An Coimisiún um
Rialáil Cumarsáide
Commission for
Communications Regulation

Amendment of MBSA2 technical conditions for the 2.3 GHz Band

Update to MBSA2 Licences & Regulations

Response to Consultation and Decision

Reference: ComReg 23/79

Decision No: D06/23

Date: 28/08/2023

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Additional Information

Consultation Document	23/54
Submission to Consultation Document	Annex 3 of ComReg 23/79

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Chapter 1

1 Introduction

1.1 This document sets out the Commission for Communications Regulation's ("ComReg") response to consultation, final decision and draft regulations relating to proposed amendments to the relevant technical conditions for the 2300 to 2400 MHz band (the "2.3 GHz Band") currently set out in:

- Schedule 1 of the Multi-Band Spectrum Award ("MBSA2") Regulations[1]; and
- the MBSA2 Liberalised Use Licences ("MBSA2 Licences") issued to Imagine Communications Ltd. ("Imagine"), Meteor Mobile Communications Ltd. ("Eir"), Three Ireland Hutchison Ltd. ("Three") and Vodafone Ireland Ltd. ("Vodafone").

1.2 These amendments would align the licence conditions in the MBSA2 Licences with the latest Electronic Communications Committee ("ECC") Decision (14)02[2], amended 10 March 2023 ("Decision of 2023").

1.3 The changes set out in the Decision of 2023 facilitate recent developments to the 2.3 GHz Band at a technical and regulatory level by:

- setting out the least-restrictive technical conditions ("LRTC") for deploying 5G New Radio ("NR") and Active Antenna Systems ("AAS")[3] base stations, and for deploying AAS base stations with 4G/Long-Term Evolution ("LTE") technology[4]; and
- retaining the same technical conditions in the previous version of this decision. i.e. ECC Decision 14(02) approved on 27 June 2014 ("Decision of 2014"). These relate to the band plan for the 2.3 GHz Band, the LTRC for deploying non-AAS[5] base stations and the technical conditions for user terminals.

[1] The Wireless Telegraphy (Liberalised Use and Related Licences in the 700 MHz Duplex, 2.1 GHz, 2.3 GHz and 2.6 GHz Bands) Regulations 2021 (S.I. 264 of 2021) as amended by the Wireless Telegraphy (Liberalised Use and Related Licences in the 700 MHz Duplex, 2.1 GHz, 2.3 GHz and 2.6 GHz Bands) (Amendment) Regulations 2022 (S.I. 483 of 2022), available at https://www.irishstatutebook.ie/.

[2] ECC Decision (14)02, "*Harmonised technical and regulatory conditions for the use of the band 2300-2400 MHz for Mobile/Fixed Communications Networks (MFCN)*" approved 27 June 2014, amended 10 March 2023, available at https://docdb.cept.org/

[3] An AAS (active antenna systems) MFCN system refers to MFCN base stations and antenna systems where the amplitude and/or phase of the signals from the various 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.

[4] The deployment of AAS MFCN systems compared to non-AAS MFCN systems enhances the capacity and throughput bit rates of a base station and improves the efficient usage of spectrum.

[5] A non-AAS (non-active antenna systems) MFCN system refers to MFCN base stations that provide one or more antenna connectors, which are connected to one or more separately designed passive antenna elements to radiate radio waves.

1.4 On 20 June 2023, ComReg published a consultation (Document 23/54[6]), setting out the proposed amendments to the technical conditions set out in the MBSA2 Licences and MBSA2 Regulations for the 2.3 GHz Band[7] in line with the Decision of 2023. ComReg also proposed a power limit of 60 dBm/5 MHz per cell for the 2.3 GHz Band, similar to technical parameters set out in other MBSA2 spectrum bands (i.e. the 2.1 GHz and 2.6 GHz bands) (the "Proposed Amendments").

1.5 ComReg received two submissions to Document 23/54 from the following respondents:

- Eircom Limited and Meteor Mobile Communication Limited (trading as 'eir' and 'open eir') ("Eir"); and
- Imagine Communications Ltd. ("Imagine").

1.6 The non-confidential versions of both submissions are contained in Annex 3 of this document.

1.7 This document sets out ComReg's response to consultation, having regard to the views received from both interested parties, its final decision, and draft amendment regulations in respect of the proposed approach set out in Document 23/54.

1.2 Structure of this document

1.8 The remainder of this document is structured as follows:

- Chapter 2 sets out background information;
- Chapter 3 set outs a summary of submissions to Document 23/54 and ComReg's assessment and final position on the Proposed Amendments;
- Chapter 4 outlines the next steps;
- Annex 1: sets out the amendments to the 2.3 GHz Band technical conditions in the MBSA2 licences;
- Annex 2: sets out the amendment regulations to be made by ComReg, subject to the consent of the Minister; and
- Annex 3: sets out the non-confidential submissions by interested parties to Document 23/54.

[6] ComReg Document 23/54, "*Proposed amendment of MBSA2 technical conditions for the 2.3 GHz Band - Update to ECC Decision (14)02*", published 20 June 2023, available at www.comreg.ie

[7] "2.3 GHz Band" refers to the frequency range 2300 to 2400 MHz.

Chapter 2

2 Background

2.1 Existing MBSA2 technical conditions for the 2.3 GHz Band

2.1 In January 2023, ComReg announced the results of the MBSA2 radio spectrum award[8] and shortly thereafter issued a MBSA2 Licence to each of the four winning bidders (the "MBSA2 Licensees"). All MBSA2 Licences commenced on 20 January 2023 and, among other things, set out the spectrum rights of use licensed to each MBSA2 Licensee and their respective licence conditions.

2.2 In relation to the 2.3 GHz Band, Eir was issued a MBSA2 Licence with spectrum rights in the 2300 to 2360 MHz frequency range and Imagine was issued a MBSA2 Licence with spectrum rights in the 2360 to 2400 MHz frequency range (see Figure 1 below).

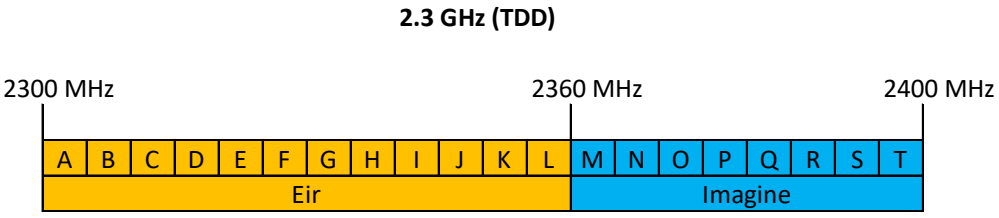

Figure 1: MBSA2 spectrum rights in the 2.3 GHz Band

2.3 The MBSA2 Licences and the MBSA2 Regulations contain technical conditions for the 2.3 GHz Band based on the Decision of 2014, which was the prevailing decision at the time.

2.4 In the MBSA2 Licences, the technical conditions are set out in Part 4, Section 2 ("Technical Conditions") and Part 4, Section 3 ("Inter-Licensee Synchronisation Procedure"). These conditions define the band plan for the 2.3 GHz Band, the LTRC for deploying non-AAS base stations and the technical conditions for user terminals.

2.2 Decision of 2023 – additional technical conditions defined for deploying AAS base stations in the 2.3 GHz Band

2.5 In 2022, the ECC commenced a review of the Decision of 2014 and subsequently developed harmonised LRTC suitable for 5G NR and AAS base stations to

[8] See below ComReg Documents all available at www.comreg.ie:
- 23/06, *"Multi Band Spectrum Award– Final Assignment Plan",* published 12 January 2023;
- 22/112, *"Multi Band Spectrum Award– Completion of Assignment Round determining the Provisional Assignment Plan and start of Negotiation Phase",* published 19 December 2022, and
- 22/105, *"Multi Band Spectrum Award – Results of the Main Stage",* published 14 December 2022.

complement the existing technical conditions for the 2.3 GHz Band.

2.6 On 10 March 2023, the ECC adopted its Decision of 2023 which amended its Decision of 2014 and set out the LRTC for the deployment of AAS base stations.

2.7 In relation to the (i) band plan for the 2.3 GHz Band, (ii) the LRTC for non-AAS base stations, and (iii) the technical conditions for user equipment, the Decision of 2023 retains the same technical conditions as set out in the Decision of 2014. In Document 23/54, ComReg did not propose any amendments to these technical conditions aside from proposed editorial changes to align with the Decision of 2023. For example, amending the definitions of the Restrictive Block Edge Mask ("BEM") and Unrestrictive BEM for the 2.3 GHz Band to clarify how the BEM is obtained with reference to the table referencing in the Decision of 2023.

2.8 In relation to the other the technical conditions (i.e. to facilitate the deployment of AAS base stations) ComReg Document 23/54 set out proposals to implement these AAS technical conditions. Chapter 3 of this document sets out ComReg's assessment and decisions in relation to same.

2.3 Regulation 14 of the European Union (Electronic Communications Code) Regulations

2.9 By way of background, any implementation of the Decision of 2023 to permit the deployment of AAS base stations in the 2.3 GHz Band would require amendments to the relevant technical conditions set out in the MBSA2 Licences (and the MBSA2 Regulations) in accordance with Regulation 14 of the European Union (Electronic Communications Code) Regulations[9]. Regulation 14 relevantly provides:

> *14. (1) The Regulator may amend the rights, conditions and procedures concerning the general authorisation, rights of use for radio spectrum or rights of use for numbering resources provided that any such amendment may only be made in objectively justified cases and in a proportionate manner, taking into consideration, where appropriate, the specific conditions applicable to transferable rights of use for radio spectrum or for numbering resources. The Regulator shall notify the holder of the authorisation or the rights of use of any decision to make the amendment.*
>
> *…*
>
> *(4) Except where the proposed amendments are minor in nature and have been agreed with the holder of a general authorisation, a right of use for radio spectrum, a right of use for numbering resources, a consent referred to in paragraph (2) or a licence referred to in paragraph (3), before making any amendment under this Regulation, the Regulator, the NRA, a road*

[9] S.I. No. 444/2022 - European Union (Electronic Communications Code) Regulations 2022.

authority or a local authority, as the case may be, shall —

(a) give notice, in such manner as it considers appropriate, of its intention to make the amendment and invite interested parties, including users and consumers, to make representations on the proposed amendment within such period as may be specified in the notice but not being, except in exceptional circumstances, less than 28 days from the date of the notice, and

(b) have regard to any representations made to it under subparagraph (a).

(5) Amendments made in accordance with this Regulation shall be published by the Regulator, the NRA, a road authority or a local authority as appropriate, together with the reasons therefor."

Chapter 3

3 Proposed amendment to MBSA2 technical conditions for the 2.3 GHz Band

3.1 Summary of ComReg's proposals in Document 23/54

3.1 The Proposed Amendments align with the changes set out in the Decision of 2023[10] facilitating recent developments to the 2.3 GHz Band at a technical and regulatory level by:

- setting out the LRTC for deploying 5G NR and AAS base stations, and for deploying AAS base stations with 4G/LTE technology[11]; and
- retaining the same technical conditions in the Decision of 2014 relating to the band plan for the 2.3 GHz Band, the LTRC for deploying non-AAS base stations and the technical conditions for user terminals.

3.2 In this regard, ComReg proposed:

- setting an in-block power limit of 60 dBm/5 MHz for AAS base stations in the 2300-2390 MHz frequency range, similar to the limits set out in other MBSA2 spectrum bands (i.e. the 2.1 GHz and 2.6 GHz bands);
- adopting the power limits set in the Decision of 2023 for the 2390-2400 MHz frequency range, which specifies an in-block power limit of 31 dBm/5 MHz; and
- regarding out-of-block power limits, adopting the baseline and transitional power limits set out in the Decision of 2023 for AAS base stations.

3.3 In addition, interested parties were referred to Annex 1 of Document 23/54 which outlined the Proposed Amendments, and Annex 2 of ComReg Document 23/54 which set out the draft proposed amending Wireless Telegraphy Regulations.

3.2 Views of respondents to Document 23/54

3.4 ComReg received two responses to Document 23/54, being from Eir and Imagine.

[10] The Decision of 2023 established the LRTC for AAS base stations, which included in-block power limits and out-of-block power limits for the baseline and transitional regions.

[11] The deployment of AAS MFCN systems compared to non-AAS MFCN systems enhances the capacity and throughput bit rates of a base station and improves the efficient usage of spectrum.

These responses are set out below and available in Annex 3 of this document:

(i) Eir states that it:

"…notes ComReg's proposal to amend the 2.3 GHz technical conditions in eir's spectrum licence in line with amendments arising from the EU Decision[12]*. Consequently, eir is agreeable to the proposed changes being implemented.";* and

(ii) Imagine states that it:

"…welcomes the implementation of the Decision of 2023 to permit the deployment of AAS base stations in the 2.3 GHz Band in order to cater for recent developments at a technical and regulatory level"; and

"…notes that ECC Decision (14)/02 states that the setting of an In-block AAS TRP limit is not obligatory and therefore Imagine is of the view that there should be no such limit and that the proposed 60dBm / 5 MHz TRP. limit is not necessary."

3.3 ComReg's assessment

3.5 First, ComReg observes that Eir agrees with the implementation of ECC Decision as proposed in Document 23/54, and that Imagine agrees with ComReg proposals with the exception of the proposed in-block TRP power limit for AAS base stations, which it submits is unnecessary.

3.6 Second, and in relation to Imagine's view, ComReg firstly observes that Imagine did not provide any justification to support its view that an in-block power limit is unnecessary or that the proposed limit of 60 dBm/5 MHz would, in its view, likely and unreasonably restrict the provision of future services in the band.

3.7 In addition, ComReg recalls that it has implemented an in-block TRP AAS power limit for other MBSA2 spectrum bands (i.e. 57 dBm/5 MHz for the 2.1 GHz Band and 60 dBm/5 MHz per cell for the 2.6 GHz Band) and that the relevant EU Implementation Decisions for these bands also stated that an in-block power limit was "not obligatory". In particular:

- For the 2.1 GHz Band, Commission Implementing Decision (EU) 2020/667[13] of 6 May 2020 amending Decision 2012/688/EU states that an in-block power limit for AAS base stations is "*not obligatory"* and that *"in case an upper bound is set by a Member State, a value of 57 dBm/(5 MHz) per cell may be applied.*[14]*";* and

[12] Although Eir references an EU decision in its response, it is ComReg's understanding that Eir had intended to refer to the ECC Decision (14)02 as referenced in Document 23/54.

[13] European Commission Implementing Decision (EU) 2020/667, available at: https://eur-lex.europa.eu/

[14] In a multi-sector base station, the AAS radiated power limit applies to each one of the individual sectors.

- For the 2.6 GHz Band, Commission Implementing Decision (EU) 2020/636[15] of 8 May 2020 amending Decision 2008/477/EC states that an in-block power limit for AAS base stations is "*not obligatory"* and that *"in case an upper limit is set by a Member State, a value between 53dBm/5MHz and 60 dBm/5 MHz per cell may be applied.*[16]"

3.8 Furthermore, ComReg recalls that in Document 23/54 it proposed an in-block AAS Power limit of 60 dBm/5 MHz per cell which reflects the upper limit set out in EU Decision of 2020/636 for the 2.6 GHz Band and a limit 3 dB *higher* than that identified in EU Decision 2020/667 for the 2.1 GHz band.

3.9 Accordingly, and noting that there is no equivalent EU implementation Decision for the 2.3 GHz Band, ComReg is of the view that setting an in-block AAS TRP limit of 60 dBm/5 MHz per in the 2.3 GHz Band is both appropriate and consistent with its approach in applying an AAS power limits in other MBSA2 spectrum bands.

3.4 ComReg's final position

3.10 Having considered the submissions from interested parties and other relevant information before it, ComReg's final position is that it:

- will implement the Proposed Amendments reflecting the Decision of 2023 and update the 2.3 GHz technical conditions in the MBSA2 Licences (see Annex 1 of this document); and

- following the making of amending MBSA2 Regulations (see Annex 2 of this document for draft amending regulations), which is subject to obtaining consent from the Minister for Environment, Climate and Communications.

[15] European Commission Implementing Decision (EU) 2020/636, available at: https://eur-lex.europa.eu/

[16] In a multi-sector base station, the radiated power limit applies to each one of the individual sectors.

Chapter 4

4 Next Steps

4.1 To implement the decisions in this document, ComReg will now engage with the Department of the Environment, Climate and Communications and seek consent from the Minister for the Environment, Climate and Communications to make the amending MBSA2 regulations as outlined in Annex 2 of this document.

4.2 Following the making of the amending MBSA2 Regulations, ComReg would then amend the MBSA2 licence conditions for the 2.3 GHz Band. A preview of these modified conditions can be found in Annex 1 of this document.

Annex 1: Amendments to 2.3 GHz technical conditions in MBSA2 Licences

A 1.1 The amendments to the MBSA2 technical conditions for the 2.3 GHz Band in the MBSA2 Licences are shown below. The proposed additions are in underlined text, and the proposed deletions are in ~~strikethrough text~~.

Part 4

Licence Conditions

Section 2: Technical Conditions

1. Definitions

[...]

2. Technical Conditions

[...]

(3) The 2.3 GHz Band

(a) Only terrestrial systems compatible with the Decision of 2014 can be worked and used in the 2.3 GHz Band.

(b) The TDD mode of operation shall be used in the 2.3 GHz Band.

(c) The Licensee shall comply with the Inter-Licensee Synchronisation Procedure set out in Section 3 of this Licence.

(d) The Licensee shall comply with all MoU[17] between the Commission and its neighbouring national regulatory authorities responsible for communications matters, in particular Ofcom in the UK, or its successor, in relation to the 2.3 GHz Band.

(e) If the Licence includes Spectrum Blocks in the range 2305 to 2330 MHz and the Licensee intends to deploy Base Stations in the coordination area[18], the Licensee shall coordinate with the operator of the RurTel system to ensure coexistence with the RurTel system currently operating in the frequency range 2307-2327 MHz.

Base Stations

[17] Current Memorandum of Understanding on frequency coordination between Ireland and the United Kingdom in the frequency bands 2300 -2400 MHz to be applied in the area including the Republic of Ireland and the United Kingdom and the Isle of Man, available at www.comreg.ie

[18] The relevant coordination area is as defined in the Information Memorandum.

(f) Within the 2.3 GHz Band Generic Frequency Blocks assigned to the Licensee, the in-block radiated power from a Base Station must not exceed an upper limit of (i) 68 dBm/5 MHz EIRP per antenna for non-AAS and (ii) 60 dBm/5 MHz TRP per cell for AAS.

(g) Within the 2.3 GHz Band Fixed Frequency Block, if assigned to the Licensee, the in-block radiated power from a Base Station must not exceed an upper limit of (i) 45 dBm/5 MHz EIRP for non-AAS and (ii) 31 dBm/5 MHz TRP for AAS.

(h) Outside of the 2.3 GHz Band Generic Frequency Blocks and the 2.3 GHz Band Fixed Frequency Block, if assigned to the Licensee, the Licensee shall comply with the out-of-block BEM requirements as specified in Section A2.1 "*Technical Conditions for MFCN Base Stations (TDD)*" of Annex 2 to the Decision of 2014.

Terminal Stations

(i) The maximum mean in-block power limit of 25 dBm[8] for Terminal Stations shall apply.

Section 3: Inter-Licensee Synchronisation Procedure

This Section 3 applies only to Licensees assigned 2.3 GHz Band Blocks or 2.6 GHz Band TDD Blocks, or both 2.3 GHz Band Blocks and 2.6 GHz Band TDD Blocks.

1. Definitions

[…]

"Restrictive BEM" means, for Licensees utilising the Other Frame Structure (or failing to synchronise with adjacent channel networks for any other reason):

(a)[…]

(b) for any 2.3 GHz Band Blocks assigned to a Licensee, ~~section A2.1.1, "*In-block requirements for MFCN base stations*" and Table 2 and Table 4~~ a Restrictive BEM is given by combining the relevant maximum permitted in-block radiated power appropriate to the Licensee and the out-of-block limits from Table 3 and Table 6 (relating to unsynchronised TDD blocks) of Annex 2 to the Decision of 2014 ~~applies~~;

"Unrestrictive BEM" means, for Licensees utilising the Default Frame Structure on their network (and having a common reference phase clock with adjacent channel operators[20]):

(a)[…]; and

(b) for any 2.3 GHz Band Blocks assigned to a Licensee, ~~Table 2 and Table 4~~ Table 3 and Table 6 of Annex 2 of the Decision of 2014 relating to synchronised TDD blocks applies.

2. Introduction

[…]

3. Conditions for using the Unrestrictive BEM

[...]

4. Conditions for using the Restrictive BEM

[...]

5. Indoor Small Cells

[...]

Annex 2: Draft amending regulations

A 2.2 Any final version of these regulations, which would be made by ComReg under section 6 of the Wireless Telegraphy Act 1926, is expressly subject to the consent of the Minister for the Environment, Climate and Communications under section 37 of the Communications Regulation Act 2002, as amended.

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STATUTORY INSTRUMENTS.

S.I. No. of 2023

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WIRELESS TELEGRAPHY (LIBERALISED USE AND RELATED LICENCES IN THE 700 MHz DUPLEX, 2.1 GHz, 2.3 GHz AND 2.6 GHz BANDS) (AMENDMENT No. 2) REGULATIONS 2023

S.I. No. of 2023

WIRELESS TELEGRAPHY (LIBERALISED USE AND RELATED LICENCES IN THE 700 MHz DUPLEX, 2.1 GHz, 2.3 GHz AND 2.6 GHz BANDS) (AMENDMENT No. 2) REGULATIONS 2023

The Commission for Communications Regulation, in exercise of the powers conferred on it by section 6(1) of the Wireless Telegraphy Act 1926 (No. 45 of 1926) as substituted by section 182 of the Broadcasting Act 2009 (No. 18 of 2009), as amended, and with the consent of the Minister for the Environment, Climate and Communications (as adapted by the Communications, Climate Action and Environment (Alteration of Name of Department and Title of Minister) Order 2020 (S.I. No. 373 of 2020)) in accordance with section 37 of the Communications Regulation Act 2002 (No. 20 of 2002), hereby makes the following Regulations:

Citation

1. These Regulations may be cited as the Wireless Telegraphy (Liberalised Use and Related Licences in the 700 MHz Duplex, 2.1 GHz, 2.3 GHz and 2.6 GHz Bands) (Amendment No. 2) Regulations 2023.

Interpretation

2. (1) In these Regulations:

"Principal Regulations" means the Wireless Telegraphy (Liberalised Use and Related Licences in the 700 MHz Duplex, 2.1 GHz, 2.3 GHz and 2.6 GHz Bands) Regulations 2021 (S.I. No 264 of 2021) as amended by the Wireless Telegraphy (Liberalised Use and Related Licences in the 700 MHz Duplex, 2.1 GHz, 2.3 GHz and 2.6 GHz Bands) (Amendment) Regulations 2022 (S.I. 483 of 2022).

(2) A word or expression that is used in these Regulations and that is also used in the Principal Regulations has, unless the context otherwise requires, the same meaning in these Regulations that it has in those Regulations.

Licences to which these Regulations apply

3. These Regulations apply to MBSA2 Liberalised Use Licences.

Amendment of Regulation 2 of the Principal Regulations

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4. Regulation 2(1) of the Principal Regulations is amended by the substitution of the following definition for the definition of “Decision of 2014”:

“Decision of 2014” means Electronic Communications Committee Decision (14)02 entitled "*Harmonised technical and regulatory conditions for the use of the band 2300-2400 MHz for Mobile/Fixed Communications Networks (MFCN), approved 27 June 2014, amended 10 March 2023;*”.

Amendment of Part 4 of the Principal Regulations

5. Paragraph 3 of sub-section 2 of Section 2 of Part 4 of Schedule 1 to the Principal Regulations (entitled “The 2.3 GHz Band”) is amended -

(a) by the substitution of the following sub-paragraph for sub-paragraph (f):

“*(f) Within the 2.3 GHz Band Generic Frequency Blocks assigned to the Licensee, the in-block radiated power from a Base Station must not exceed an upper limit of:*

(i) 68 dBm/5 MHz EIRP per antenna for non-AAS; and

(ii) 60 dBm/5 MHz TRP per cell for AAS.”

(b) by the substitution of the following sub-paragraph for sub-paragraph (g):

“*(g) Within the 2.3 GHz Band Fixed Frequency Block, if assigned to the Licensee, the in-block radiated power from a Base Station must not exceed an upper limit of:*

(i) 45 dBm/5 MHz EIRP for non-AAS, and

(ii) 31 dBm/5 MHz TRP for Non-AAS.”, and

(c) by the substitution of the following sub-paragraph for sub-paragraph (h):

“(h) Outside of the 2.3 GHz Band Generic Frequency Blocks and the 2.3 GHz Band Fixed Frequency Block, if assigned to the Licensee, the Licensee shall comply with the out-of-block BEM requirements as specified in Section A2.1 “Technical Conditions for MFCN Base Stations (TDD)” of Annex 2 to the Decision of 2014”.

6. Sub-section 1 of Section 3 of Part 4 of Schedule 1 to the Principal Regulations is amended –

(a) by the substitution of the following sub-paragraph for sub-paragraph (b) under the definition of “Restrictive BEM”:

“*(b) for any 2.3 GHz Band Blocks assigned to a Licensee, a Restrictive BEM is given by combining the relevant maximum permitted in-block radiated power appropriate to the licensee and the out of block limits from*

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Table 3 and Table 6 (relating to unsynchronised TDD blocks) of Annex 2 to the Decision of 2014.", and

(b) by the substitution of the following sub-paragraph for sub-paragraph (b) under the definition of "Unrestrictive BEM":

"*(b) for any 2.3 GHz Band Blocks assigned to a Licensee, Table 3 and Table 6 of Annex 2 of the Decision of 2014 relating to synchronised TDD blocks applies.*"

GIVEN under the Official Seal of the Commission for Communications Regulation,

2023

On behalf of the Commission of Communications Regulation

The Minister for the Environment, Climate and Communications (as adapted by the Communications, Climate Action and Environment (Alteration of Name of Department and Title of Minister) Order 2020 (S.I. No. 373 of 2020)), in accordance with section 37 of the Communications Regulation Act, 2002, consents to the making of the foregoing Regulations

GIVEN under the Official Seal of the Minister for Environment, Climate and Communications

2023

Minister for the Environment, Climate and Communications.

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EXPLANATORY NOTE

(This note is not part of the Instrument and does not purport to be a legal interpretation.)

These Regulations prescribe matters in relation to the amendment of certain technical conditions relating to the 2.3 GHz Band applying to MBSA2 Liberalised Use Licences granted under the Wireless Telegraphy (Liberalised Use and Related Licences in the 700 MHz Duplex, 2.1 GHz, 2.3 GHz and 2.6 GHz Bands) Regulations 2021.

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Annex 3: Non-confidential submissions to Document 23/54

1 Eircom Limited and Meteor Mobile Communication Limited (trading as ‘eir’ and ‘open eir’), collectively referred to as ‘eir Group’ or ‘eir’

eir

Response to ComReg Consultation:

Proposed amendment of MBSA2 technical conditions for the 2.3 GHz Band

Update to ECC Decision (14)02

ComReg Document 23/54

25 May 2023

DOCUMENT CONTROL

Document name	eir response to ComReg 23/54
Document Owner	eir
Status	Non-Confidential

The comments submitted in response to this consultation document are those of Eircom Limited and Meteor Mobile Communications Limited (trading as 'eir' and 'open eir'), collectively referred to as 'eir Group' or 'eir'.

eir response to 23/54

Response to consultation

1. eir welcomes the opportunity to contribute to the consultation process.

2. eir notes ComReg's proposal to amend the 2.3GHz technical conditions in eir's spectrum licence in line with amendments arising from the EU Decision. Consequently eir is agreeable to the proposed changes being implemented.

2 Imagine Communications Ltd. (“Imagine”)

Mr. Martin O Donoghue

Commission for Communications Regulation
One Dockland Central Guild Street
Dublin 1
D01 E4X0
Ireland

18th July, 2023

Imagine Non Confidential Submission to ComReg 23/54

Dear Martin,

Imagine welcomes the implementation of the Decision of 2023[1] to permit the deployment of AAS base stations in the 2.3 GHz Band in order to cater for recent developments at a technical and regulatory level.

In line with the general aim of:-

> *"setting out the least-restrictive technical conditions ("LRTC") for deploying 5G New Radio ("NR") and Active Antenna Systems (AAS) base stations"*

Imagine notes that ECC Decision (14)/02 states[2] that the setting of an In-block AAS TRP limit Is not obligatory and therefore Imagine is of the view that there should be no such limit and that the proposed 60dBm / 5 MHz TRP. limit is not necessary.

Yours sincerely,
Mike Stacey

Chief Technology and Innovation Officer
Imagine Communications Group

[1] ECC Decision (14)02, "Harmonised technical and regulatory conditions for the use of the band 2300-2400 MHz for Mobile/Fixed Communications Networks(MFCN)" approved 27 June 2014, amended 10 March 2023
[2] **A2.1.1 In-block requirements for TDD MFCN base stations**, ECC Decision (14)02, "Harmonised technical and regulatory conditions for the use of the band 2300-2400 MHz for Mobile/Fixed Communications Networks(MFCN)" approved 27 June 2014, amended 10 March 2023

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