BANGLADESH TELECOMMUNICATION REGULATORY COMMISSION

Instructions for Providing Service Through 2.4 and 5.7 GHz Band in Bangladesh

1. INTRODUCTION

- 1.1 In pursuant to its powers of the Bangladesh Telecommunication Regulation Act, 2001, the regulatory and operational instruction for 2.4 and 5.7 GHz band to the nation for establishing, operating and maintaining short range, low power and low/high speed digital wireless technologies in Bangladesh are being issued by the Bangladesh Telecommunication Regulatory Commission (BTRC).
- 1.2 It is a license exempted band, i.e., there is no charge for license and no exclusive allocation of spectrum for the utilization of this band. Moreover, there is no charge for the equipments/devices/stations/terminals on this band.
- 1.3 The short range devices which are permitted for use in Bangladesh are designed to operate over short range and at low power levels in accordance with ITU-R Recommendations (ITU-RSM.1538) and as well as other internationally recognized and industry based standards.
- 1.4 ISM stands for Industrial, Scientific and Medical and SRD stands for Short Range Devices as per FCC (USA) and ETSI (EU) standardization respectively. The band which is designed for short range, low power application is also known as ISM band and SRD band.

2. OBJECTIVES

These Instructions have been prepared to achieve the vision of "Digital Bangladesh-2021" of the Government. To materialize this vision, the objectives of these Instructions are mentioned below:

- 2.1 To provide a more liberal regulatory regime for users, manufacturers, operators, regulators, importers/vendors and suppliers in Bangladesh under these bands.
- 2.2 To promote broadband wireless access application through short range, low power and low/high speed digital devices in Bangladesh.
- 2.3 To encourage innovation and the use of digitalized devices under new technologies at all levels.
- 2.4 To introduce of these bands for National Information Infrastructure/ICT for short range, low power and low/high speed digital devices.

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3. LEGAL ISSUES

- 3.1 These Instructions, should be read in conjunction with other Acts, only subsequent legislation on other prevalent laws or sector policies framed by the government, rules, regulations, decrees, orders, decisions, instructions, directives and other document of general application issued by the Government or the Commission from time to time.
- 3.2 These Instructions may be withdrawn, revised, updated or amended from time to time to take into consideration various factors including, but not limited to, imminent threat to public health, grave natural calamity, and national security and statutory or court orders.
- 3.3 The Commission reserves the right to vary, change or amend its Instructions from time to time without any prior notice.
- 3.4 The Instructions shall be revised in every 5 years or when decided by the Commission to cope-up with the technological development and spectrum harmonization globally as per the recommendation of ITU.

4. ELIGIBILITY

- 4.1 Any personal, private, corporate, public and national entity may use this band for short range, low power and low/high speed digital devices.
- 4.2 All license/non-licensed service providers, commercial/non-commercial business entities, communication/non communication operators, manufacturers, consumers/end users can use this band for short range, low power and low/high speed digital devices.
- 4.3 Cellular Phone operators shall use this band to serve their customers all over Bangladesh except Dhaka and Chittagong city Corporation. In the mentioned city corporation areas cellular phone operators may provide the service jointly with the help of an ISP network basing on revenue sharing model duly approved by the commission.
- 4.4 The service providers shall obtain any other necessary approvals as may be required by other competent authorities in Bangladesh in accordance with the applicable laws of the land.

5. SPECTRUM ALLOCATION

- 5.1 The license exempt spectrum encourages innovation and dynamism within telecom sector. BTRC declares 2.4000-2.4835 GHz (83.5 MHz) and 5.725-5.875 GHz (150 MHz) bands for this purpose. The total bandwidth of this band is 233.5 MHz. This band shall be utilized for ISM application as well as error-tolerant communication application. The Commission does not regulate the ISM application, e.g., microwave oven, sulfur plasma lighting etc. and RFID applications.
- 5.2 Access to the spectrum will be on shared basis. There will be no exclusive assignment to any entity by the Commission.

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6. TRANSMITTED POWER OUTPUT CONDITION

The maximum transmitted power output at antenna is limited to 1 watt/+30 dBm or maximum Effective Isotropic Radiated Power (EIRP) is 4watt/+36 dBm for equipment/devices under this band

7. INTERFERENCE

- 7.1 These equipments/devices shall only be permitted for terrestrial use and shall operate on non-protection basis from other authorized services in the same or adjacent bands.
- 7.2 The users in these bands shall not claim protection from interference and shall not cause interference to other licensed users in other bands. If such device causes harmful interference, the operation must be stopped and can only be brought into operation again after special measures are taken to eliminate such interference. These short ranges, low power equipments/devices are unprotected from interfering with each other.

8. TYPE OF ENVIRONMENT

Equipments/devices shall be deployed under this band with the specific power output as mentioned in these Instructions for any type of environment such as indoor, outdoor, LOS, Non-LOS.

9. MODE OF OPERATION

Equipments/devices shall be deployed under this band with the specific power output as mentioned in these Instructions for any mode of operation such as Hotspot, Point-to-Point and Point-to-Multipoint link with technology neutrality.

10. TYPES OF NETWORK

Equipments/devices shall be deployed under this band with the specific power output as mentioned in these Instructions for any type of network such as Shared Wireless Access Protocol (SWAP), Wireless Personal Area Network (WPAN), Bluetooth, Wireless Home Area Network (WHAN), Small Office/Home Office (SOHO), Home Networking and Wireless Local Area Network (WLAN).

11. TYPES OF APPLICATIONS

The applications of this band are Non-Communication application (ISM application), Communication application (Wireless Network), RFID and other short range applications.

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12. FEES AND CHARGES

There shall be no charges/levies for radio license, spectrum utilization with specific power output (1 watt/EIRP 4 watt) and usages of equipment/devices as station/terminal for any entity but the entity providing commercial service shall have to obtain enlistment certificate from the Commission. There will be enlistment fee of Tk. 5000 for five years. The entity needs to pay form fee of Tk. 500 and processing fee of Tk. 5000 at the time of lodging the application.

All existing operators holding valid license and all enlisted vendors holding valid enlistment certificate from BTRC are exempted from the enlistment process. But they have to pay form fee and processing fee.

13. TYPE ACCEPTENCE PROCEDURE

- 13.1 Type Approval Process will be applicable for importing radio equipments radio equipments under these bands. But existing requirement of NOC for importation will continue till the type approval Guideline is approved.
- 13.2 Where necessary the manufacturer, operators, vendors, suppliers and importers shall be required to make a presentation to the Commission on the technology and services provided by the equipment under this band.

14. CONCLUSION

- 14.1 To get the benefit from the devices by grasping the contemporary technologies this instruction will help the users to enjoy the real wireless experience in an efficient manner. This will provide a more liberal regulatory regime for the stakeholders which in turns an important initiative to build Digital Bangladesh by 2021.
- 14.2 After publishing these instructions, all the previous directives as per references and any other documents related to the subject matter will be treated as null and void.

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