



Information & Communication Technologies Authority

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**DECISION OF 15 APRIL 2026 ON THE OPENING OF THE 2 300 – 2 400 MHz FREQUENCY BAND FOR
OPERATION OF IMT NETWORKS, INCLUDING 5G**

15 April 2026

1.0 BACKGROUND

5G is the 5th generation of wireless networks, a significant evolution of the 4G LTE networks. 5G has been designed to meet the very large growth in data and connectivity of today's modern society, the Internet of things (IoT) with billions of connected devices and tomorrow's innovations. The 5G wireless network enables high-speed data transmission with ultra-low latency.

The frequency band 2 300 – 2 400 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis in the ITU Region 1 and identified for International Mobile Telecommunications (IMT).

The ICT Authority recognizes the importance of harmonized frequency arrangements for Mobile Communications Networks and the need for common technical conditions for Public Land Mobile Network (PLMN) operators in the band 2 300 – 2 400 MHz, based on international best practices. A licensed PLMN operator with the ICT Authority shall be referred to as Mobile Network Operator (MNO) in this document.

The technical parameters and limits for operation within the 2 300 – 2 400 MHz frequency band are being specified in this Decision so as to enable the operation of terrestrial IMT Systems including 5G New Radio (5G NR).

Beyond the initial deployment of 5G networks, the evolution towards 5G-Advanced (5G-A), as standardised by 3rd Generation Partnership Project starting from Release 18, represents a significant enhancement of 5G capabilities. 5G-Advanced is expected to further improve network performance through:

- enhanced spectral efficiency and capacity gains;
- improved energy efficiency and sustainable network operation;
- support for advanced use cases, including extended reality (XR), immersive communications, and industrial automation;
- integration of artificial intelligence and machine learning for network optimisation and automation;
- enhanced support for massive Internet of Things (IoT) and mission-critical services.

The 2 300 – 2 400 MHz frequency band, being a mid-band spectrum, is particularly well suited for the deployment of 5G-Advanced technologies due to its ability to provide a balance between coverage and capacity.

The Information & Communication Technologies Authority (ICTA) recognizes that early availability of this band for IMT will facilitate a smooth evolution from 4G and 5G to 5G-Advanced, ensuring that Mauritius remains aligned with global technological developments and benefits from economies of scale in the international ecosystem.

Furthermore, the introduction of 5G-Advanced is expected to contribute to national objectives related to digital transformation, smart infrastructure, and innovation-driven economic growth.

2.0 DECISION ON THE INTRODUCTION OF IMT SERVICES IN THE 2 300-2 400 MHz FREQUENCY BAND

The ICT Authority,

Considering,

- a) that the frequency band 2 300 – 2 400 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis in the ITU Region 1 and is identified for IMT;
- b) that the ICT Authority has adopted a technology neutral approach and supports the deployment of mobile technologies that can technically co-exist within the international regionally harmonised mobile bands;
- c) that the ICT Authority supports an equitable access to spectrum approach for all MNOs with a view to create a level playing field;
- d) that certain MNOs have already deployed 5G networks and require additional mid-band spectrum to enhance capacity, enable advanced technologies, and support innovative use cases;
- e) that harmonized technical conditions (including a harmonized frequency arrangement) will support the implementation of MNOs in this band and facilitate global roaming, economies of scale, and availability of low-cost equipment;
- f) that in Recommendation ITU-R M.1036, the recommended frequency arrangement for implementation of IMT in the band 2 300-2 400 MHz is referred to as frequency arrangement E1. The said frequency arrangement is also contained in 3GPP specifications as part of operating band 40;
- g) that radio equipment under the scope of this Decision shall comply with applicable national type approval requirements and international standards.

Decides,

- i. that the frequency band 2 300 – 2 400 MHz be made available to eligible MNOs for the operation of terrestrial IMT systems, for the continued evolution and enhancement of existing 4G and 5G networks.
- ii. that, for the purpose of all operations within the 2 300 – 2 400 MHz frequency band,
 - a. the duplex mode of operation shall be time division duplex (TDD);
 - b. the assigned block sizes shall be in multiples of 5 MHz from the lower band edge of 2 300 MHz;
 - c. Synchronised operations as defined at Annex 1, shall be the only authorised mode of operation;
- iii. that MNOs having deployed a 5G network and offering commercial services for more than 2 years shall be eligible to apply for frequency spectrum in 2 300 – 2 400 MHz band;
- iv. that eligible MNOs shall, within one month of this Decision, submit an application for Network Spectrum Licence (SPL 2).
- v. that eligible MNOs shall justify their spectrum requirement (number of 5 MHz blocks) by submitting, with their application:
 - a. proposed coverage commitments and deployment timelines, including rollout commitments and targeted geographic areas;

- b. expected quality of service (QoS) improvements, including enhancements in throughput, latency, packet loss and user experience;
 - c. the development and deployment of new and innovative use cases, including applications related to 5G and 5G-Advanced, such as industrial automation, smart city solutions, and other advanced digital services;
- vi. that, where the total demand for spectrum exceeds 100 MHz, the Authority shall consider information provided in decides (v) to determine the assignment of spectrum in the 2 300 – 2 400 MHz band with a view to ensuring:
 - a. efficient and optimal use of spectrum;
 - b. promotion of innovation and next-generation services; and
 - c. maintenance of a fair and competitive market environment among all MNOs.
- vii. that eligible MNOs: -
 - a. shall comply with the technical parameters and standardisation requirements as specified in Annex 1 and Annex 2 of this document;
 - b. shall comply with all applicable licensing requirements and type approval procedures as determined by the ICT Authority;
- viii. that this Decision comes into force on 15 April 2026.

ANNEX 1
TECHNICAL PARAMETERS FOR OPERATION OF IMT SYSTEMS IN THE 2 300 - 2 400 MHz
FREQUENCY BAND¹

A. FREQUENCY ARRANGEMENT

Frequency arrangement shall be based on 20 blocks of 5 MHz as described in Table 1. An operator can aggregate several channels of 5 MHz to obtain a wider channel.

Frequency (MHz)	2300	2305	2310	2315	2320	2325	2330	2335	2340	2345	2350	2355	2360	2365	2370	2375	2380	2385	2390	2395
	2305	2310	2315	2320	2325	2330	2335	2340	2345	2350	2355	2360	2365	2370	2375	2380	2385	2390	2395	2400
Channel Bandwidth (MHz)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Table 1: Harmonised frequency arrangement for TDD operation in the 2300-2400 MHz band

B. DEFINITIONS²

Active antenna systems (AAS) AAS refers to a base station and antenna system where the amplitude and/or phase between antenna elements is continually adjusted resulting in an antenna pattern that varies in response to short term changes in the radio environment. This is intended to exclude long term beam shaping such as fixed electrical down tilt.

Non-Active antenna systems (Non-AAS) refers to base station transmitters which are manufactured and supplied separately to antenna systems.

Synchronised operation

The synchronised operation in the context of this Decision means operation of TDD in several different networks, where no simultaneous UL and DL transmissions occur, i.e. at any given moment in time either all networks transmit in DL or all networks transmit in UL. This requires the alignment of all DL and UL transmissions for all TDD networks involved as well as synchronising the beginning of the frame across all networks.

Total radiated power (TRP) is defined as the integral of the power transmitted in different directions over the entire radiation sphere.

C. BASE STATION TECHNICAL PARAMETERS

The following technical parameters for base stations called block edge mask (BEM) are an essential component of conditions necessary to ensure coexistence between neighbouring networks, in the absence of an agreement between operators. Less stringent technical parameters, if agreed among the operators of such networks, may also be used.

¹ ADAPTED FROM ECC Decision (14)02

² ECC/DEC/(11)06 / ECC Report 281

A BEM is an emission mask that is defined, as a function of frequency, relative to the edge of a block of spectrum that is licensed to an operator. It consists of in-block and out-of-block components which specify the permitted emission levels over frequencies inside and outside the licensed block of spectrum respectively. In-block power limit is used for the block assigned to the operator. The out-of-block component of the BEM itself consists of a baseline level and, where applicable, intermediate (transition) levels which describe the transition from the in-block level to the baseline level as a function of frequency. Figure 1 shows the Combined BEM elements for adjacent blocks with synchronised TDD networks.

BEM element	Definition
In-block	Block for which the BEM is derived.
Baseline	Spectrum used for TDD, except from the operator block in question and any corresponding transitional regions.
Transitional region	Transitional regions apply for unwanted emissions into adjacent TDD blocks allocated to other operators. They also apply in-between TDD blocks with a frequency separation of 5 or 10 MHz between each block edge. The transitional regions do not apply below 2 300 MHz or above 2 400 MHz.

Table 2: BEM elements definitions

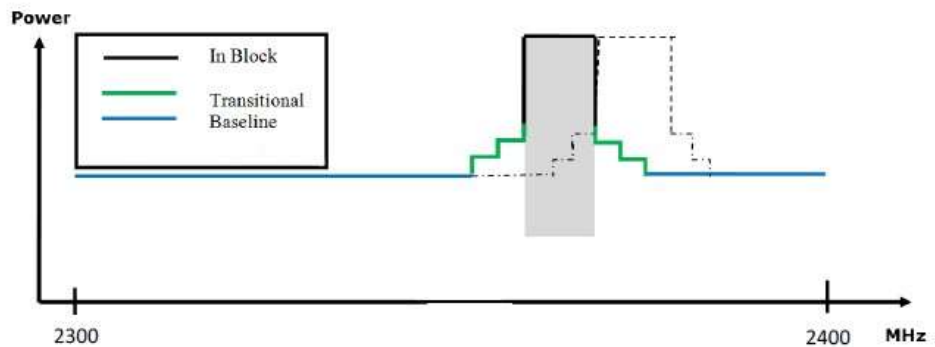


Figure 1: Combined BEM elements for adjacent blocks with synchronised TDD networks

Power limits for operation of Base Stations in the 2 300 – 2 400 MHz frequency band are given in Table 3.

Frequency Range	Non-AAS e.i.r.p. limit.	AAS TRP limit
Mobile Base Station in-block power limits		
Block assigned to the operator (2300-2390 MHz)	68 dBm/5 MHz per antenna	Not obligatory
Block assigned to the operator (2390-2400 MHz)	45 dBm/(5 MHz) per cell per sector	31 dBm/(5 MHz) per sector
Mobile Base Station baseline requirements		
Synchronised TDD blocks (2300-2400 MHz)	Min($P_{max}-43$, 13) dBm/(5 MHz) per antenna per sector	Min($P_{max}'-43$, 1) dBm/(5 MHz) per sector
Note 3: P_{max} is the maximum mean carrier power in dBm for the base station measured as e.i.r.p. per carrier, interpreted as per antenna. Note 4: P_{max}' is the maximum mean carrier power in dBm for the base station measured as TRP per carrier in a given cell.		
Mobile Base Station transitional region requirements		
Transitional region - -5 to 0 MHz offset from lower block edge. 0 to 5 MHz offset from upper block edge	Min($P_{max}-40$, 21) dBm/(5 MHz)	Min($P_{max}'-40$, 16) dBm/(5 MHz)
Transitional region - -10 to -5 MHz offset from lower block edge. 5 to 10 MHz offset from upper block edge	Min($P_{max}-43$, 15) dBm/(5 MHz)	Min($P_{max}'-43$, 12) dBm/(5 MHz)

Table 3: Power limits for operation of Base Stations in the 2 300 – 2 400 MHz frequency band

D. TERMINAL STATION TECHNICAL PARAMETERS

For the terminal station, BEM consists of an in-block maximum power level of 23 dBm and further requirements as specified in relevant ETSI Standard.

ANNEX 2
STANDARDISATION REQUIREMENTS

The base stations and terminal stations shall comply with ETSI standards as specified in Table 4 below.

	Base Station Equipment	Terminal Station Equipment
Spectrum 5G NR	ETSI EN 301 908-23	ETSI EN 301 908-25
	ETSI EN 301 908-24	
Spectrum LTE	ETSI EN 301 908-14	ETSI EN 301 908-13
EMC	ETSI EN 301 489-1	ETSI EN 301 489-1
	ETSI EN 301 489-50	ETSI EN 301 489-52
Safety	EN 62368-1	EN 62368-1
EMF safety		EN 50360 (applicable to mobile phones)

Table 4 – Applicable ETSI standards