



THE PROPOSED BAND POLICY FOR THE 3600 – 3800 MHz AND 26 GHz BANDS

Information Memorandum

Consultation paper
August 2026

1. Introduction

- 1.1. Demand for broadband connectivity is growing rapidly, driven by digital transformation, cloud computing, smart applications, and emerging technologies, placing increasing pressure on existing radio-frequency spectrum resources.
- 1.2. The evolution of mobile networks and digital services requires additional spectrum to support higher data rates and greater network capacity. Millimeter-wave (mmWave) offers wide contiguous bandwidths for advanced wireless applications, including high-capacity 5G and fixed wireless access.
- 1.3. As mobile networks and digital services continue to advance, additional spectrum is needed to deliver very high data rates and expanded capacity. The 3.6 – 3.8 GHz and 26 GHz bands provide the large contiguous bandwidths required for high-capacity 5G services, fixed wireless access, and other advanced wireless uses.
- 1.4. Following the global identification of the 300–3800 MHz band for mobile services and the harmonisation of the 400–3600 MHz and 3600–3800 MHz ranges for IMT at WRC-15 and WRC-23, these bands have become widely used for broadband deployment. Uganda opened the 300–3600 MHz band for commercial use in 2023. Mid-band spectrum is now central to broadband expansion because it balances coverage and capacity, supporting the opening of the 600–3800 MHz range.
- 1.5. The 24.25–27.5 GHz range, commonly referred to as the 26 GHz band, was internationally identified for International Mobile Telecommunications (IMT) in the ITU Radio Regulations following the decisions of the 2019 World Radiocommunication Conference (WRC-19).
- 1.6. These bands provide large contiguous bandwidths that facilitate very high data throughput and support advanced wireless applications, including dense urban 5G deployments and fixed wireless access enterprise and private networks. The 3600–3800 MHz band has been identified as a strategic frequency range for deploying next-generation mobile networks and expanding national broadband capacity.
- 1.7. The band policies for the respective bands outline the technical and regulatory considerations that shall govern access to and use of the spectrum band in Uganda.
- 1.8. The authority to set this band policy and associated technical specifications is derived from among others, Sections 5(1)(c) and 25(1)(b) of the Uganda Communications Act, Cap 103 (the “Act”), the Uganda Communications (Licensing) Regulations with respect to radio

communication services and installation and operation of radio communication services' equipment.

2. Objective

This paper presents policies outlining the regulatory and technical requirements for the access and utilization of the 3 600 – 3 800 MHz and 26GHz bands in Uganda.

3. Band Usage

- 3.1. Under the international Table of Frequency Allocations, the 3 600 – 3 800 MHz, in ITU-R Region 1, is allocated on a primary basis to the Fixed Service (FS), the Fixed-Satellite Service (FSS) (space-to-Earth), and the Mobile Service (except aeronautical mobile).
- 3.2. The 24.25–27.5 GHz is allocated on a primary basis to the Fixed Service, Mobile Service (excluding aeronautical mobile), Fixed-Satellite Service, Inter-Satellite Service, Earth Exploration-Satellite Service, and Space Research Service.
- 3.3. The Uganda National Table of Frequency Allocations (NFTA) highlights this band as allocated on a primary basis to the Fixed Service (FS), the Fixed-Satellite Service (FSS) (space-to-Earth), and the Mobile Service (except aeronautical mobile). Currently, the band is used for satellite C-band downlink operations under footnote UGA030 in the range 3 625 – 4 200 MHz, as well as for short-range communication devices (SRDs) under footnote UGA037.
- 3.4. The 24.25 – 27.5 GHz band has historically been designated for Fixed Wireless Services under footnote UGA032 and Short-Range Devices (SRDs) under footnote UGA037 and also internationally identified for IMT under No. 5.532AB of the ITU Radio Regulations, subject to technical conditions that protect other radiocommunication services.
- 3.5. Accordingly, the bands are well suited for 5G and other next-generation wireless technologies, particularly in dense urban areas and specialised connectivity applications.

4. Amendment

The proposed band policy shall remain valid until UCC withdraws it and shall be reviewed regularly to ensure alignment with developments in the radiocommunications industry and/or any changes to the national information and communications technology (ICT) policy, legal, and/or regulatory regimes.

5. Interpretation

The terms used in this document shall have the same interpretation as used in the Act and regulations issued thereunder.

“The Act”: Uganda Communication Act Cap 103

“Radiocommunication”: Telecommunication by means of radio waves.

“Fixed Wireless Systems” (FWS): refers to the fixed point-to-point or point-to-multi-point radio communication systems capable of high-capacity transmissions over a wide range of frequencies.

“Point-to-point Radio Communication”: refers to a communication system that establishes a connection only between two endpoints.

“Point-to-multipoint Radio Communication”: refers to a communication system that establishes connections between a single specified point and more than one other specified point.

“Fixed Service” (FS): refers to a radiocommunication service between specified fixed points.

“Fixed-Satellite Service” (FSS): refers to a radiocommunication service between earth stations at specified fixed points when one or more satellites are used, including the feeder links for other space radiocommunication services.

“Mobile Service” (MS): refers to a radiocommunication service between mobile and land stations, or between mobile stations.

“Short Range Devices” refers to radio devices that operate at low transmit power and hence range, thus offering a low risk of interference with other radio services.

“International Mobile Telecommunications” (IMT): refers to Mobile telecommunication systems that provide high-capacity mobile broadband and support a wide range of voice, data, and multimedia services, including IMT-2000, IMT-Advanced, and IMT-2020.

6. Applicable legislation

The legal and regulatory provisions taken into consideration, and which shall govern the implementation of this band policy, are subject to the provisions of:

- a) The Uganda Communications Act Cap 103.

- b)* The National Broadband Policy of 2018.
- c)* Uganda's National Fourth Industrial Revolution (4IR) Strategy of 2022.
- d)* The Digital Transformation Roadmap, 2023/2024 - 2027/2028.
- e)* The Uganda Communications (Licensing) Regulations, 2019 (as amended).
- f)* The Uganda Communications Commission Radio Spectrum Management Guidelines, 2017 (as amended).
- g)* The Uganda Communications (Equipment Type Approval) Regulations 2019 (as amended).
- h)* The Uganda Communications Commission Spectrum Assignment Framework 2019 (as amended).
- i)* Guidelines on Access and Use of Radio Frequency Spectrum on a Temporary basis, 2023 (as amended).
- j)* The Framework for Spectrum Assignment to Telecommunications Services in Uganda, 2019 (as amended).
- k)* The Uganda Communications Commission Framework for Satellite Communication, 2022 (as amended).
- l)* Uganda Communications Commission (Fees and Fines) Regulations 2019 (as amended).
- m)* The Uganda Table of Frequency Allocation, 2024.
- n)* The respective Commission's band policies and standards/regulatory guidelines for different radiocommunications services.
- o)* Guidelines on the Use of Short-range Radiocommunication Devices (SRDs) and Ultra-Wideband (UWB) Devices, 2021(as amended).

- p) The Uganda Communications Commission Guidelines on Variation and Withdrawal of Radio Frequency Spectrum Authorisation, 2021(as amended).
- q) The Framework for monitoring mobile network operator service coverage obligations in Uganda, 2024.
- r) The Terms and Conditions for the Radio Frequency Spectrum Authorisation.
- s) UCC Framework for Radio Frequency Spectrum Sharing.
- t) Any decisions or directives issued by the Commission, however so described.

7. Scope

The proposed band policies outline regulatory and technical requirements to support the deployment and operation of high-capacity broadband IMT-2020 technologies in the 3 600 – 3 800 MHz and the 24.25–27.5 GHz bands in Uganda.

8. Applicability

The technical and regulatory provisions herein apply to operations in the respective bands as outlined below.

9. Authorisation and technical requirements

9.1. For the 3.6 – 3.8GHz band

9.1.1. Applicable requirement	Regulatory requirements Requirement Description
Radio Frequency Spectrum Authorisation	a) The utilization of spectrum in the 3600-3800 MHz band by any person shall be conditional on the possession of radio frequency spectrum authorisation for this band duly granted by the Commission to the respective person. b) A radio frequency spectrum authorisation shall grant the right of use for the specified radio frequencies only. Such authorisation does not confer ownership. c) The duration of the spectrum authorisation in the 3600-3800MHz shall be concurrent with the duration of the respective operating service Licence issued by the Commission under Section 22 of the

Act under which the radio frequency spectrum authorisation is issued. This is subject to the continued validity of the operating Licence and continued compliance with the terms and conditions of the radio frequency spectrum authorisation.

**Applications
authorisation**

for a) Applications for radio frequency spectrum authorizations in this band shall only be in response to a public invitation by the Commission or as shall be advised by the Commission.

b) The evaluation of applications for radio spectrum in the 3600-3800MHz shall be in accordance with section 8.3 of the Framework for assignment of spectrum to telecommunications services in Uganda and the conditions for use of the spectrum in the band as specified herein.

**Eligibility
Assignment**

for a) An application for a radio frequency spectrum authorisation in the 3600-3800MHz band must be either:

- i). an individual operator licensed under section 22 of the Act,
- ii). a consortium of operators licensed under section 22 of the Act¹, or
- iii). a legal person with demonstrated ability to meet the coverage obligations associated with this spectrum assignment and provide telecommunication services in Uganda, as determined from an appropriately detailed technical network roll-out plan, as well as other technical, business plan, and financial statements of proof submitted.

b) An applicant must be solvent and cannot be the subject of a petition for bankruptcy or winding-up.

c) Where the applicant does not already have a Licence issued under the Act, the applicant shall be required to obtain the relevant operational Licence before assignment of the spectrum.

¹ The consortium may be any combination of the following:

- Operators with a Regional infrastructure Licence in the same Licence region (central, eastern, northern or western)
- Operators with National Telecommunications Operator and/or National Infrastructure licenses
- Operators holding National infrastructure/Telecommunication Operator licenses with regional infrastructure Licence holders

**Applicable Radio
Spectrum Cap**

d) The provision in (b) shall not apply where the spectrum authorisation for use of the 3600-3800MHz band is granted to a consortium of not less than three (3) operators that each hold a Licence for the establishment of infrastructure on a nationwide basis (*National Telecommunications Operator and/or National Public Infrastructure Provider*).

a) No operator shall be allowed to apply for or acquire more than 100MHz; 10(1x10MHz) in the band;

b) An award of TDD blocks of 10MHz from a minimum of 40MHz and not exceeding a maximum of 100MHz will be considered per successful candidate.

c) The resultant total radio spectrum holding of any successful operator in the radio frequency range 2.3GHz to 3.8GHz after acquiring radio spectrum in the 3600-3800MHz band, shall not exceed 200MHz in total.

**Coverage
obligations**

a) The frequencies assigned in the 3600-3800MHz band may be used throughout the respective geographical area covered by the authorisation, including the territorial waters within that designated geographical area;

b) Every assignee granted authorisation to access and utilize spectrum in the 3600-3800MHz band shall be required to build a public communication network that provides:

i. An average street-level (outdoor) downlink speed of 50Mbps on handheld mobile terminals in Kampala District, within Central, Kawempe, Nakawa, Makindye and Rubaga divisions

ii. An average street-level (outdoor) downlink speed of 25Mbps on handheld mobile terminals in the Greater Kampala Metropolitan Area excluding Kampala District (see Figure 1);

iii. An average street-level (outdoor) downlink speed of 15Mbps on handheld mobile terminals in each district capital within the respective authorization region designated

under a radio frequency spectrum authorization;

- iv.* Requirements in *(i)* and *(ii)* above shall apply for the respective authorized (Licensed) geographical areas of operation.
- c)* To facilitate monitoring of deployment progress, the assignee shall submit it to the Commission.
 - i.* a deployment plan for approval prior to the issuance of the radio frequency spectrum authorisation for the 3600-3800MHz band, and;
 - ii.* regular reports on the progress of the deployment of coverage requirements based on intervals specified by the Commission.
- d)* Compliance with the coverage obligation shall be subject to verification by the Commission.
- e)* Failure to honour and conform to the deployment plan shall be considered a non-utilisation of the assigned frequency and breach of the terms and conditions of the authorisation, and thus grounds for withdrawal of the radio frequency spectrum authorisation.
- f)* The coverage obligations above can be met through any combination of spectrum bands to which the spectrum assignee has the rights of use and/or mutual joint construction agreements with other licensed operators.

Spectrum Fees

The fees for use of spectrum in the 3 600-3 800MHz band shall be in accordance with the Uganda Communications (Fees and Fines) Regulations 2019 or as amended.

Other Radio Frequency Spectrum Authorization Terms and Conditions

The terms and conditions of a radio frequency spectrum authorization issued in respect of the 3 600-3 800MHz shall be in accordance with section 8.4 of the Framework for assignment of spectrum to telecommunications services in Uganda (as amended).

a) Specific Technical Conditions

These shall include, but not be limited to, the following:

- i. Collaboration amongst all operators to ensure deployment of synchronized networks.
- ii. The authorization and use of radio spectrum in the 3600-3800MHz band shall be on a technology and service-neutrality basis; The technical specifications are provided in Annexure 1 attached hereto.
- iii. The best international industrial practices.

Other Regulatory Conditions

b) Radio Spectrum Trading

In accordance with Article 1.2.6(ii) and strategy (b) of policy objective 3 of the National Broadband Policy of 2018, the sale and such transfer of rights of use of radio spectrum, either directly or through merger & acquisition arrangement, is **not** permitted in Uganda.

All types of spectrum trading, including trading of a spectrum usage right and trading of parts of a spectrum usage right, are not allowed in Uganda.

c) Radio Spectrum Sharing

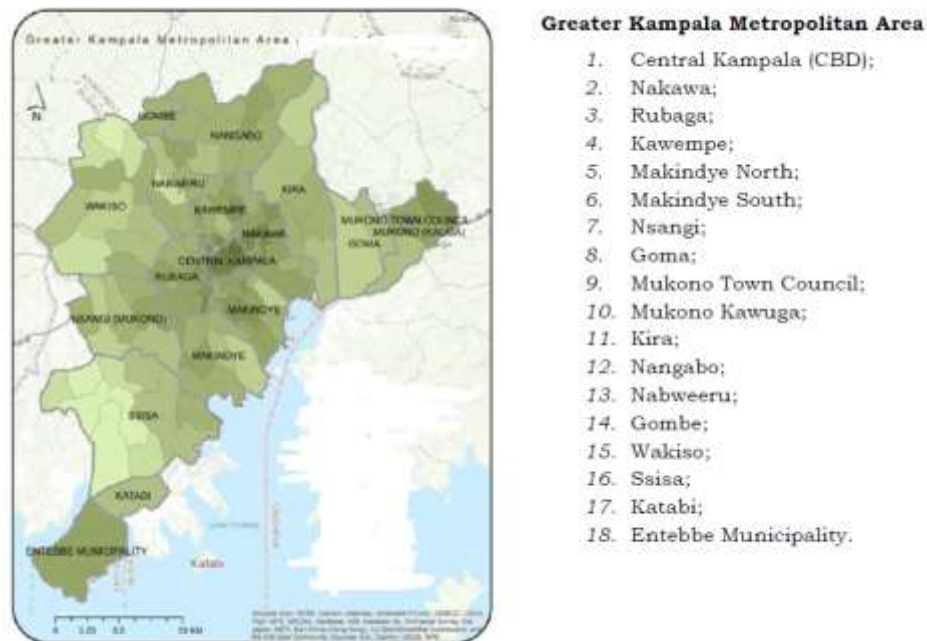


Fig.1. Map of Greater Kampala Metropolitan Area (Source: *Journal of Geographic Information System > Vol. 12 No.4, August 2020*)

9.1.2. Technical Specifications

The technical specifications, such as Power limits and/or magnetic fields and applicable standards, are highlighted in Annexure-1 attached herewith.

9.1.3. Other Regulatory Conditions

9.1.3.1. Radio Spectrum Trading

- i. In accordance with Article 1.2.6(ii) and strategy (b) of policy objective 3 of the National Broadband Policy of 2018, the sale and such transfer of rights of use of radio spectrum, either directly or through merger & acquisition arrangement, is **not** permitted in Uganda.
- ii. All types of spectrum trading, including trading of a spectrum usage right and trading of parts of a spectrum usage right, are not allowed in Uganda.

9.1.3.2. Radio Spectrum Sharing

- i. Holders of radio frequency spectrum authorisation in the 3600-3800MHz shall be eligible to enter spectrum sharing with other duly licensed operators;
- ii. Spectrum sharing between operators shall be guided by the Commission's spectrum sharing framework.

9.1.3.3. Withdrawal and Variation

- i. The Spectrum Withdrawal and Variation Framework of the Commission shall apply to the radio frequency spectrum authorizations granted in respect of the 3 600-3 800MHz band;
- ii. If the spectrum assignment is withdrawn or varied, the fees paid prior relating to the assignment will not be refunded.

9.2. For the 24.25–27.5 GHz band (the 26 GHz band)

9.2.1. Regulatory requirements

Applicable requirement Terms and Conditions

Requirement Description

The specific terms and Conditions specified herein shall apply.

Access to and use of the band shall also comply with the provisions of the Act and the Regulations issued thereunder, the respective spectrum management frameworks & guidelines, and any directives issued by the Commission from time to time, as appropriate.

Access Mode

The duplex mode used in the band is (Time Division Duplex) TDD.

Technology and Services	The band shall be accessed and used on a technology-neutral basis, subject to conformance with the technical and regulatory provisions herein and the Uganda National Table of Frequency Allocation. The band shall be subject to the regulatory, technical, and informational parameters specified in Annexure-1.
Geographical area/scope	National Geographical Territory of the Republic of Uganda as defined in the 1995 Constitution.
Licensing/Authorisation	The band shall be authorised using a licensed approach.

9.2.2. Technical Specifications

The technical specifications, such as Power limits/magnetic field and applicable standards, are highlighted in Annexure 2 attached herewith.

10. Other General requirements

10.1 Spectrum Fees

Spectrum fees shall apply to the 24.25. – 27.5 and the 3 600 – 3 800 GHz bands in accordance with the Uganda Communications Commission (Fees and Fines) Regulations 2019 (as amended);

10.2 Spectrum Sharing

- 10.2.1 *Holders of radio frequency spectrum authorisation in the 3600-3800MHz and 26GHz bands shall be eligible to enter spectrum sharing with other duly licensed operators;*
- 10.2.2 *Spectrum sharing between operators shall be guided by the Commission's spectrum sharing framework.*

10.3 Equipment Type-approval

All equipment to be deployed in any of the above bands shall be type-approved as required under the Framework on Type-approval of Communications Equipment in Uganda (as amended), available on the Commission's website. <https://www.ucc.co.ug/type-approval/>.

10.4 Emission exposure and safety.

10.4.1 Emission limits shall comply with ICNIRP² EMF³ exposure limits and/or any other limits as shall be guided by law from time to time.

10.4.2 Spectrum users may be required to demonstrate compliance with EMF exposure limits.

10.5 Interference mitigation

10.5.1 Use of the 3600 – 3800MHz and 26GHz bands shall be on an exclusive basis. Therefore, the users shall be protected from interference.

11. Stakeholder Responsibility

10.6 The regulator (the Commission)

10.6.1 Regularly review and update this guide's provisions to ensure its continued relevance and effectiveness.

10.6.2 Respond to inquiries related to the provisions herein and the implementation of these guidelines.

10.7 Stakeholders (Importers, Vendors, and Operators)

10.7.1 *Comply with the operational requirements herein.*

10.7.2 Acquaint themselves with the laws, Regulations, and Frameworks referenced herein.

10.7.3 Regularly, as shall be specified in the spectrum authorisation instrument, demonstrate and submit reports regarding the usage of the assigned spectrum, in compliance with the terms and conditions. This requirement shall only apply to spectrum users or operators.

Annexure 1

Technical and regulatory specifications to support the opening of the 3.6 – 3.8 GHz band for IMT use

1. Channel Arrangements

In line with ITU-R Recommendation M.1036 and international best practice, Uganda will adopt frequency arrangement F3 for the implementation of IMT in

² ICNIRP: International Commission on Non-Ionizing Radiation Protection (ICNIRP) is an international commission specialized in non-ionizing radiation protection

³ EMF: Electro Magnetic Field

the 3.6 – 3.8 GHz band. This arrangement is harmonized with the 3GPP NR bands n77/n78 and supports deployment across the wider 3.5 GHz range (3400–3800 MHz) using TDD standardized for IMT2020 broadband technologies.

Table 1: n77/78 frequency arrangement

NR operating band	Uplink (UL) operating band BS receive/UE transmit FUL_low – FUL_high	Downlink (DL) operating band BS receive FDL_low – FDL_high	Duplex Mode
N77/N78 (part of)	3600 – 3800 MHz	3600- 3800MHz	TDD

A channel raster based on multiples of 10 MHz shall apply within the band, dividing the 3600 – 3800 MHz range into wider contiguous blocks (e.g., 40, 50, 80, or 100 MHz) based on operator deployment requirements.

Table 2: 3600- 3800 MHz band Channel arrangement

3600 MHz CH1- 10 MHz	CH2- 10 MHz	CH3- 10MHz	-----	CH19- 10 MHz	3800MHz CH20-10 MHz
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200MHz

2. Power/Emission Limits

Tables 3 and 4 below present the power limits for UE/fixed/nomadic terminal stations and the Block Edge Mask (BEM) for Non-AAS and AAS base stations, respectively.

Table 3: Block Edge Mask (BEM) for Non-AAS and AAS base stations

Element	Power (dBm)	Applicability	Reference
UE Max in-block power limit	≤ 23 dBm	Power class 3	ETSI TS 138 101-1 (3GPP TS 38.101-1)
	≤ 26 dBm	Power class 2	ETSI TS 138 101-1 (3GPP TS 38.101-1)

Table 4: Block Edge Mask (BEM) for Non-AAS and AAS base stations

BEM Element	Non-AAS (e.i.r.p per antenna) dBm / 5 MHz	AAS (TRP* per cell) dBm / 5 MHz	Operational case/Notes
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In-block ⁴		64 ⁵	Synchronised TDD operation.
Baseline ⁶ Transitional region (inner) ⁷	Min (PMax - 43, 13) Min (PMax- 40, 21)	Min (PMax'- 43, 1) Min (PMax'- 40, 16)	
Transitional region (outer) ⁸	Min (PMax - 43, 15)	Min (PMax'- 43, 12)	

*Total Radiated Power

⁴ Refers to a block for which the BEM is derived (Assigned block)

⁵ Typical macro-BS in-block power

⁶ Spectrum within the 3 600 – 3 800 MHz band used for WBB ECS outside own assigned block and the corresponding transitional regions

⁷ -5 to 0 MHz / 0 to +5 MHz from block edge

⁸ -10 to -5 MHz / +5 to +10 MHz from block edge

Annexure 2

Technical specifications to support the opening of the 24.25 – 27.5 GHz band.

1. Channel Arrangements

Uganda will adopt ITU-R Recommendation M.1036 frequency arrangement I1 for the implementation of IMT in the 24.25–27.5 GHz band. The band corresponds to 3GPP NR band n258 and operates using TDD duplex access supporting channel bandwidths including 50 MHz, 100 MHz, 200 MHz, and 400 MHz.

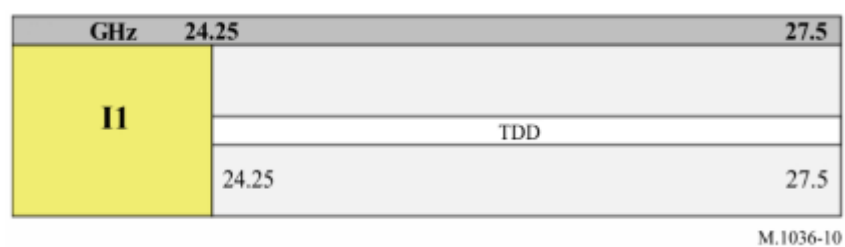


Figure 1: Frequency Arrangement in ITU-R M.1036

A 50 MHz channel raster shall apply within the 24.25–27.5 GHz band. Spectrum assignments shall be made in multiples of 100 MHz or larger contiguous blocks, depending on deployment requirements and efficient spectrum utilisation.

24.25 GHz						27.5 GHz
CH1	CH2	CH3	CH4	-----	CH64	CH65
50 MHz	50 MHz	50 MHz	50 MHz		50 MHz	50 MHz

Figure 2. Channel arrangement of the 26 GHz band.

NB: The above channelisation provides a maximum of 65 x 50MHz channels

2. Power/Emission Limits

Tables 1 and 2 below present the base station transmit power limits and the Block Edge Mask (BEM) emission limits applicable to systems operating in the 24.25–27.5 GHz band to ensure coexistence between adjacent spectrum blocks and protection of adjacent services.

Table 1. BS maximum permissible transmit power

BS class⁹	TRP¹⁰
Wide Area BS	(see note below)
Medium Range BS	$\leq + 47$ dBm
Local Area BS	$\leq + 33$ dBm
<i>Note: There is no upper limit for the TRP of the Wide Area Base Station</i>	

Table 2. Block Edge Mask for the 24.25–27.5 GHz Band

BEM Element	Maximum TRP	Measurement Bandwidth	Frequency Range
Transitional Region	12 dBm	50 MHz	0–50 MHz below or above the operator block
Baseline limit	4 dBm	50 MHz	Within 24.25–27.5 GHz outside the assigned block
Additional baseline (EESS protection)	–39 dBW	200 MHz	23.6–24 GHz

⁹ The BS class coverage definitions are defined in ETSI TS 138 104, Section 5.2.2 under Table 5.2.2-1

¹⁰ TRP is the Total radiated power, and it is the power radiated by the antenna in a specific direction. It considers the power losses due to the antenna impedance