

MCA RESPONSE TO CONSULTATION DOCUMENT No. MCA/C/23-5060 AND DECISION NOTICE

**Updating the spectrum management frameworks for
the 900 MHz, 1800 MHz and 2.5 GHz bands
designated for terrestrial systems capable of
providing electronic communications services**

MCA Reference: MCA/D/25-5799

Publication Date: 28 November 2025

 (+356) 2133 6840  info@mca.org.mt  www.mca.org.mt/


 Valletta Waterfront, Pinto Wharf, Floriana FRN1913, Malta

TABLE OF CONTENTS

1	Introduction	1
2	Consultation procedure	3
3	Facilitating the provision of innovative wireless technologies in the 900 MHz and 1800 MHz bands	4
4	Addressing the divergence of MCA Decision No. MCA/D/17-2971 and enhancing the spectrum efficiency measures	5
5	Updating Decision No. MCA/10/44/D	6
6	Establishing in-block power limits in the 900 MHz and 1800 MHz bands.....	7
7	Frequency separation requirements for the 900 MHz and 1800 MHz bands	9
8	Implementation timeframes	11

List of Abbreviations

Term	Definition
2010 MCA Decision	Decision no. MCA/10/44/D
2017 MCA Decision	Decision no. MCA/D/17-2971
2022 EU Decision	Commission Implementing Decision (EU) 2022/173
AAS	Active Antenna System
CEPT	European Conference of Postal and Telecommunications Administrations
EC-GSM-IoT	Extended Coverage GSM IoT
ECC	Electronic Communications Committee
ECS	Electronic Communications Services
EECC	European Electronic Communications Code
EU	European Union
GSM	Global System for Mobile communications
IoT	Internet-of-Things
MCA	Malta Communications Authority
TDD	Time Division Duplex

1 Introduction

The Malta Communications Authority ('MCA' or 'Authority') adopts decisions aimed at regulating how radio spectrum designated for terrestrial systems capable of providing electronic communications services ('ECS') shall be managed, assigned and subsequently used. From a technical perspective, the decisions are aligned with what is stated in European Union ('EU') law which establishes a harmonised approach as regards the designation and availability of frequency resources for these type of services. These instruments ensure the effective and efficient utilisation of the radio spectrum and are revised from time-to-time to, amongst other things, create opportunities for innovation and investment.

The national spectrum management framework for the 900 MHz (880-915 MHz / 925-960 MHz) and the 1800 MHz (1710-1785 MHz / 1805-1880 MHz) bands was originally adopted in 2010 and reflects the technical framework of Commission Decision 2009/766/EC¹ as amended. It should be noted that whilst the entire 900 MHz band is assigned, a number of channels within the 1800 MHz band remain unused due to a lack of market interest.

The national framework for the 2.5 GHz band (2500-2690 MHz) was adopted in 2017 and takes into account the legal provisions which applied at that time. In this band, some limited radio spectrum is also unassigned due to lack of market interest.

In 2018, Directive (EU) 2018/1972² was adopted and subsequently transposed under national legislation. The Directive (and national law transposing the Directive) include provisions which have a direct effect on the conditions to be attached to rights of use of EU harmonised radio spectrum which still need to be granted. One such condition concerns the duration of the individual grants of rights of use of radio spectrum.

In 2022 Commission Implementing Decision (EU) 2022/173³ ('2022 EU Decision') was adopted which replaced the technical framework of the 900 MHz and 1800 MHz bands and repealed Decision 2009/766/EC. This instrument therefore established a new set of technical conditions to facilitate the introduction of innovative next generation wireless services within the EU.

¹ Commission Decision 2009/766/EC of 16 October 2009 on the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community. This Decision has been amended by Commission Decisions 2011/251/EU and (EU) 2018/637.

² Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code.

³ Commission Implementing Decision (EU) 2022/173 of 7 February 2022 on the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing electronic communications services in the Union and repealing Decision 2009/766/EC.

Against this background, in September 2023, the MCA undertook a public consultation procedure to implement changes to the national licensing frameworks governing the use of radio spectrum in the said frequency bands. As stated in the MCA's consultation document (reference MCA/C/23-5060)⁴, MCA's objectives are to:

- i) align certain provisions of the national spectrum management frameworks with those set out at law, as a measure to provide legal clarity and ensure that the frameworks are interpreted correctly; and
- ii) implement the 2022 EU Decision concerning the 900 MHz and 1800 MHz bands in order to assist undertakings in the provision of innovative next generation wireless services.

The purpose of this document is to summarise the responses received during the consultation period and to present the position and actions the MCA will be taking as regards the national spectrum management frameworks governing the 900 MHz, 1800 MHz and 2.5 GHz frequency bands.

⁴ <https://www.mca.org.mt/consultations-decisions/updating-spectrum-management-frameworks-900-mhz-1800-mhz-and-25-ghz-bands>.

2 Consultation procedure

The formal consultation procedure was launched on the 13th September 2023 with the publication of the consultation document with reference no. MCA/C/23-5060. Responses in relation to MCA's proposals could be submitted until the 13th October 2023. Responses were received from:

- Epic Communications Limited
- GO plc.; and
- Melita Limited.

The MCA wishes to thank these operators for their participation in the consultation procedure.

3 Facilitating the provision of innovative wireless technologies in the 900 MHz and 1800 MHz bands

In its consultation document the MCA observed that the technical conditions attached to grants of rights of use of radio spectrum in the 900 MHz and 1800 MHz bands reflect what is stated in Commission Decision 2009/766/EC and that it was desirable to update such conditions in order to provide for the use of innovative wireless technologies in line with the 2022 EU Decision.

Overall, the respondents agreed with MCA's proposal outlined in the consultation document. Nonetheless, one respondent commented on the proposed renewal procedure of grants of rights of use of radio frequencies which may be issued after the 30th September 2021. The respondent proposed that MCA's notice to holders of grants of use of radio spectrum regarding the intention of renewing their grants of rights of use and the terms of renewal, or otherwise the rationale for non-renewal, should be of three years. In this regard the MCA would like to reiterate that as stated in the consultation document under sections 1 and 4, the MCA is not seeking to extend the validity of the individual grants of rights of use in the 900 MHz and 1800 MHz bands as currently in force. It should be clarified that the national spectrum management framework governing the use of radio spectrum in the 900 MHz and 1800 MHz bands as well as the grants of the rights of use of radio spectrum in the same bands do not include provisions for the renewal of such grants. In this context it should be clarified that regulation 37 of the Electronic Communications Networks and Services (General) Regulations (S.L.399.48) provides the legal basis associated with the renewal of individual rights of use for harmonised radio spectrum, which serves to guide both the MCA and stakeholders accordingly.

It should also be clarified that according to its work programme, the MCA will be submitting proposals for consultation concerning the future of the current grants of rights of use of radio spectrum in both the 900 MHz and 1800 MHz frequency bands.

Decision 1

The MCA will be liaising with the holders of the grants of rights of use of radio spectrum in the 900 MHz and 1800 MHz bands with a view to modify the aforesaid rights, in line with the proposals described in the consultation document MCA/C/23-5060.

4 Addressing the divergence of MCA Decision No. MCA/D/17-2971 and enhancing the spectrum efficiency measures

Decision MCA/D/17-2971 ('2017 MCA Decision') establishes the spectrum management framework for the 800 MHz and the 2.5 GHz bands as well as the unassigned spectrum in the 1800 MHz band. As articulated in the consultation document MCA/C/23-5060, the MCA deems it necessary to align the 2017 MCA Decision with the legal framework currently in force as a measure to provide regulatory certainty to prospective users of the radio spectrum which is still available for assignment.

Through the consultation procedure the MCA also proposed to include a new provision to safeguard the efficient use of the portions of the radio spectrum within the 2.5 GHz band for the deployment of Time Division Duplex ('TDD') networks.

MCA's detailed proposals were included in Table 4 of the consultation document. All the respondents supported MCA's proposals.

Decision 2

The MCA will proceed to publish amendments to the 2017 MCA Decision in accordance with Table 4 of the consultation document MCA/C/23-5060.

5 Updating Decision No. MCA/10/44/D

Decision No. MCA/10/44/D ('2010 MCA Decision') established the basis for the granting of the rights of use of radio spectrum in the 900 MHz and 1800 MHz bands currently in force. From a technology perspective, the decision is aligned with Commission Decision 2009/766/EC which was subsequently repealed and replaced by Commission Implementing Decision (EU) 2022/173. The 2022 EU Decision provides opportunities for implementing next generation (5G) wireless systems in the 900 MHz and 1800 MHz bands.

In this regard through its consultation document the MCA proposed measures to facilitate the introduction of such wireless systems, where it proposed to replace the reference of Commission Decision 2009/766/EC with Commission Implementing Decision (EU) 2022/173.

MCA's proposal as outlined above was supported by two respondents, whilst the other respondent did not provide any comments on this proposal.

Decision 3

The MCA will proceed to publish amendments to the 2010 MCA Decision by substituting the reference of Commission Decision 2009/766/EC with Commission Implementing Decision (EU) 2022/173.

6 Establishing in-block power limits in the 900 MHz and 1800 MHz bands

As articulated in the consultation document, the 2022 EU Decision establishes the in-block power limits for wireless systems operating in the 900 MHz and 1800 MHz bands. Specifically, Table 2 thereof does not establish an obligatory upper limit but suggests a limit which Member States may consider for implementation for systems employing both active antenna systems ('AAS') and non-active antenna systems ('non-AAS').

Based on various considerations, the MCA proposed that no in-block power limits be established for non-AAS base stations operating in both the 900 MHz and 1800 MHz bands. However, the MCA proposed limiting the in-block power for AAS base stations in the 1800 MHz band to 58 dBm/(5 MHz) per cell. It should be clarified that this upper limit which is also established in the 2022 EU Decision derives from studies undertaken by the regional European organisation CEPT and published in its CEPT Report 80.

In response to the public consultation, one respondent fully supported MCA's proposals as outlined above. A second respondent supported the proposals not to establish any in-block power limits for non-AAS base stations but did not comment on the proposals concerning the in-block power limit for the 1800 MHz band. A third respondent only commented on the proposal concerning the AAS in-block power limit for the 1800 MHz band. This respondent considered it premature to establish the AAS in-block power limit now, stating that such a limit should only be enforced if deemed essential at a later stage when AAS base stations are being introduced. This respondent argued that the potential of this technology will be unjustifiably hindered if the proposed limit is enforced.

The MCA considers that although the adoption of the 58 dBm/(5 MHz) in-block power limit per cell for AAS base station is not explicitly mandated by the 2022 EU Decision, this level is derived from technical studies undertaken by CEPT which ensure the efficient use of radio spectrum. These studies were undertaken in cooperation with interested industry stakeholders, including those representing the mobile infrastructure/services industry.

In addition, the imposition of such a limit will contribute towards ensuring compliance with the licence obligations concerning EMF. Nonetheless, the requirement to establish an in-block power limit for AAS base stations in the 1800 MHz band may be relaxed or withdrawn in the future.

Decision 4

In line with its original proposal, the MCA confirms that it will not be establishing any in-block power limits for non-AAS base stations operating in both the 900 MHz and 1800 MHz bands.

For AAS base stations operating in the 1800 MHz band, the application of 58 dBm/(5 MHz) per cell (in line with Table 2 of the 2022 EU Decision) shall apply.

7 Frequency separation requirements for the 900 MHz and 1800 MHz bands

The consultation document highlighted the general requirement to use radio spectrum efficiently and the avoidance of harmful interference. As regards the 900 MHz and 1800 MHz bands, the 2022 EU Decision confirms that a frequency separation of 200 kHz between the nominal channel edges of adjacent narrowband and broadband terrestrial systems capable of providing electronic communications services as well as between the nominal channel edges of different adjacent narrowband terrestrial systems capable of providing electronic communications services and also GSM and EC-GSM-IoT is required. Nonetheless, the requirement to implement a frequency separation as aforesaid will not apply in cases where there is agreement between undertakings operating neighbouring systems. In case a frequency separation needs to be applied, the toolbox described in section 3.4.5.3 of CEPT Report 80⁵ may be considered to assist the relevant parties.

In this regard through the consultation document the MCA requested the holders of grants of rights of use of radio spectrum in these bands to indicate whether an agreement is in place between them ensuring the coexistence between the respective terrestrial wireless systems. In this context the MCA observed that based on the current spectrum assignments, aspects concerning frequency separation was only relevant to the 900 MHz band.

In addition, through the consultation document the MCA also requested the holders of radio spectrum in the 900 MHz and 1800 MHz bands to commit themselves to finalise a frequency coordination agreement addressing the frequency separation requirements within 6 months from the publication of the updated spectrum management framework for the 900 MHz and 1800 MHz bands.

All respondents confirmed that no agreements are in place as regards frequency separation requirements. However, one of the respondents clarified that such an agreement is currently not required since the 200 kHz frequency separation was implemented by design in their network. Another respondent observed that an informal agreement is in place at a technical level with another operator to safeguard the network of that operator. This respondent said that a reciprocal agreement is not in place which aims to safeguard the network of the respondent.

As regards the additional question concerning the finalisation of a frequency coordination agreement, one of the respondents confirmed that it did not find any objection to mandate the frequency separation requirement but supported any frequency coordination initiatives as directed by the MCA. Another respondent expressed the view that any frequency coordination

⁵ <https://docdb.cept.org/document/19385>.

discussions should be facilitated and managed by the MCA. A third respondent strongly supported the adoption of a frequency coordination agreement between all operators.

Decision 5

On the basis of the responses received during the consultation procedure and in line with the 2022 EU Decision⁶, the MCA will be imposing a frequency separation of 200 kHz between the nominal channel edges of adjacent narrowband and broadband terrestrial systems capable of providing electronic communications services as well as between the nominal channel edges of different adjacent narrowband terrestrial systems capable of providing electronic communications services and also GSM and EC-GSM-IoT in the 900 MHz band⁷. The requirement for implementing a frequency separation as aforesaid in the 1800 MHz will not be imposed but will become applicable in the event that adjacent frequency assignments are granted in this band.

Nonetheless, this requirement will no longer apply if a frequency coordination agreement is concluded between all holders of grants of rights of use in the 900 MHz band.

As regards the frequency coordination agreement, the MCA strongly supports initiatives taken by holders of grants of rights of use of radio spectrum to adopt frameworks the purpose of which is to safeguard the efficient use of radio spectrum and the avoidance of harmful interference, such as those addressing the implementation of the block edge mask and frequency separation requirements. Nonetheless, the MCA will, if requested to do so by industry, facilitate any discussions leading to the satisfactory conclusion of any form of formal arrangement between holders of radio spectrum.

⁶ Refer to section 3 of the Annex to the 2022 Decision.

⁷ The toolbox described in CEPT Report 80 provides guidance and may be considered when implementing the frequency separation requirement.

8 Implementation timeframes

Updating the spectrum management framework for the 900 MHz, 1800 MHz and 2.5 GHz bands in line with this Decision will require the MCA to take various actions, namely:

- i) the publication of a MCA decision amending Decision No. MCA/10/44/D on the assignment methodology and licence conditions for the 900 MHz and 1800 MHz bands;
- ii) the publication of an MCA decision amending Decision No. MCA/D/17-2971 on the assignment process for additional spectrum for wireless broadband; and
- iii) issuance of amended grants of rights of use of radio spectrum in the 900 MHz and 1800 MHz bands.

The MCA plans to finalise this process within 60 days following publication of this Decision.



MALTA COMMUNICATIONS AUTHORITY

 (+356) 2133 6840
 info@mca.org.mt
 www.mca.org.mt
 Valletta Waterfront, Pinto Wharf,
Floriana FRN1913, Malta