right to arrange the Auction of rest of the band(s).
- 11.26 The provisions of Regulatory and Licensing Guidelines for 2G Cellular Mobile Phone Service Operator License bearing No. BTRC/LL/Mobile/License Renewal (342)/ 2009-563, Dated: 11-09-2011 and Regulatory and Licensing Guidelines for 3G Cellular Mobile Phone Service Operator License bearing No. BTRC/LL/3G Guidelines (394) Part-1/2012-148, Dated: 14-02-2013 shall prevail if the Licensee have 2G and 3G Cellular Mobile Phone Services Licenses respectively. In case of any inconsistency arises between Regulatory and Licensing Guidelines for 2G, 3G and 4G/LTE Cellular Mobile Phone Service Operator License, the provisions of Regulatory and Licensing Guidelines for 4G/LTE Cellular Mobile Phone Service Operator License shall prevail.
- 11.27 The Government 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 Government shall be final and binding on the Licensee.
- 11.28 Cancellation of License for any reasons whatsoever shall not prejudice any other legal rights or remedies of the Commission conferred by the Act or any other law for the time being in force or the License. Cancellation shall not relieve the Licensee from any obligations accrued and due under law or this License.
- 11.29 The Licensee shall comply with all terms and conditions of this License, applicable legislation including the Bangladesh Telecommunication Regulation Act, 2001 and any applicable subsidiary legislation, Government policies, guidelines, Directives, Instructions, Orders, Circulars, Decisions etc. issued by the Commission from time to time.
- 11.30 Violation of any of the conditions of the License shall render the License to be cancelled.
- 11.31 The Commission may, in any of the events specified in Section-55 of the Act, suspend or cancel the License issued by the Commission and/or imposes fine as mentioned in the Act.

11.32 The Commission may cancel the License and the Licensee shall be liable for action as per the Bangladesh Telecommunication Regulation Act, 2001 on the following grounds including but not limited to –

- (i) that any information furnished in the Application form for obtaining the License is found incorrect/false which is mala fide,
- (ii) that the Applicant obtain the renewal License hiding the information as mentioned in the guidelines and the Act and the reason for not providing the information is not acceptable,
- (iii) that required fees and charges are not paid by the Licensee as per the terms and conditions of the Radio Communications Apparatus License for Technology Neutral spectrum (for 2G, 3G, 4G/LTE Services),
- (iv) that the Licensee has disclosed or is involved with any discloser of any information to anybody/performing any illegal activities that may hamper National Security, Integrity, Sovereignty, Stability, and Harmony,
- (v) that National Security, Integrity, Sovereignty, Stability and Harmony is hampered by using the telecommunication infrastructure of the Licensee,
- (vi) that the Licensee violates or purports to violate any terms and/or conditions under this Guideline is / Any Regulations/ Directives/ Instructions/ Orders/ Circulars/ Decisions etc.
- (vii) that the Licensee violates any conditions of the Cellular Mobile Phone Services (2G, 3G, 4G/LTE) Operator License.

11.33 Unless repugnant to the context–

- (i) all headings are for convenience only and shall not affect the interpretation of the provisions of this License;
- (ii) the words importing the singular or plural shall be deemed to include the plural or singular respectively;
- (iii) any expression in masculine gender shall denote both genders;
- (iv) any reference in this License to a person shall be deemed to include natural and legal persons;
- (v) all references to legislation or License or directions issued by the Commission shall include all amendments made from time to time;
- (vi) the term ‘or’ shall include ‘and’ but not vice versa;
- (vii) any reference in this License to “writing” or “written” includes a reference to official facsimile transmission, official e-mail, or comparable means of communication;
- (viii) references to Clauses, Sub-Clauses, Annexure, Appendix and Schedule of Licenses are to Clauses, Sub-Clauses, Annexure, Appendix and Schedule to this guidelines, respectively.

- 11.34 This License shall be integral part of the “....(2G/3G/4G/LTE)...., Cellular Mobile Phone Services Regulatory and Licensing Guidelines, 20..... and vice-versa.
- 11.35 This License shall be governed by and construed in accordance with the laws of Bangladesh.
- 11.36 This License is issued with the approval of the appropriate authority.

Signed on thisday of, 20.....
for and on behalf of the
Bangladesh Telecommunication Regulatory Commission

Director
Spectrum Division
BTRC