An Coimisiún um
Rialáil Cumarsáide
Commission for
Communications Regulation

Licensing Frameworks for Private Mobile Radio and Wireless Broadband Low Medium Power

Response to Consultation with Decisions and Draft Regulations

Response to Consultation and Decisions

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Chapter 1

1 Introduction

1.1 On 27 January 2026, ComReg issued a response to consultation and draft decisions on its Proposed Licensing Framework for Private Mobile Radio and Wireless Broadband Low Medium Power (ComReg Document 26/06[1]). This set out ComReg's proposals for a new licensing framework for narrowband Private Mobile Radio ("PMR") licensing and a proposed Wireless Broadband Low Medium Power ("WBB LMP") licensing framework.

1.2 For the proposed narrowband PMR licensing framework, Document 26/06 considered and made proposals regarding the following aspects of a future PMR Licensing framework:

- licence duration;
- licence fees;
- licence types;
- geographic scope; and
- frequency bands.

1.3 For the proposed WBB LMP licensing framework, Chapter 5 of Document 26/06 set out:

- firstly, ComReg's response to consultation on Document 25/46 having regard to the views received from interested parties, recent developments and other relevant material; and
- secondly, a further consultation and draft decision (set out separately in Chapter 6 of Document 26/06) on its detailed proposals for the proposed WBB LMP licensing framework in the 3.8-4.2 GHz Band.

1.4 In doing so, ComReg set out its proposals in relation to various specific aspects of a the proposed WBB LMP licensing framework, as follows:

- clarification on the band to be included in the proposed WBB LMP Framework (i.e. 3.8-4.2 GHz Band);
- the high-level principles that would inform the establishment of a WBB LMP licensing framework

[1] https://www.comreg.ie/publication/response-to-consultation-proposed-licensing-regime-for-private-mobile-radio-and-low-medium-power-wireless-broadband-systems

- permitted transmission powers in the band;
- licensing and network planning approach for WBB LMP;
- bandwidth;
- synchronisation;
- licence duration;
- rollout and usage obligations;
- sharing and compatibility;
- other issues; and
- fees (set out separately in Chapter 7 of Document 26/06).

1.5 ComReg received four responses to the response Consultation (the "Respondents"), from;

(i) DECT Forum; ("**DECT Forum**");

(ii) RTÉ; ('**RTÉ'**),

(iii) Sennheiser; ('**Sennheiser'**), and;

(iv) Shure UK Ltd, ("**Shure**");

1.6 The responses to the proposed PMR licensing framework and the WBB LMP licensing framework in the 3.8-4.2 GHz band are addressed at Chapter 2 and Chapter 5 respectively. ComReg does not repeat the background information provided in the response to consultation but instead refers interested parties to Document 26/06.

1.7 ComReg would like to thank all for their submissions and has published the non-confidential versions of the submissions in ComReg Document 26/42s. Having carefully considered all submissions made over the duration of this consultation process, the views of ComReg's consultants DotEcon Limited and Plum Consulting, and other relevant information, this document sets out ComReg's Final Decision in regard to the licensing frameworks for:

(i) Narrowband PMR; and

(ii) WBB LMP.

1.1.2 Consultant Reports

1.8 ComReg is publishing alongside this document:

1. an analysis prepared by ComReg's independent economic consultant, DotEcon Limited ("DotEcon"), of submissions received in response to Document 26/06 relating to licensing and design elements of the establishment of a WBB LMP Licensing framework (Document 26/06)

and its proposals in relation to PMSE fees, the ('PMR licensing review – assessment of responses to Decision') (Document 26/42a); and

2. an analysis prepared by ComReg's independent technical consultant, Plum Consulting ("Plum") titled " WBB LMP Licensing Issues" of submissions received in response to Document 26/06 relating to technical and engineering elements of the establishment of a WBB LMP Licensing framework, as well as of recent developments from the WBB LMP technical harmonisation work within CEPT (Document 26/42b), the ("Plum June 2026 update").

1.2 Structure of this document

1.9 This document is structured as follows:

- **Chapter 2**: sets out ComReg considerations of the submissions received to Document 26/06 regarding the narrowband PMR licensing framework. This includes ComReg's assessment of the responses;
- **Chapter 3**: sets out ComReg's final Regulatory Impact Assessment ("RIA") on licence fees for PMR having addressed the relevant responses received to Document 26/06;
- **Chapter 4**: sets out the fees for narrowband PMR;
- **Chapter 5**: sets out ComReg's considerations of the submissions received and updated licensing proposals related to the Proposed WBB-LMP licensing framework in the 3.8-4.2 GHz Band;
- **Chapter 6**: sets out a final RIA for the establishment of rollout and usage conditions to be applied to a WBB LMP Licence having addressed the relevant responses received to Document 26/06;
- **Chapter 7**: sets out the final Decision Instrument for Narrowband PMR;
- **Chapter 8**: sets out the final Decision Instrument for WBB LMP.
- **Annex 1**: Relevant Legal Framework
- **Annex 2**: Final Draft Licensing Regulations Narrowband PMR
- **Annex 3:** Final Draft Licensing regulations WBB LMP

Chapter 2

2 Response to submissions on the Proposed Narrowband PMR Licensing Framework

2.1 In Chapter 2 of Document 26/06, ComReg detailed its proposals for the Narrowband PMR licensing framework. This chapter sets out ComReg's consideration of submissions relating to ComReg's proposals for the Narrowband PMR licensing framework as set out in Document 26/06. ComReg received three submissions, namely from:

- RTÉ;
- Sennheiser; and
- Shure

2.2 The responses received are considered under the following headings:

- PMSE licence duration;
- Spectrum planning for PMSE; and
- PMSE fees

2.2 PMSE licence duration

2.3 In Section 4.3 of Document 26/06, ComReg noted that the PMSE licensing data indicates a large gap in the licence durations requirements of users as some users require licences for very short periods (for example, less than 10 days to cover a very short term event, such as a concert), while others apply for the maximum 6 month duration.

2.4 DotEcon advised that increasing the maximum duration for PMSE licences from 6 months to 12 months would better support users that require longer term licences (rather than applying for a new 6-month licence at expiry) by reducing the frequency they would need to submit new licence applications. ComReg agreed with this approach and proposed to increase the maximum duration for PMSE licences from 6 months to 12 months.

2.2.2 Views of respondents

2.5 All of the respondents expressed support for ComReg's proposal to increase the maximum duration for PMSE licences from 6 months to 12 months.

2.2.3 ComReg's assessment

2.6 ComReg notes respondents support for increasing the maximum duration for PMSE licences and intends to proceed with this proposal.

2.3 Spectrum planning for PMSE

2.3.1 Views of respondents

2.7 RTÉ submits that it is of the view there is an opportunity to review the spectrum planning process and potentially increase the level of spectrum efficiency for PMSE uses. RTÉ proposes that ComReg further engages with industry and consider publishing an up-to-date guide to assist PMSE applicants in choosing suitable clear frequencies.

2.8 Sennheiser submits that the licensing process could be simplified if ComReg introduces the option to apply for a single frequency assignment with a bandwidth of 8 MHz that can be used for WMAS of multiple narrowband systems. In its view, such an assignment would remove the need to issue multiple 200 kHz licences thereby reducing the administrative burden on ComReg.

2.3.2 ComReg's assessment

2.9 ComReg has been progressively updating its eLicensing system over the last number of years to improve the online application process and provide up-to-date information for applicants and licensees.

2.10 In the implementation of any future PMR and WBB LMP licensing regimes, ComReg will necessarily have to update its eLicensing application process. This will also require ComReg to publish an updated guidelines document to enable applicants make informed decisions prior to submitting a licence application.

2.11 In common with the approach taken by ComReg in the recent Implementation of new licensing frameworks for fixed link and satellites earth stations, ComReg will actively engage with the relevant industry stakeholders to ensure a smooth transition from the old to the new licensing regime

2.12 In relation to Sennheiser's submission, Sennheiser will be aware that any changes to electronic processes such as ComReg's eLicensing system takes time to properly fully scope out, develop, test and roll out to live.

2.13 In that regard, ComReg intends to begin an IT project to implement the new PMR and PMSE Licensing regimes on its internal licensing systems and on its eLicensing systems. The project will also consider the application process for both PMR and PMSE licence to take account of the changes from the current regime and application process. System development will also need to be planned, developed and tested for ComReg's financial system which is linked to the eLicensing system. To ensure all interrelated systems are properly updated to implement the new regimes, ComReg has decided to propose an effective date of 1 July 2028 for the new PMR and PMSE Regulations to ensure the completion of the IT project and the seamless migration of licensees to the new regimes.

2.4 PMSE Fees

2.14 In Section 4.3 of Document 26/06, ComReg detailed its proposed fees for PMSE licences. In summary, ComReg proposed removing the equipment charge under the current licensing framework and aligning the fee structure for PMSE with the proposed fee structure for the consolidated PMR licence.

2.15 ComReg proposed that the fees for PMSE licences would be set at half the level of a comparable PMR licence (i.e. on site and shared use) and take into account the typical bandwidth used by the different PMSE applications. Having analysed historical licensing data, ComReg identified typical bandwidths used by the different PMSE applications and set out the proposed fees for each of the PMSE applications.

2.4.2 Views of respondents

2.16 RTÉ submits that it supports the proposed fee structure. However, it seeks clarification on the calculation of fees for wideband systems such as Wireless Multi-channel Audio Systems ("WMAS"). In its calculations, RTÉ queries whether the fees for an 8 MHz WMAS system operating in the 470 – 703 MHz band would be: €2630; €526; or €131.50. RTÉ submits that if the fee would be €2630, then it is of the view that this would disincentivise users from exploring new PMSE technologies.

2.17 Regarding fees for WMAS, Sennheiser submits that ComReg takes account of "total spectrum occupancy" to align fees with those for traditional PMSE systems as in its view, the price differential between narrowband systems and WMAS does not facilitate the optimal use of spectrum, promote innovation or incentivise users to adopt WMAS.

2.18 Sennheiser submits that, according to ECC Report 204, ECC Report 323 and CEPT Report 32, the number of audio PMSE channels that could be accommodated in 8 MHz is 12. Sennheiser adds that, according to ETSI TR 102

546 (Technical characteristics for Audio PMSE equipment) , with the equipment used in high end productions and events the channel density is 1-2 audio channels per MHz. Sennheiser notes that this would give an upper limit of 16 x 200 kHz channels (accounting for channel separation) per 8 MHz.

2.19 In Sennheiser's view, the price differential between a narrowband system using 16 x 200 kHz channels in 8 MHz (which, based on the proposed fee schedule in Document 26/06 would amount to €263) and a WMAS system occupying 8MHz (which, based on the proposed fee schedule in Document 26/06 would amount to €526) does not facilitate the optimal use of spectrum nor promotes innovation and incentivises users to continue using narrowband technology rather than adopting a WMAS.

2.20 Sennheiser suggests that the fee for an 8 MHz WMAS should therefore be €263, and adds that the fee for a 6 MHz WMAS licence should be €197.25 (in its view, equivalent to a traditional system using 12 x 200 kHz channels accounting for channel separation) and that for shorter term licences, fees should then be scaled accordingly.

2.21 Shure considers that the application of cost-based fees for PMSE is appropriate. However it submits that, in its view the price floor appears to be somewhat arbitrarily determined and for some use cases, potentially artificially high. Furthermore, Shure submits that ComReg should ensure that licence fees for WMAS will not be disproportionately more expensive or inequitably priced in comparison to "traditional" narrowband PMSE.

2.4.3 ComReg's assessment

2.22 In relation to RTÉ's request for clarification on fees for an 8MHz WMAS, the fee as proposed in Document 26/06 would be €526[2], not accounting for any adjustment for CPI.

2.23 ComReg notes that PMSE operators have, and will continue to use, different systems to suit their individual needs and observes that the proposed fees for PMSE are low and in most cases will likely result in lower fees for users compared to the existing framework. However, regarding fees for WMAS, ComReg notes that such systems can support more equipment and contribute to more efficient use of the spectrum resource than traditional systems. ComReg agrees with Sennheiser's suggestion that fees be brought into alignment with fees that would be paid by users of narrowband systems that would occupy the same bandwidth. ComReg notes DotEcon's general agreement with this approach. However, DotEcon points out that some consideration is needed over

[2]The fee for 8MHz would be calculated as follows: For wireless mics/in-ear monitors, the fee for five 200 kHz channels for 12 months is €65.75. Multiplying this by 8 gives a fee of €526.

how best to set the reference WMAS channel width and the maximum number of narrowband channels given that the scalability of WMAS and that the spectral efficiency of WMAS and narrowband systems is not fixed.[3]

2.24 DotEcon is of the view that using 8 MHz as the reference bandwidth for WMAS is sensible as it is the standard TV channel size in Europe and is also suggested as the typical bandwidth for WMAS by ETSI[4]. DotEcon points out that the number of narrowband audio channels that could fit into 8 MHz varies depending on a number of factors which may include: the specific equipment and technology used; the number of audio links needed; interference from external systems; and the link quality desired by the user. For instance, ECC Report 323 mentions that the number of wireless microphones that could be supported within 8 MHz could be anywhere from 12 up to approximately 25 depending on the specific requirement of the user. However, the numbers are likely to vary where there is a mixture of microphones and in-ear-monitors.[5]

2.25 DotEcon considers that 16 narrowband channels would be reasonable as this would align with the middle of the range mentioned in ECC Report 323 and, based on the views of ETSI, is based on the premise of ensuring that typical usage can be supported.[6] ComReg agrees with DotEcon and will update the fee schedule so that the fees that would be payable for an 8 MHz WMAS would be set equivalent to the total fees paid for 16 x 200 kHz audio channels. This corresponds to 2 x 200 kHz audio channels per MHz, and the charging structure would then be scaled accordingly so that the fee a WMAS user would pay would be equivalent to the number of narrowband channels that could be accommodated within that bandwidth. For instance, the fee for a 6 MHz WMAS for 12 months would be €197.25 which would correspond to the fee a narrowband user would pay for 12 x 200 kHz channels (€65.75 x 3 as fees are calculated in blocks of 5 channels). ComReg has updated the fees table in Section 4.3 accordingly.

2.26 ComReg does not agree with Shure's submission that the price floor is arbitrarily determined and may be too high. DotEcon notes that it has mentioned in its previous reports that there is a degree of uncertainty over the marginal cost to ComReg of issuing a PMSE licence. However, DotEcon maintains that ComReg needs to cover its administrative costs of managing the licensing framework and should not take on excessive risk of under-recovery.[7] Additionally, ComReg notes that the proposed fees will likely result in lower fees for a majority of users. For instance, the licence fee for a smaller audio PMSE user (e.g. 5 pieces of

[3] DotEcon Report, p.8, Document 26/42a
[4] ETSI TR 102 546 V2.1.1 (2021-10)
[5] ECC Report 323, page 22.
[6] DotEcon Report, p.9, Document 26/42a
[7] DotEcon Report, p.12, Document 26/42a

equipment with individual channels which corresponds to 5 x 200 kHz channels[8]) under the current framework is €72 for a licence with a duration of up to 6 months (the maximum duration under the current framework). Under the proposed fees, the corresponding licence fees for that user for a short term (up to 3 months) and 12-month licence would be €50 and €65.75 respectively. Further, should the licensee require a licence for 12 months, the proposed fee would be less than half the fees that would be charged under the existing framework as the licensee would need to apply for an additional 6-month licence upon expiry, bringing their total fees to €144 (compared to €65.75 under the proposed framework).

2.4.4 ComReg's Final Position

2.27 ComReg did not receive any other submissions from respondents on the above proposals, nor is ComReg aware of any other information which would warrant any further amendment to its proposals as set out in Consultation 26/06.

2.28 Accordingly, ComReg's final RIA, set out in Chapter 3 below, is substantially the same as that set out in Document 26/06.

2.5 Overall Summary and ComReg's Final Views of the PMR Licensing Framework

2.29 In line with the considerations outlined in ComReg Document 26/06 (Section 2), ComReg will implement certain changes, while, following careful deliberation, maintaining the status quo in other areas.

PMSE Licence Duration

2.30 The maximum duration for PMSE licences will increase from 6 months to 12 months, giving users longer operational certainty, however PMSE licences will remain as non-renewable licences.

Reform of PMR Licensing Framework

2.31 The new PMR licensing regime will contain just two licence types:

(i) PMR Licences; and

(ii) PMSE Licences.

2.32 Existing Business Radio, Third Party Business Radio, Trunked Radio, And Community Repeater licences, and Pagin Permits will be migrated to the new PMR Licence type from 1 July 2028.

2.33

[8] As detailed in Section 4.3 of Document 26/06 and repeated in Section 4.3 of this document, the median user uses 10 x 200 kHz channels.

PMR and PMSE Fees

2.34 ComReg will implement a new fee structure for PMR and PMSE licences as detailed in Section 4.3.

PMR and PMSE Licence eLicensing application process

2.35 As part of its strategy to regularly review our policies, processes and systems to ensure that they continue to support us in delivering on our mandate, mission, and vision, while meeting the highest standards of corporate governance,[9] ComReg will begin an IT project to update and further enhance the eLicensing system as part of its implementation of the new framework. The update will implement the new licence fees, enhance the frequency selection process, and provide additional information on spectrum assigned to other users within a given area.

2.36 ComReg will also continue to update Siteviewer tool[10] with further spectrum usage information by publishing relevant information on PMR licences which will assist licence applicants in the application process.

2.37 To ensure all interrelated systems are properly updated to implement the new regimes, ComReg has decided to propose an effective date of 1 July 2028 for the new PMR and PMSE Regulations to ensure the completion of the IT project and the seamless migration of licensees to the new regimes.

Changes to PMR Frequency Bands

2.38 The following frequency bands will be closed to new applications:

- 385–400 MHz; and
- 415–429 MHz.

2.39 The following frequency bands will remain available for PMR Licences:

- 68–88 MHz
- 155.85–174 MHz
- 450–470 MHz

New Frequency Range for PMSE Licences (3.8–4.2 GHz)

2.40 ComReg will allow low-power PMSE use in the 3.8–4.2 GHz band on a secondary basis for short-term, localised use (e.g. events, venues) to support

[9] ComReg Document 25/37 – ComReg Strategy Statement 2025-2027 – published 18 June 2025. Strategic Goal 12 - *We will endeavour to resource our organisation to deliver on our expanded mandate while continuing to deliver our existing responsibilities. As we change, we will regularly review our policies, processes and systems to ensure that they continue to support us in delivering on our mandate, mission, and vision, while meeting the highest standards of corporate governance*.

[10] https://siteviewer.comreg.ie/

higher quality wireless services.

Frequency Band Harmonisation

2.41 No changes will be made to the configuration of the lower and upper parts of the relevant sub-bands, ComReg will continue monitoring usage in key bands:

- 68–88 MHz;
- 155.85–174 MHz; and
- 450–470 MHz.

2.42 Any potential future alignment with ECC Recommendation T/R 25-08 will be considered as required.

Chapter 3

3 Final Regulatory Impact Assessment - PMR Licensing

3.1 Introduction

3.1 PMR refers to a variety of licence types issued by ComReg that are used to provide wireless communication services over private networks. Each licence type is issued under its own framework with different technical conditions and fees applicable to each framework and consists of the following licence types:

- Business Radio;
- Community Repeaters;
- Third Party Business Radio;
- Trunked Radio;
- PMSE; and
- Paging (permit)[11].

3.2 This chapter sets out ComReg's final Regulatory Impact Assessment ("RIA") on the procedure for setting spectrum fees for PMR licences by outlining the relevant policy issues and assessing the various regulatory options to determine ComReg's preferred option, having regard to the impact on stakeholders, competition, and consumers.

3.3 While assessing the various regulatory options, ComReg will do so in line with relevant legal obligations including Regulation 24 of the European Union (Electronic Communications Code) Regulations 2022[12] (the "ECC Regulations"), which requires that any regulatory option in relation to fees chosen by ComReg is objectively justified, transparent, non-discriminatory and proportionate.

3.4 ComReg has prepared this RIA having careful regard to the relevant information available, including the following:

[11] ComReg issues permits for paging under the Wireless Telegraphy Acts, 1926-1988
[12] Regulation 24 of S.I. No. 444 of 2022.

- Interviews carried out by DotEcon and ComReg with multiple stakeholders including existing users and equipment vendors prior to the first consultation (the "Stakeholder Interviews");
- A survey issued to all PMR licensees;
- The DotEcon Reports (Document 25/46a published alongside the first consultation, Document 26/06a published alongside the draft Decision and Document 26/42a which is published alongside this Decision document); and
- The submissions received to Documents 25/46 and 26/06.

RIA Framework

3.5 In general terms, a RIA is an analysis of the likely effect of proposed new regulation or regulatory change and, indeed, of whether regulation is necessary at all. The RIA should help identify regulatory options and establish whether the proposed regulation is likely to have the desired impact, having considered relevant alternatives and the impacts on stakeholders. The RIA is a structured approach to the development of policy and analyses the impact of regulatory options. In conducting a RIA, the aim is to ensure that all proposed measures are appropriate, effective, proportionate and justified.

3.6 A RIA should be carried out as early as possible in the assessment of regulatory options, where appropriate and feasible. The consideration of the regulatory impact facilitates the discussion of options, and a RIA should therefore be integrated into the overall analysis. This is the approach which ComReg follows in this document, and the RIA should be read in conjunction with the overall Consultation.

3.7 In conducting a RIA, ComReg has regard to the RIA Guidelines[13], while recognising that regulation by way of issuing decisions, for example, imposing obligations or specifying requirements in addition to promulgating secondary legislation, may be different to regulation exclusively by way of enacting primary or secondary legislation.

3.8 To ensure that a RIA is proportionate and does not become overly burdensome, a common-sense approach is taken towards a RIA. As decisions are likely to vary in terms of their impact, if after initial investigation, a decision appears to have relatively low impact ComReg may carry out a lighter RIA in respect of that decision.

[13] ComReg Document 07/56a, "Guidelines on ComReg's Approach to Regulatory Impact Assessment", published 10 August 2007, available at www.comreg.ie

3.2 Structure of the RIA

3.9 As set out in ComReg's RIA Guidelines, ComReg's approach to the RIA is based on the following five steps:

- **Step1:** Describe the policy issue and identify the objectives;
- **Step 2:** Identify and describe the regulatory options;
- **Step 3:** Determine the likely impact on stakeholders;
- **Step 4:** Determine the likely impacts on competition; and
- **Step 5:** Assess the likely impacts and choose the best option.

3.10 In the following sections, ComReg identifies the relevant stakeholder groups, specific policy issues to be addressed and relevant objectives (i.e. Step 1 of the RIA process). This is followed by the identification of the policy issues that need to be addressed.

3.11 ComReg then considers these policy issues in accordance with the four remaining steps of ComReg's RIA process.

Identification of stakeholders and approach to Steps 3 and 4

3.12 The focus of step 3 is to assess the likely impact of the proposed regulatory measures on stakeholders. Hence a necessary precursor is to identify such stakeholders. In this RIA, stakeholders fall into two main groups:

- Consumers; and
- Industry stakeholders.

3.13 The industry stakeholders comprise of the licensees and potential licensees of the various PMR licence types. These users span a wide range of sectors and use the various licence types to provide a wide range of use cases. In general, the industry stakeholders are the existing licensees that use the various PMR licence types and fall into the following categories:

- Transportation;
- Security;
- Manufacturing;
- Construction;

- Events Broadcasting;
- Utilities; and
- Healthcare/Retail.

3.14 The focus of Step 4 is to assess the impact on competition of the various regulatory options available to ComReg. In that regard, ComReg notes that it has various statutory functions, objectives and duties which are relevant to the issue of competition.

3.15 Of themselves, the RIA Guidelines and the Ministerial Policy Direction on Regulatory Impact Assessment[14] provide little guidance on how much weight should be given to the positions and views of each stakeholder group (Step 3), or the impact on competition (Step 4). Accordingly, ComReg has been guided by its primary statutory objectives which it is obliged to seek to achieve when exercising its functions. ComReg's statutory objectives in managing the radio frequency spectrum, as further outlined in the Legal Annex, include:

- Promote competition[15];
- Contribute to the development of the internal market[16];
- Promote the interests of users within the community[17];
- Ensure the efficient management and use of the radio frequency spectrum in Ireland in accordance with a direction under Section 13 of the 2002 Act.

3.16 In addition, ComReg is guided by regulatory principles and obligations provided for under the European Union (Electronic Communications Code) Regulations 2022, S.I. No. 444 of 2022. Such principles and obligations are outlined further at Annex 1 and include:

- Regulation 24 of S.I. No. 444 of 2022[18] permits ComReg to impose fees for rights of use, which reflect the need to ensure the optimal use of the radio frequency spectrum. ComReg is required to ensure that any such fees are objectively justified, transparent, non-discriminatory and proportionate in relation to their intended purpose; and

[14] Ministerial Direction dated 21st February 2003
[15] Section 12 (1)(a)(i) of the Communications Regulation Act, 2002
[16] Section 12 (1)(a)(ii) of the Communications Regulation Act, 2002
[17] Section 12(1)(a)(iii) of the Communications Regulation Act, 2002
[18] Regulation 24 of S.I. No. 444 of 2022.

- Regulation 4(5) (d) of S.I. No. 444 of 2022[19] which requires ComReg to promote efficient investment and innovation in new and enhanced infrastructure.

3.17 In this document, ComReg has adopted the following structure in relation to Step 3 and Step 4; the impact on industry stakeholders is considered first, followed by the impact on competition, followed by the impact on consumers. This order does not reflect any assessment of the relative importance of these issues but rather reflects a logical progression. In particular, a measure which safeguards and promotes competition should, in general, impact positively on consumers. In that regard, the assessment of the impact on consumers draws substantially upon the assessment carried out in respect of the impact on competition.

3.3 Step 1: Identify the policy issues and the objectives

Policy Issues

3.18 The spectrum available for users of the existing PMR licensing frameworks is a finite resource with many different services and users, and the radio spectrum management of these resources involves the careful consideration of a broad range of factors (e.g. administrative, regulatory, social, economic, and technical) with a view to ensuring that radio spectrum is optimally and efficiently used. This may also involve balancing a range of competing factors, including appropriately meeting the requirements of all radio services and promoting competition including ensuring that users derive maximum benefit in terms of price, choice, and quality, contributing to the development of the internal market, and promoting the interests of users within the Community.

3.19 Effective management of the radio spectrum requires more than a purely technical consideration; spectrum efficiency, functional and economic considerations must also be considered, including the extent to which the utilisation of spectrum meets a user's specific needs and the social and economic value that can be derived from it. This is particularly relevant in the current case where there are a variety of different frameworks catering for a variety of users providing different services using different technologies.

3.20 With that in mind, ComReg periodically conducts reviews of its licensing frameworks to ensure they remain fit for purpose given developments in use cases and technology. For instance, ComReg has recently completed reviews of its licensing frameworks for Fixed Links[20], Satellite Earth Stations[21], Telemetry

[19] Regulation 4(5)(d) of S.I. No. 444 of 2022
[20] ComReg Document 23/61
[21] ComReg Document 23/96

Systems[22] and Railway Mobile Radio[23]. In each case, ComReg has proposed new licensing frameworks which has provided for an increasing range of uses and technologies ensuring the more efficient use of the radio spectrum.

3.21 Regarding the various PMR frameworks, ComReg observes that some frameworks have been in place for considerable time (over 75 years in some cases) and that they have been developed sequentially to accommodate new technologies as they emerged. The licensing framework(s) for the six licence types (including fees) were established independently from one another over a more than 50-year period with the framework for Business Radio established in 1949 and Third-Party Business Radio in 2005. This means that there has been little if any consideration of how the spectrum rights of use in one licence category impacts the use of another. In that regard, ComReg notes the views of DotEcon that despite ComReg offering a broad range of licence types across the various frameworks, these licence types are no longer aligned with PMR use cases.[24]

3.22 Furthermore, the fees across all licence types in the period since they were established have not been adjusted for CPI meaning that licensees have benefited from a fee reduction in real terms over each relevant period – which raises the question of whether those fees are still effective enough to ensure the optimal use of the spectrum (e.g. are some licensees selecting some licence types because they are cheaper relative to others rather than more suitable to their requirements). There are different fee regimes for each of the PMR licence categories so it follows that any review of the frameworks should also include consideration of the level of fees to ensure that they are appropriate.

3.23 In that regard, the main policy issues to consider in this RIA, in the context of its statutory objectives, are, how best to establish a licensing framework for the PMR regime by considering (a) whether one or more licence types are still required and (b) an appropriate fee schedule for any such licence type(s)

3.24 The six licensing frameworks are summarised in Table 1.

Table 1: Overview of existing PMR licensing frameworks

	Business Radio	Trunked Radio	Third Party Business Radio	Community Repeater	PMSE	Paging
Established	1949	2002	2005	1988	1949	1988
Frequency ranges used	68 - 88 MHz	415.7750 - 418.9875 MHz Paired	165.5875 - 166.55 MHz Paired with	68 – 88 MHz	Two way radio 169 MHz, 441 – 448 MHz, 455-456 MHz,	68 - 88 MHz 155.85 – 174 MHz

[22] ComReg Document 24/25
[23] ComReg Document 25/17
[24] DotEcon Report, p30, Document 25/46a.

	Business Radio	Trunked Radio	Third Party Business Radio	Community Repeater	PMSE	Paging
	155.85 – 174 MHz 450 – 470 MHz	with 425.7750 - 428.9875 MHz 385.0000 - 389.9875 MHz Paired with 395.0000 - 399.9875 MHz	170.3875 - 171.35 MHz 453.8375 - 461.4875 MHz Paired with 460.3375 - 467.9875 MHz	450 – 470 MHz	461 MHz, 465 MHz, 469 MHz Wireless microphone/in-ear 470-703 MHz, 733 - 753 MHz, 1785-1805 MHz Wireless camera 1980-2010 MHz, 2010-2025MHz, 2025 – 2110 MHz, 2170 – 2200 MHz, 2200-2300 MHz, 6.425 – 7.125 GHz, 7.125 – 7.425 GHz, 10.3 – 10.5 GHz	450 – 470 MHz
Duration	1 year (renewable)	1 year (renewable)	5 years	1 year (renewable)	Max 6 months	Lifetime of system usage
Service Area	On site, local area, wide area	On site, local area, wide area	National	Wide area	On site	On site
Channel Size	12.5 kHz	12.5 kHz	12.5 kHz	12.5 kHz	12.5 kHz/200 kHz/10 MHz/ 20 MHz[48]	12.5 kHz
Fees	€22 + €22	€625 per 12.5kHz channel per base station (Year 1) €1000 (Subsequent)	€5000 per 12.5kHz channel	€12 processing fee + €625 year 1 €1,000 renewal	€12 fixed charge + €12 per piece of equipment	None
Spectrum rights of use	Shared	Shared	Iindividual	Shared	Shared	Shared
Number of live licences/permits (30 June 2025)	842	30	61	2	47	183 (permits)

Objectives

3.25 ComReg aims to design and carry out its review of the PMR licensing framework in accordance with its broader statutory objectives (as outlined in Annex 1) including the promotion of competition in the electronic communications sector.

3.26 In addition, the focus of this RIA is to assess the potential impacts of the proposed measure(s) (see regulatory options below) on stakeholders, competition, and consumers. ComReg can then identify and implement the most appropriate and effective means by which to set a new licensing framework including an approach to spectrum fees for PMR services, while achieving its

relevant statutory objectives under section 12 of the 2002 Act of promoting competition by, among other things:

- Encouraging efficient use and ensuring effective management of radio frequencies;
- Promoting regulatory predictability by ensuring a consistent regulatory approach;
- Safeguarding competition to the benefit of consumers and promoting, where appropriate, infrastructure-based competition;
- Contributing to the development of the internal market; and
- Promoting the interest of EU citizens.

3.27 ComReg notes that, in achieving its objectives, it seeks to choose regulatory measures which maximise the benefits for consumers in terms of price, choice and quality. Having identified the policy issues and objectives, ComReg now identifies the regulatory options to be assessed over the remainder of this RIA.

3.4 Step 2: Identify and describe the regulatory options

3.28 The existing PMR licensing frameworks have been in place for significant periods of time and have supported a wide variety of use cases. For this reason, ComReg will evaluate the existing licensing regimes as an option, given their utility to date, and to fully understand the impact of any change to an alternative option(s). Therefore, ComReg notes that **Option 1 is to maintain the status quo** and maintain the current frameworks and fee structures under the existing PMR licensing frameworks.

3.29 Furthermore, because those fees have not ever been updated for CPI an alternative option would be to update the existing fees for CPI. Therefore, Option 1 (b) is existing fees updated to account CPI in the period since those fees were first established.

Identifying other regulatory options

3.30 In relation to determining other potential options, it is necessary to ensure that such options could facilitate current and future use cases for Private Mobile Radio while also supporting ComReg in its objective to effectively manage the radio spectrum allocated to Private Mobile Radio.

3.31 As outlined above, the two main policy issues are (a) whether one or more licence types are still required and (b) what is an appropriate approach to setting fees for any such licence type(s). ComReg considers these in turn below to

determine other regulatory options because options which require more licences than necessary and/or have an inappropriate approach to setting fees would not be valid regulatory options.

(A) Are one or more PMR licence types still required?

3.32 As discussed previously, the existing frameworks were developed in separate processes over a substantial period of 50 years or more. While these frameworks have facilitated users in delivering a variety of use cases, ComReg notes that the frameworks may no longer be best aligned with the use cases that exist for PMR today and that there may be room for consolidating licences into one or more frameworks.

3.33 Following engagement with stakeholders, DotEcon notes that the stakeholders typically require PMR licences to provide the following use cases:

- **On-site communication:** such as talkback systems used at factories, retail, hospitals and construction sites;
- **Wide-area communication:** such uses include transportation, logistics companies, emergency services and search and rescue operations.
- **Events and broadcasting:** used in wireless devices for the production of events and for broadcasting.
- **Telemetry and control**: generally used by utilities companies to monitor and report back to a command centre frequent readings and critical operating information.
- **Paging** which allow the use of paging systems to provide for the sending of a one-way digital coded signal to a paging receiver.

3.34 Third Party Business Radio users also tend to cater for the same use cases with licensees often interested in that licence type because it offers individual rights of use to channels. Data gathered by ComReg shows that these licences are typically used to deliver on-site usage across different parts of the country. This points to a likely need for a more regional licence with the possibility for individual rights of use where required. Future requirements for a national licence should be supported by a rollout plan.

3.35 Each of these use cases have varying requirements in terms of bandwidth, types and quantities of equipment (e.g. hand portables, repeaters, base stations) and geographic scope etc. However, within all these use cases there is significant overlap between the spectrum, equipment, channel size and technical conditions across each of the different licence types and there is no apparent reason why these requirements cannot be satisfied across a single licence type.

3.36 This is supported by the fact that the ECC Decision documents[25] currently applicable to PMR are technology neutral and common ETSI standards cover multiple types of equipment. Alignment with best practice throughout Europe would not require different types of PMR systems/equipment to be covered by a separate licence type. In that regard, DotEcon notes there does not appear to be any prevailing need for licence types to be tied to specific types of PMR technology to deliver the above use cases.[26] This points to a need for a consolidation of licences to better ensure the efficient management and use of the radio spectrum.

3.37 While potential licensees will likely have different requirements, for example in terms of geographic scope, bandwidth and duration, there is no reason why these requirements cannot be satisfied under a single licensing framework. The notable difference is PMSE which, under the current framework, a licence is only available for a maximum duration of six months on a secondary basis and makes use of additional frequency ranges in addition to the UHF and VHF bands. Furthermore, the duration required by PMSE Licensees can be anything from a few days to six months meaning a uniform duration (e.g. one year, five years etc) as would be appropriate for other uses is unlikely to be suitable for PMSE.

3.38 A consolidated PMR licence would enable licensees to apply for a licence that is best aligned with their PMR needs and would lend a high degree of flexibility for a framework to be able to suitably adapt to any use cases for PMR that may emerge in the future. The potential benefits of such an approach in relation to spectrum efficiency are discussed in Paragraph 3.98 to 3.108 below. As such, ComReg considers that the basis for any alternative options should be through a PMR licence that would consolidate the existing licensing frameworks for Business Radio, Third Party Business Radio, Trunked Radio, Community Repeaters and Paging.

3.39 However, for the reasons outlined above, ComReg is of the view that it would be appropriate to retain a separate licence type for PMSE for the following reasons:

(iii) PMSE users require access to additional frequency ranges for specific radio equipment, e.g. wireless cameras, wireless microphones, and in-ear monitors that the users of the other PMR frequencies do not; and

(iv) The events for which PMSE licensees provide communication services for the most part, take place over very short periods of time

[25] For example, ECC Decision (19)02 and ERC Recommendation 25-08– On land mobile systems in the VHF and UHF bands; ECC Decision (15)05 – On PMR 466 applications and EC Decision 243/2012/EU – Establishing a multiannual radio spectrum policy programme.
[26] DotEcon Report p.30, Document 25/46a.

i.e. days for concerts. Some licensees provide services for longer durations (i.e. TV/film productions). This is reflective of the different usage requirements of PMSE licensees.

3.40 Therefore, ComReg is of the view that a consolidated PMR licence (which would now include paging) and a separate PMSE licence are required, and any regulatory options assessed in this RIA should facilitate same.

(B) What is an appropriate approach to setting fees?

3.41 Fees can play an important role in ensuring that licensees use the spectrum resource efficiently and supports ComReg in its function of ensuring the effective management of the spectrum resource. Regulation 24 of S.I. No. 444 of 2022 permits ComReg to impose fees for rights of use that reflect the need to ensure the optimal use of the radio frequency spectrum. In addition, ComReg is also required to:

- ensure that any such fees are objectively justified, transparent, non-discriminatory and proportionate in relation to their intended purpose; and

- consider the objectives of ComReg as set out in Section 12 of the 2002 Act and the general objectives of the Directive and S.I. No. 444 of 2022.[27]

3.42 There are various methods of determining spectrum fees and some approaches (or a combination of approaches) are likely to be more suitable than others. ComReg does not favour any one process for determining an appropriate approach to fees. As a matter of principle, it decides the most appropriate process in each individual case. Each approach will typically have its advantages and disadvantages, and one process may, on balance, be found to be the most suitable in light of the circumstances, including the characteristics of the spectrum to be assigned, the types of rights of use to be assigned and the anticipated demand for the spectrum.

3.43 As previously mentioned, ComReg has recently conducted reviews of other licensing frameworks and carried assessments of fee regimes for each. For each of those reviews, ComReg considered the relevant circumstances in each case to determine the most appropriate approach to setting fees:

- In the Fixed Links licensing review, ComReg determined that it was appropriate to adopt an approach that sets fees that are reflective of

[27] Among other things, these include the promotion of competition in the provision of electronic communications networks and associated facilities, including efficient infrastructure-based competition, and in the provision of electronic communications services and associated services.

opportunity cost which should encourage licensees to utilise the spectrum more efficiently, including incentivising the return of unused or underused spectrum.[28]

- In the Satellite Earth Station licensing review, ComReg found that the circumstances were materially different[29] to fixed links such that an approach based on the recovery of ComReg's administrative costs for licensing SES was the most appropriate approach.[30]

- In its review of the Telemetry licensing regime, ComReg determined that the existing framework for telemetry was effective and that the existing fee regime should remain in place, with the only change being a CPI adjustment which is in line with ComReg's best practice for determining licence fees for spectrum.[31]

- In its review of the Railway Mobile Radio regime, ComReg determined that that the spectrum fees for RMR should be based on long-run opportunity cost as this would accord with ComReg's statutory objective of encouraging the efficient use and ensuring the effective management of spectrum in addition to setting conservative fees that are reflective of opportunity cost to ensure Irish Rail are not unduly discouraged from rolling out services.[32]

3.44 ComReg endeavours to ensure a consistent regulatory approach across each of these relatively recent licensing reviews.

3.45 In the context of PMR, ComReg notes that the current regimes have different fee structures, and a policy option based around a consolidated PMR licence would mean that one approach to setting fees would be applicable to all users of PMR. In relation to PMSE, ComReg agrees with DotEcon that it would also be appropriate to closely align the fee regime for PMSE with the regime proposed under a consolidated licence approach.[33] This would be similar to the approach taken with the existing fee schedule for PMSE which is based on the existing fee schedule for business radio licences.

3.46 At a high-level, there are broadly two approaches to setting spectrum fees:

[28] ComReg Document 23/61.
[29] The comparatively lower demand for SES, in addition to the low interference and scarcity risks resulted in ComReg determining that administrative cost approach was appropriate.
[30] ComReg Document 23/96
[31] ComReg Document 24/25
[32] ComReg Document, 25/17
[33] DotEcon Report, p.46, Document 25/46a.

- **Opportunity cost based:** The opportunity cost of the radio spectrum is the value associated with the best alternative use that is denied by granting access to one user rather than to the alternative.

- **Administrative cost recovery:** a minimum requirement for fees is that ComReg recovers its administrative costs associated with managing spectrum licences.

3.47 Clearly, there is a sequencing in determining the appropriate fees approach. If it is the case that the spectrum can be used freely, or relatively freely, across alternative potential users over a sufficiently long period, then an approach based on the recovery of administrative costs is likely to be appropriate. In such a circumstance, no further consideration of alternative approaches would be required because there would be no opportunity cost that needs to be reflected in fees because other users are not precluded. An administrative cost approach often serves as a floor for fees because even where no scarcity issues are evident, there may also be a need to provide licensees with the correct incentives to use the spectrum efficiently than would be the case with simply administrative cost recovery.

3.48 Therefore, it follows that, prior to setting out the regulatory options available to it, ComReg must first assess the extent to which issues of scarcity could arise in the licensing of frequencies for PMR.

Assessment of spectrum scarcity for PMR

3.49 ComReg notes that to date there have been no issues of spectrum scarcity preventing operators from obtaining licences for their desired frequencies. This is primarily due to the usage characteristics of PMR:

- First, on-site and wide-area PMR users (e.g. business radio, trunked radio) are geographically confined, and operators should not cause interference with other geographically defined licences when in compliance with the technical conditions of their licence.

- Second, most PMR licences operate as shared use and employ coordination techniques, such as tone control, to use the same frequencies in overlapping areas without causing interference to other PMR users.

3.50 While a high proportion of PMR licences are concentrated in the Dublin area, there is considerable scope for reuse of frequencies without denying access to other users. DotEcon notes that where interference has been observed between PMR users, it is primarily due to operators failing to meet the technical conditions

specified in their licences rather than issues around excess demand.[34]

3.51 ComReg agrees with DotEcon's finding that there are no general trends in PMR demand that suggest spectrum scarcity will emerge. ComReg notes DotEcon's view that some emerging technologies such as push to talk over cellular (PoC) using mobile networks to provide similar services could reduce demand. However, there has been no indications at this time from PMR operators that they might migrate to this technology.

3.52 ComReg is of the view that demand for PMR licences will continue to provide communications across various sectors of society. ComReg does not envisage, at this point in time, significant changes to demand in the near future. However, some types of narrowband systems may be replaced by wideband systems over time in certain sectors such as transport, industry, and manufacturing to meet greater data bandwidth requirements. This could result in a migration from one type of licensing regime to another such as PMR to WBB LMP.

3.53 In relation to the Third-Party Business Radio licensing regime, ComReg notes that the supply of available channels was exhausted at the end of the last application round. While some of those licences have since been cancelled, ComReg agrees with DotEcon that the demand for national licences demonstrates that there is potential for scarcity to arise if many users were to demand access to national licences.[35] ComReg agrees with DotEcon that the potential for scarcity among users of PMR spectrum is likely to be low and an opportunity cost-based approach, would not likely be appropriate in this circumstance.

3.54 While a consolidation of licence types would help support this outcome by providing licensees with a higher degree of flexibility than under the existing frameworks, ComReg notes the views of DotEcon that any fee regime attached to this framework should create the correct incentives for users to select a licence that best fits their specific requirements and minimise the potential for artificial scarcity to arise.[36] In such cases, fees should incentivise potential users to assess its actual need for spectrum and select the most appropriate spectrum band from a range of alternatives. Therefore, ComReg's approach is to recover the administrative costs of licensing PMR but also provide the correct incentives for licensees to apply for a licence only for what they require to serve their use case(s).

3.55 In the section that follows, ComReg considers the factors that should be used to best ensure efficient use by encouraging users to only apply for rights of use that

[34] DotEcon Report p.28, Document 25/46a
[35] DotEcon Report p.23, Document 25/46a.
[36] DotEcon Report p.40, Document 25/46a.

meet their requirements but not beyond.

Factors that could be used to determine fees under a consolidated licence approach.

3.56 Under the existing PMR framework, fees are determined based on a variety of factors specific to each licensing framework. However, under an approach that is based on a consolidated PMR licence type, there would to be one approach to setting fees that would apply to all licensees. Therefore, before ComReg can assess any policy options, it must first carry out an assessment of what factors would be appropriate to determine how fees may be charged for PMR under a consolidated licence approach.

3.57 ComReg considers that a pragmatic approach would be to first assess the extent to which any elements of the existing fee structures associated with each of the current frameworks could be appropriate for determining fees as part of a consolidated licence approach. This assessment is set out below.

Equipment

3.58 Equipment is a feature of determining fees in three of the existing frameworks:

- The Business Radio framework where licence fees are based on the number of pieces of equipment used by the licensee;
- Trunked Radio, where the number of base stations included in the licence is used to determine licence fees; and
- The PMSE framework, where licence fees are based on the number of pieces equipment charged at half of the rate charged under the Business Radio framework.

3.59 An effective fee mechanism should encourage the most efficient use of the radio spectrum and facilitate the various use cases considered necessary under a consolidated PMR licence. However, a fee regime which includes an equipment charge could risk disincentivising licensees to use the limited spectrum resource to its maximum potential if it becomes inefficiently costly to use the optimal amount equipment on the network. (i.e. an equipment-based approach).

3.60 Charging per piece of equipment reduces the incentives to use spectrum more efficiently because it increases costs proportionally with each additional piece of equipment, potentially discouraging certain users (e.g. third-party business radio) from deploying the optimal amount of equipment needed for the efficient use of the spectrum because the total cost could become excessive and disproportionate.

3.61 In particular, Third-Party Business Radio users would be significantly disadvantaged by using a per-equipment based approach because as noted by DotEcon it would place an administrative burden on third-party operators and would be difficult to set at a level that meaningfully differentiated between different amounts of equipment without the risk of undermining some third-party provider business cases.[37] This effectively precludes charging per piece of equipment under a consolidated PMR licensing approach.

3.62 Conversely, the removal of per piece of equipment-based charging would not impact the efficient use for users that were formally charged on that basis because other factors such as geographic scope can adequately ensure the efficient use because any geographic area that an operator needs to cover needs to be served by a minimum set of equipment. DotEcon notes there is no strong need to maintain the per equipment charges that apply to other licence types, noting, for example, that the effect of per base station charges to trunked radio operators might already be achieved by charging based on coverage area.[38]

3.63 Therefore, ComReg is of the view that, in assessing a policy option under a consolidated PMR licence approach, it would not be appropriate to consider an equipment charge in the determination of fees as part of that assessment.

Geographic scope

3.64 Under the current regime, the geographic scope of the existing PMR framework includes on-site (<1km), Local area (<12.5km), Wide area (<25km) and national licences. Third Party Business Radio licensees are the only licensees that can be assigned a national licence under the existing frameworks. The other licensing frameworks can only operate within a subnational area (i.e. on-site, local area, wide area) as specified in the licence conditions.

3.65 To best provide for efficient use, it is essential that the geographic scope of a licence aligns with the usage/coverage area required by a licensee. Not accounting for the geographic scope of a user's requirements could have the undesired effect of:

(a) licensees inefficiently applying for larger areas that they do not need, thereby impeding access to other potential users and increasing the potential for scarcity in the future; and

(b) pricing off licensees that only require rights of use across a defined area (e.g. on site) but would need to pay the price of a national or wider area licence.

3.66 Therefore, ComReg is of the view that, in assessing a policy option under a

[37] DotEcon Report, p.41, Document 25/46a.
[38] DotEcon Report, p.41, Document 25/46a.

consolidated PMR licence approach, it would be appropriate to consider a geographic scope/coverage in the determining fees as part of that assessment.

Channels

3.67 The spectrum available for PMR is finite and, notwithstanding the risk of scarcity being low, not including the number of channels or total bandwidth in the determination of fees would not be conducive to creating the appropriate incentive for users to only use the spectrum or bandwidth that they need. Absent such a consideration, licensees would likely apply for more spectrum than necessary increasing the risk of future scarcity.

3.68 Therefore, ComReg is of the view that, in assessing a policy option under a consolidated PMR licence approach, it would be appropriate to consider a charge per channel size in the determination of fees as part of that assessment.

Individual rights use of the spectrum

3.69 Third Party Business Radio is the only framework where licensees have individual rights of use for the channels licensed to them on a national basis. This is also in part because they are licensed spectrum on a national basis meaning that it would not be possible for other users to get access to the same frequencies. The other current PMR licensing frameworks involve users having shared rights of use to the different frequency bands available for PMR and this has meant that frequencies can be re-used by multiple users.

3.70 ComReg notes from the stakeholder engagement that there is demand for the exclusivity offered by the Third-Party Business Radio framework. In 2025, ComReg consulted on the reopening of that regime for applicants.[39] While the need for individual rights of use is currently linked to the national licences under the Third-Party Business Radio regime, a consolidated approach would also facilitate use cases that value individual rights of use over a smaller geographic footprint.

3.71 Therefore, ComReg is of the view that, in assessing a policy option under a consolidated PMR licence approach, it would be appropriate to consider an exclusivity charge for individual rights of use in the determination of fees as part of that assessment

Conclusion

3.72 Given the above, ComReg is of the view that a valid regulatory option would be a consolidated PMR licence (including paging) with fees primarily based on

[39] ComReg Document 25/29 – Response to Consultation and decision on Re-opening the Third-Party Business Radio licensing regime: Response to Consultation and decision – published 22 May 2025.

administrative cost but also encourages more efficient use determined by reference to the geographic scope, channels and spectrum rights of use that a potential licensee would require.

3.73 Therefore, ComReg considers that the three regulatory options available to it are:

- **Option 1** – Maintain the existing licensing frameworks and make available all PMR frequencies on the same basis as detailed in each of the existing fee schedules.
- **Option 1(b)** – The same as Option 1 except fees would be updated to account for the change to the Consumer Price Index (CPI) in the intervening periods since the last updates to fees were made.
- **Option 2** – Make available all rights of use through a consolidated PMR licence (including paging). This option would involve consolidating five of the existing frameworks into one single PMR licensing framework with fees based on administrative cost set by reference to Channels, Geographic scope and individual rights of use. Fees would be annually updated for CPI.

3.74 Under Option 2, ComReg would closely align the fee regime for PMSE with that of the consolidated PMR licence.

3.5 Step 3: Impact on Stakeholders

3.75 This section provides information on the impacts on industry stakeholders (as outlined in Section 3.2) arising from the regulatory options above.

3.76 ComReg notes that there are two broad categories of impacts relevant to this section:

- First, the impacts arising from how rights of use are assigned in each of the regulatory options (i.e., “Assignment Impacts”); and
- Second, the impact of the regulatory option on spectrum fees paid by Existing Licensees or would be paid by future licensees (i.e., “Financial Impacts”)

Assignment Impacts

3.77 Assignment Impacts refers to impacts on licensees arising from how ComReg assigns spectrum rights of use. The choice of preferred option can impact an operator’s ability to obtain the rights of use necessary to satisfy efficient demand and deliver one or more of its use cases. Generally, these impacts can arise

where licensees are unable to obtain rights of use necessary to deliver their use cases, and/or where there is uncertainty about future fees and the extent to which they may change. For example, there are assignment impacts arising from the fact that the requirements that users have are not fully aligned with the existing PMR frameworks.

3.78 As discussed, each existing PMR framework currently has different approaches to the assignment of spectrum (including fees) and there are some features that are only applicable to certain frameworks. Under Option 1 or Option 1 (b), there is a risk that a licensee could apply for a licence that does not fully align with their specific requirements. For instance, if a user requires individual spectrum rights of use on a non-national basis (stakeholder engagement indicated support for such a provision), there is no existing framework that supports such a use case. Similarly, if a user requires nationwide access to spectrum but does not require individual spectrum rights of use, a Third-Party Business Radio licence is the only licence type that could facilitate such a use case under Option 1 or Option 1(b).

3.79 However, the use of the third-party business radio framework for such use cases is inefficient because the geographic scope is too large for non-national use cases and exclusivity may not be required by all potential licensees. Therefore, under Option 1 or Option 1 (b) some licensees would be assigned spectrum rights of use beyond the geographic scope of their requirements or be granted exclusivity when it is not required by the user. Further, a Third-party Business Radio licensee may not require the licence to provide services to third parties, but rather it is required to meet their own communications requirements.

3.80 Misalignment between current use cases and licensing frameworks was raised during the stakeholder engagement and it mainly arises due to legacy effects associated with the annual renewal of licences (e.g. many licensees have applied for licences under certain frameworks because they are simply renewing the same licence every year as a matter of practice). The stakeholder engagement supports the view that some licensees hold licences not because of an assessment of what their exact needs are and how they have changed over time but because it is easier to simply renew an existing licence. For example, some trunked radio users could potentially use the business radio framework except it currently does not accommodate trunked use cases which has a different fee schedule.

3.81 Under Option 2, operators would be able to determine what their exact PMR requirements are and then apply for a licence that is more precisely aligned with their use case through a single consolidated framework (e.g. the licence would be provided based on the licensees' exact requirements across, bandwidth, geographic scope, exclusivity, third party use etc). This would remove the gaps between the existing frameworks and would better support existing use cases

already provided for under the existing frameworks, while also facilitating new use cases that cannot be facilitated under the current regimes.

3.82 Therefore, ComReg is of the view that based on assignment impacts stakeholders would likely prefer Option 2 over Option 1 and Option 1 (b).

Financial Impacts

3.83 Under Option 1 there would be no change in the financial impacts faced by stakeholders as the fees across the various licence types would remain the same.

3.84 The remainder of this section assesses the financial impacts of Option 1 compared to Option 1 (b) and Option 2.

Option 1 v Option 1 (b)

3.85 The existing PMR licence fees are not annually updated to account for CPI. Therefore, the financial impacts that would arise under Option 1 (b) would amount to the % increase/decrease in the CPI in the intervening periods since the frameworks have been last reviewed. As noted previously, the various PMR frameworks were introduced at different times and have been in place for considerable durations. In the case of Business Radio, PMSE and Community Repeaters, the governing regulations predate the adoption of the Euro in Ireland and the fee regimes for each of these frameworks were converted from the Irish Punt to reflect the equivalent value in Euro from January 2002.[40]

3.86 See Table 2 for the percentage change across each licence type. In summary, the total fees paid by Existing Licensees would increase by approximately 52% or €320,000 per annum under Option 1 (b). The change in the CPI under Option 1 (b), using the latest available data at the time of publication[41], would result in licence fee increases of the following:

- 60.2% for Business Radio, Community Repeater and PMSE;
- 55.1% for Trunked Radio; and
- 41.8% for Third Party Business Radio.

Table 2: Changes to the CPI for each licensing framework

	Commencement	CPI Change[42]

[40] Euro Changeover (Amounts) Act, 2001
[41] CPI data available to March 2026.
[42] CSO CPI Inflation Calculator. See Interactive Data Visualisations | CSO Ireland

Business Radio	January 2002	60.2%
Trunked Radio	August 2002	55.1%
Community Repeaters	January 2002	60.2%
Third Party Business Radio[43]	October 2005	41.8%
Paging	n/a	n/a
PMSE	January 2002	60.2%

Option 1 v Option 2

3.87 To assess the financial impact of Option 2 on Existing Licensees, ComReg has conducted a comparative analysis of the fees paid by those licensees compared to Option 1. The assessment that follows is necessarily static and is conducted to highlight possible impacts, noting that final fees paid by Existing Licensees would depend on choices made by those licensees in determining how to dimension their PMR networks in the future.

3.88 Total fees for Existing Licensees under Option 2 would increase by approximately €60,000 per annum annually compared to Option 1. This increase in overall fees is not universal because some licensees would experience a decrease in fees while others would experience an increase. However, this increase would be approximately €260,000 lower compared to Option 1b which updates existing fees for inflation as set out in the Table 2 above.

3.89 Under Option 2, any financial impacts (whether an increase or decrease) would be dependent on the number of channels used, the geographic scope and whether the spectrum is assigned with individual rights of use or not. It is not possible to outline each of these impacts individually, given the prevailing confidentiality concerns. Notwithstanding, it is informative to note the percentage increases and decreases across each of the existing licence types given that stakeholders typically fall under these categories. In summary:

- The median on-site Business Radio user would experience an increase on average of around €61 per licence.
- Trunked Radio Licensees would experience a decrease on average of around €5,600 per licence.

[43] ComReg reopened the TPBR licensing regime on 1st September 2025 and all new licences issued will expire on 29 September 2030. Any adjustment for CPI under this option would only take effect after the expiry of licences.

- Third Party Business users would experience an increase on average of around €2,900 per annum.
- Community Repeater users would experience a decrease of approximately €700 per annum.
- Paging would now fall under a consolidated PMR licence and the average fee for a licence would be €263 per annum (this would depend on the number of channels used, the geographic scope and whether the channel(s) are assigned with individual rights of use or as shared rights of use).

3.90 Business Radio and Trunked Radio users (who are currently charged on a per equipment basis under Option 1) are likely to prefer Option 2 because their licence fee would not increase with each piece of equipment used on the network. This is particularly likely to be the case for operators who have a large quantity of equipment operating on an on-site basis network using shared spectrum. The removal of equipment-based charging means that licensees that previously used a large amount of equipment would face the largest fee reductions.

3.91 Licensees with smaller amounts of equipment under the current Business Radio framework (i.e. less than 8) would likely see a rise in fees compared to Option 1. However, any increase would be small (i.e. in the order of tens or hundreds of euros) and such operators may offset any increase against the flexibility that Option 2 would bring as operators would not need to make any licence amendments or pay additional fees should they require additional equipment at any stage over the duration of their licence.

3.92 Third-Party Business Radio licensees that require national licences with individual spectrum rights of use are likely to prefer Option 1 over Option 2 because such licences would experience a €2,900 increase in fees per annum under Option 2. This increase primarily arises from the need for fees to reflect the individual and geographic nature of the spectrum rights of use under Option 2. To date such licences have been made available for a relatively modest €1,000 per annum and have not been updated in over 20 years. However, as noted earlier, some of these licensees may not require national licences with individual spectrum rights of use. Under Option 2 such licensees would now be able to tailor their licence to suit their requirements such that the fees paid may be less that what is currently under the case under Option 1 or Option 1 (b).

3.93 In September 2025 ComReg reopened the TPBR licensing regime for a final time to facilitate the continuation of services currently operating under the regime while ComReg consults on a new PMR licensing framework. As such, any financial impacts for Third Party Business Radio users would not occur until the

proposed expiry of those licences. (i.e. those licensees most impacted would have nearly 5 years notice if assigned a new licence under that framework).

3.94 Having considered the assignment and financial impacts associated with both Options and noting that no views were received during this consultation process that would suggest otherwise, ComReg is of the view that, on balance, stakeholders are likely to prefer Option 2.

3.6 Step 4: Impact on Competition and consumers

Impact on competition

3.95 There are different elements to competition that are relevant in determining the impact of any of the preferred options. There is a natural overlap between the aims of the fee methodology and an assessment of ComReg's compliance with some of its statutory obligations, particularly that of promoting competition, in accordance with Section 12 of the 2002 Act. These include:

- Encouraging efficient use and ensuring the effective management of radio frequencies and numbering resources[44] ("Efficiency and Spectrum Management"); and
- Promoting efficient investment and innovation in new and enhanced infrastructures[45]("Efficient Investment"); and

3.96 ComReg provides its assessment of each below.

Efficiency and effective management of radio spectrum

3.97 ComReg's spectrum management role requires that operators with spectrum assignments are incentivised to efficiently use those spectrum assignments. Given the requirements of users across bandwidth, geographic scope and exclusivity, there are three main areas governing the efficient use of spectrum under this aspect of competition.

(i) the geographic scope of a licence should not extend beyond the area necessary to meet its intended use of the spectrum.

(ii) the approach to fees should incentivise spectrum sharing to avoid potential scarcity. (i.e. if operators have rights of use beyond their needs or inefficiently use licences with individual spectrum rights of use when the frequencies could be shared).

[44] Section 12(2)(a) of the 2002 Act
[45] Section 12(2)(a) of the 2002 Act

(iii) Fees should not be sufficiently different across similar use cases (i.e. users that require similar bandwidth and coverage should have broadly similar fees).

(iv) Licensees should be incentivised to only apply for bandwidth that is sufficient to satisfy their requirements.

3.98 In relation to (i) and (ii), under Option 1 and Option 1 (b), licensees are unable to match their requirements to the geographic scope and/or their exclusivity requirements across certain licence types. For example, Third Party Business Radio Licences are national licences with individual spectrum rights of use and with no scope for any further specificity across either the geographic scope or the extent of sharing (i.e. individual spectrum rights of use or not). For example, a licensee can only obtain a licence with individual spectrum rights of use across a national area and there is no flexibility under Option 1 to provide a non-national licence individual spectrum rights of use or a national licence with shared rights of use.

3.99 This means if a licensee requires exclusivity to provide for its use case, it can only obtain a national licence when a licence across a smaller geographic would have better suited their requirements and been a more efficient use of the radio spectrum. In such cases, licensees either must obtain a licence beyond its geographic or sharing requirements or decide not to apply for a licence at all. Neither outcome best ensures the efficient use of the spectrum because a licence is either assigned inefficiently beyond the licensees' requirements or not at all denying a valid use of the spectrum because the licensing framework was not sufficiently flexible.

3.100 Under Option 2, consolidating licences enhances spectrum efficiency by enabling licensees to apply for a single licence that best aligns with their operational needs. This reduces the inefficiencies of using multiple different licences across different spectrum assignments, allowing operators to optimise network performance and minimise potential interference with other users. A consolidated licence ensures more effective use of a finite resource by streamlining assignments to better match demand, improving network capacity and supporting innovative services while maximising the overall utility of available frequencies.

3.101 Alternatively, under Option 2, all licensees would be able to apply for a licence that best represents the geographic area required to cover its use (i.e. national, local, wide area etc) and whether access to the spectrum is individual or shared with other PMR users. This clearly represents a more efficient use of the radio spectrum because Option 2 provides more flexibility to cater for a potential licensee's requirements across bandwidth, geographic scope and the need for exclusivity (or not).

3.102 In relation to (iii), under Option 1 and Option 1(b), there would be no consistent approach to determining fees which means that licensees are charged different fees for accessing spectrum through the different frameworks, despite technical conditions being largely similar. The approach to setting fees is different across each of the frameworks because they were designed independently and licensees may select a licensing framework (e.g. business radio) based on the fees charged, rather than on whether the licensing framework best suits its requirements in terms of the use of the spectrum.

3.103 For example, it is likely that some licensees would prefer trunked radio but may instead use the business radio framework purely because the fees for trunked radio are significantly higher owing to the €625 per channel per base station charge (compared to €22 per piece of equipment plus a fixed charge of €22 for the duration of the licence for business radio). Such scenarios would not support efficient use, particularly given that trunked radio aims to be an efficient way of sharing a pool of channels between users and its use could potentially be discouraged under Option 1. As previously discussed, such scenarios arise because the frameworks under Option 1 were developed independently of one another over a more than 50-year period.

3.104 Alternatively, under Option 2 fees are primarily determined based on administrative cost recovery given a licensee's requirement across, bandwidth geographic scope and sharing requirements. The fees associated with any use type increase in line with those usage requirements regardless of the underlying technology used by the Licensee. In this way, potential licensees do not need to consider fees in determining how (or what technology) is used to support their requirements. Such an approach also better supports ComReg's position that the licensing of radio spectrum in Ireland is technology and service neutral. In that regard, ComReg agrees with the views of DotEcon that the structure of fees and the assumptions used to distribute costs must reflect that the types of consolidated licence that would be taken up and that fees approach under Option 2 would better encourage users to best determine their requirements and only apply for licences specific to their requirements.

3.105 In relation to (iv), the use of bandwidth as a factor simply means that the more bandwidth that is used the higher the associated spectrum fee.

3.106 Under Option 1, fees rise in line with increases in bandwidth for Trunked radio only (i.e. the fee for a 25 kHz is twice that of a 12.5 kHz channel) – for all other licence types of Licences higher bandwidths are either unavailable or users are assigned several 12.5 kHz channels. Alternatively, under Option 2, the formula approach applies to the fee per 2 x 12.5 kHz channel. Other channel widths and unpaired channels are also permitted (unlike Option 1) and will be charged the same price per kHz, meaning an unpaired 12.5 kHz channel pays half this fee, as does a paired 6.25 kHz channel, while a paired 25 kHz channel pays double.

If a licence covers multiple channels, this formula applies to each channel, and the channels fees are added together to give the licence fee.

3.107 Given the above, ComReg is of the view that Option 2 best promotes the efficient use of the radio spectrum.

Efficient investment

3.108 Creating the conditions for promoting efficient investment and innovation in new and enhanced infrastructure involves ComReg exercising its regulatory functions in an appropriate and predictable fashion, thus providing regulatory certainty. Any option should provide certainty that the regulatory framework, which often underpins investment decisions, will not change unnecessarily and require operators to make subsequent and additional investments and/or changes to their network.

3.109 Promoting competition and encouraging efficient investment, in ComReg's view, means allowing for a cost-effective deployment of PMR services and preventing inefficient duplication of investment caused by predictable changes to the regulatory regime. With that in mind, it is important that any option considers the likely long run development of the market to avoid future changes to the regulatory framework that could have been foreseen or give rise to additional cost.

3.110 Under Option 1, investment in the PMR network to date has largely been effective and efficient given the benefits to consumers and competition. However, it is unlikely that this option can persist in the long run because each of the PMR licensing frameworks are linked to use cases which were developed over 20 years ago and DotEcon's assessment of use cases shows that these use cases are no longer aligned with the existing framework. Over time, it is likely that potential licensees will find it increasingly difficult to roll out their preferred network due to the misalignment between the existing frameworks and their requirements. As previously discussed, Option 1 limits the extent to which potential licensees can be assigned rights of use that match their requirements across bandwidths, geographic scope and exclusivity.

3.111 Alternatively, under Option 2 fees are primarily determined based on administrative cost recovery given a licensee's requirement across, bandwidth geographic scope and its sharing requirements. In this way, licensees can match their requirements with the type of spectrum assignment that they require, thereby promoting efficient investment choices. As noted by DotEcon, certain types of licence are not currently available under Option 1 but will be under the consolidated licence such as national shared use licences, or regional licences that are individual or support third party provision (under Option 2). Additionally, under Option 2, fees are based on administrative cost recovery, thereby not

inefficiently choking off demand for smaller users.

3.112 Therefore, ComReg is of the view that Option 2 would better encourage efficient investment and innovation by allowing operators to deploy services best aligned with their needs.

Conclusion on impact on competition

3.113 Based on the assessment above, ComReg is of the view that Option 2 best promotes competition.

Impact on consumers

3.114 ComReg considers that as consumers are not direct users of PMR systems, it would be appropriate to consider the impacts on consumers in the context of ensuring that spectrum rights are efficiently used to facilitate the effective deployment of PMR use cases used by industry stakeholders, which in turn provide goods and services that consumers are likely to value. In that sense, ComReg considers that the primary consumer impacts to be considered are how the policy options impact inputs to downstream services which are valued my consumers.

3.115 Further, it can be generally assumed that what is good for competition, and what promotes investment in infrastructure, is, good for consumers. This is because increased competition between operators brings benefits to their customers in terms of price, choice and quality of services. In that regard, options that are good for competition are likely to be good for consumers. For example, consumers are likely to prefer those options which maintain or improve services and while at the same time not deterring entry or efficient investment. With that in mind, ComReg reminds the reader that Option 2 is preferred in terms of the likely impact on competition.

3.116 It is useful to briefly set out why the efficient assignment of PMR rights of use across a range of bands and services which are not directly used for downstream services is an important issue for consumers, as it will affect the choice, price, and quality of the electronic communications service that ultimately are made available to consumers.

3.117 The efficient assignment and use of PMR rights of use is important for consumers because these systems serve as inputs into essential services that consumers rely on. PMR enables reliable, secure and cost-efficient means of communications public safety, public and private transport (e.g. bus and taxi), logistics and critical infrastructure (e.g. utilities and construction). The efficient assignment of these rights of use minimises interference thereby helping to ensure that these industries can operate effectively, delivering timely and dependable services that consumer scan rely on and that enhance consumer

safety, convenience and economic productivity. Inefficient assignment could lead to communications failures, delays, or increased costs ultimately impacting the quality and affordability of consumer facing services.

3.118 As discussed previously, the existing frameworks under Option 1 have been developed for old and possibly outmoded use cases. While consumers value the services that these frameworks have helped to deliver, the flexibility provided by Option 2 would better facilitate existing and future use cases by best allowing operators to deploy services best aligned with their communications needs. Additionally, as Option 2 is primarily based on the recovery of ComReg's administrative costs, the distribution of costs should not inefficiently choke off demand from smaller users.

3.119 With that in mind, ComReg is of the view that consumers are likely to prefer Option 2.

3.6.2 ComReg's preferred option

3.120 This RIA considers a number of regulatory measures available to ComReg within the context of the analytical framework set out in ComReg's RIA Guidelines (i.e., impact on industry stakeholders, impact on competition and impact on consumers).

3.121 In light of the above, ComReg is of the view that Option 2 is preferred in terms of the impact on stakeholders, competition and consumers mainly because it is the Option that best provides for the provision of all use cases referred to in this consultation and appropriately weights the burden of administrative costs on those users most likely to benefit from the deployment of those costs.

Chapter 4

4 Setting Fees for PMR

4.1 Introduction

4.1 In its RIA, ComReg set out its view that Option 2 was its preferred approach to setting fees for PMR. This option would set fees to at least recover ComReg's administrative costs of managing the framework for PMR licensing while encouraging the efficient use of the radio spectrum through the distribution of costs drawing on the following parameters:

- The number of channels used;
- The coverage area of the licence; and
- Whether the spectrum is licensed with individual spectrum rights of use or shared use.

4.2 This chapter provides a formal description of the formula used to calculate fees under Option 2. Further, it outlines the values for each parameter under that option and provides an assessment for each value.

4.2 Description of formula

4.3 To implement this administrative cost fee schedule, ComReg will use the following formula:

$$\mathbf{F(c, E)} = \boldsymbol{\alpha}[\mathbf{1} + \boldsymbol{\beta c}]\,\boldsymbol{\gamma}^{\boldsymbol{E}}$$

4.4 Table 3 below provides a description of each of each of the variables, how each variable is mathematically represented and the value for each variable. Following this table, ComReg provides its rationale for the value for each variable in the formula.

Table 3: The values for the model parameters under Option 2

Variable	Description and values
The base fee for a paired (or 2 unpaired) 12.5 kHz channel: α	This is the value required for ComReg to recover its administrative costs of managing the PMR licensing framework. **α=263**
The coverage area of a licence: c	This is a variable that is associated with the coverage area of a licence. If the coverage area of a licence is national: **c=1** If the coverage area of a licence is on site: **c=0** If the coverage area of the licence is wide area, c is the geographic scope of the licence in proportion to the area covered by a national licence. (i.e. c will be greater than zero, but less than 1)
The premium value for a national licence: β	This determines how much a national licence costs relative to an on-site licence: **β=4**
The premium for individual rights of use licences: γ	γ is the proportionate premium for individual rights of use licences relative to licences that share channels. **γ=3**
Whether a licence has individual spectrum rights of use or not: E	This is a binary variable that is associated with the exclusivity of a licence. If the licence requires individual spectrum rights of use: **E=1** If the licence does not require individual spectrum rights of use: **E=0**

Parameter values

4.5 The consolidated licensing approach under Option 2 would see a notable change in the structure for PMR licensing. This approach would facilitate new licence type possibilities (for example, national shared-use licences and on-site licences with individual spectrum rights of use) while greater flexibility for licensees to secure licences better suited with their specific

4.6 Given the degree of change, anticipated demand would be challenging to forecast. The demand for licences under the licensing structure is highly uncertain and ComReg cannot reasonably predict what users will need to meet

their communications requirements. That said, DotEcon rightly advises that the structure of fees and the assumptions used to distribute costs should reflect that the types of consolidated licences that may be taken up and should not inefficiently choke off demand from smaller users.

4.7 Therefore, fees should create meaningful incentives for efficient use of spectrum for PMR and should at least recover ComReg's administrative costs while also being predictable and practical to implement for ComReg.

4.8 In light of the above, ComReg discusses the parameters for each component in the fees formula in order below:

- The base fee **(α)**;
- The premium value for a national licence **(β)**; and
- The premium for an licence with individual spectrum rights of use **(γ)**

The base fee (α)

4.9 In Document 25/46a, DotEcon advised that the base fee **(α)** is set at the level required to cover ComReg's administrative costs (under the assumption that the number of licences remains constant). It is calculated by dividing total administrative costs incurred by ComReg by the total number of channels currently licensed. This gives a value of €263 for **(α)** which is the minimum fee any PMR licensee would need to pay.[46] Additional fees would be incurred for licences with wider coverage, greater bandwidth and/or have individual spectrum rights of use (discussed below).

4.10 DotEcon advised that based on current use this might lead to some over-recovery of costs because the scope of existing licences go beyond on-site, shared use licences (i.e. some licensees use multiple channels, deploy services over a wider geographic area or are licensed for exclusive use with individual rights of use) and it is not possible to set a base fee for a consolidated licence when existing use is spread across five use types. Nevertheless, it is appropriate for ComReg to protect against any risk of significant under-recovery subject while not choking off efficient demand. This is a proportionate approach for the following reasons:

(i) any potential over-recovery would be spread across over 500 licensees compared to an under recovery which would have to be borne entirely by ComReg,

[46] DotEcon Report p.45, Document 25/46a.

(ii) Any additional costs arising from an over recovery of the base fee would be very modest,

(iii) the level of (and differences within) the fees must be sufficient to create meaningful incentives for the efficient use of the radio spectrum.

4.11 Given the above and in light of the values of the other parameters which are discussed below, ComReg agrees with DotEcon's recommendation and sets the base fee **(α)** at €263.

The premium value for a national licence (β)

4.12 To create the appropriate incentive to avoid operators claiming larger coverage areas than required, DotEcon suggested in Document 25/46a that the premium for a national licence be based on the difference in fees between national and on-site licences (noting that such geographic scopes are already available under existing PMR licences and the stakeholder engagement suggested that they remained appropriate for the likely use cases). Third Party Business Radio licences (which are national licences) and Business Radio licences (which provide for on-site licences) are the closest equivalent licence types under the existing frameworks for PMR. To calculate the premium, DotEcon calculated the ratio of an annual TPBR licence[47] to a typical Business Radio licence[48] which gives a premium value for a national licence (β) of 4.

4.13 ComReg notes that this value would be towards the lower end of where ComReg could set the parameter value to incentivise users only taking national licences when required. For instance, DotEcon noted that a similar calculation based on the difference between national telemetry licence fees (not subject to this consultation) would result in a premium value of approximately 60. However, ComReg notes that such a high parameter could risk pricing off those who have genuine requirement for a national licence. ComReg therefore agrees with DotEcon's consideration as outlined at page 44 of Document 25/46a and sets the value of (β) at 4.

The premium value for a licence with individual spectrum rights of use (γ)

4.14 Similar to the premium value for a national licence, DotEcon advised in Document 25/56a that the individual spectrum rights of use parameter should be set at a level to incentivise operators to only take out licences with individual spectrum rights of use when they have a genuine need and value for them. DotEcon noted that the number of users that would share a channel is not fixed

[47] The total fee for a Third-Party Business Radio licence is €5000 for a duration of 5 years. DotEcon assumes an annual value of €1000. DotEcon report p.44, Document 25/46a.

[48] This is calculated by taking the median number of pieces of equipment for on-site business radio licences. DotEcon Report p. 44, Document 25/46a.

and may well depend on the usage patterns of licensees. As such, DotEcon recommended that ComReg offers guidance that there will typically be no more than 4 operators sharing a channel in a given area and advises that the premium value for a licence with individual spectrum rights of use be set at 3[49] to reflect this position. In DotEcon's view, this would reflect that the number of users sharing a channel would likely be the optimum shared usage scenario.

4.15 ComReg notes that under the existing frameworks, only TBPR licensees have individual spectrum rights of use and that all other PMR licensees are licensed on a shared basis. However, with the consolidated licence approach under Option 2, all users would be able to apply for individual spectrum rights of use. ComReg agrees with DotEcon that the individual spectrum rights of use parameter should be set at a level to incentivise efficient use and not give rise to artificial scarcity. As such, ComReg agrees with DotEcon's recommendation and sets the value of (γ) at 3.

4.16 ComReg provides some examples of fees under the new framework in Table 4 below.

Table 4: Examples of the fees for PMR licences

	Annual fee under current framework	Annual fee under new framework
Example 1 2 x 12.5 kHz channels (1 paired) 10 pieces of equipment On-site operation Shared spectrum rights of use	Business Radio Framework 22+(22*10)= **€242**	[263(1+4*0)3^0] = **€263**
Example 2 8 x 12.5 kHz channels (4 paired) 2 base stations (4 paired channels at each location) Area: 100km^2	Trunked Radio Framework 1000*2*4= **€8,000**	4*[263(1+4*0.004) 3^0]= **€1070**[50]

[49] DotEcon Report p. 45, Document 25/46a.

[50] The 0.004 is calculated by calculating the coverage area (radius 10km = coverage area of approx. 314 km^2) and dividing it by the area of Ireland (approx. 70,273 km^2)

Shared spectrum rights of use		
Example 3 6 x 12.5 kHz channels (3 paired) National operation individual spectrum rights of use	Third Party Business Radio Framework 1000*3 = €3000 per year[51]	3*[263(1+4*1) 3^{1}]= **€11,835**
Example 4 6 x 12.5 kHz channels (3 paired) Area: 2500km^2 individual spectrum rights of use	Third Party Business Radio Framework Fees under current framework based on national usage only. 1000*3 = €3000	3*[263(1+4*0.036)3^{1}]= **€2703**

4.3 PMSE

Licence duration

4.17 In Document 26/06a, DotEcon noted that the licence data indicates a polarising split as some users only require spectrum for relatively short periods (i.e. less than 10 days to cover a very short-term event, such as a concert), while other users apply for the maximum 6 month duration.

4.18 DotEcon suggested that increasing the maximum duration for PMSE licences from 6 months to 12 months would better support users that require longer term licences (as opposed to applying for a new 6 month licence at expiry) by reducing the frequency they would need to submit new licence applications, while also remaining consistent with the PMR licence framework.[52] ComReg agrees with this approach and notes that respondents to Document 26/06 were also supportive of this. As such, ComReg will increase the maximum licence duration for PMSE from 6 months to 12 months.

Channels

4.19 Unlike other PMR licensees, DotEcon noted that PMSE operators use a wide

[51] TPBR fees are €5000 for a paired channel for a duration of 5 years. Dividing by 5 assumes an annual fee of €1000.
[52] See DotEcon Report p.36, Document 26/06a

range of bands, each catering for different types of equipment, with some using much wider bandwidths. DotEcon recommended in Document 25/46a that ComReg identifies a typical bandwidth for each band, and apply a fee based on that bandwidth[53]. ComReg agrees with this approach and, having examined PMSE licence data, sets out the channel size and typical number of channels used in Table 5. Following ComReg's assessment of respondents' views regarding WMAS in Section 2.4.3, ComReg has added WMAS to the table below.

Table 5: PMSE channel size and usage

Equipment	Frequency Ranges	Typical Channel Size	Median number of channels used
Two-way radio	169 MHz, 441 – 448 MHz, 455 - 456 MHz, 461 MHz, 465 MHz, 469 MHz	12.5 kHz	2
Wireless microphone/In-ear Monitor	174-230 MHz, 470 - 703 MHz, 733 -753 MHz, 1785 - 1805 MHz	200 kHz	10
WMAS	470 - 694 MHz	8 MHz	1
Wireless Camera	1980 - 2010 MHz, 2010- 2025 MHz, 2025 – 2110 MHz, 2170 – 2200 MHz, 2200 - 2300 MHz, 6.425 – 7.125 GHz, 7.125 – 7.425 GHz, 10.3 – 10.5 GHz	10 MHz	1
Telemetry	174-230 MHz, 455-461 MHz	12.5 kHz	2
Wireless Broadband	3800-4200 MHz	10 MHz	1

Fees for PMSE

4.20 As detailed in Chapter 3, ComReg is of the view that the fee structure for PMSE licences should be aligned with the proposed fee structure for the consolidated PMR licence proposed under Option 2. This approach would remove the equipment charge currently attached to PMSE licences and would helpfully make fees more predictable and consistent for PMSE users.

4.21 DotEcon advises that PMSE fees should be set at half the level of a comparable PMR licence (i.e. on site and shared use) fee under the formula set

[53] DotEcon Report p.46, Document 25/46a

out above[54] as:

- this would be similar to the approach taken under the existing fee schedule;[55]; and
- is reflective of the fact that PMSE licences are issued for on-site use, with shared spectrum rights of use on a non-interfering and non-protected basis.

4.22 In light of this and noting that the fee for a comparable PMR licence (on- site and shared use) would be €263, the fees for PMSE would be €131.50. As mentioned previously, DotEcon recommends that this fee be applied to the typical bandwidth used for each PMSE band, which ComReg has set out in Table 5 above. For example, the typical bandwidth for two-way radio is two 12.5 kHz channels which would mean the fee for 2 channels would be €131.50, and the fee for one channel would be €65.75.

4.23 Regarding fees for WMAS, in Section 2.4.3 ComReg, having considered the views of respondents and the advice of DotEcon, decided to set WMAS fees equal to the fee that would be paid by a narrowband operator using the maximum number of channels in the same bandwidth. Consequently, the reference bandwidth for WMAS was determined to be 8 MHz and the corresponding fee €263. ComReg has scaled fees accordingly for different bandwidths for WMAS to be reflective of this. In Document 26/06a, DotEcon advised that it would be prudent for ComReg to apply a price floor to cover the incremental administrative cost of the licence and recommends that this be set at half the fee of the typical bandwidth where smaller bandwidths are sometimes used by operators (in the above example, the minimum fee would be €65.75 which would correspond to a single 12.5 kHz channel or two 6.25 kHz channels).[56] ComReg agrees with this approach and sets out the fees for PMSE in Table 6 below.

[54] DotEcon Report p. 46, Document 25/46a.

[55] Under the existing framework, licence fees are based on the quantity of equipment to be licensed. The cost is €12 per piece of equipment plus a fixed charge of €12 for the duration of the licence. This is half the price of the Business Radio framework which is €22 per piece of equipment in addition to a fixed charge of €22 for the duration of the licence.

[56] See DotEcon Report p37, Document 26/06

Table 6: Fees for PMSE licences

Equipment	Frequency Ranges	Fees for 12 months
Two-way radio	169 MHz, 441 – 448 MHz, 455 - 456 MHz, 461 MHz, 465 MHz, 469 MHz	€65.75 per 12.5kHz simplex channel €131.50 per 12.5kHz duplex channel
Wireless microphone/In-ear Monitor	174-230 MHz, 470 - 703 MHz, 733 -753 MHz, 1785 - 1805 MHz	€65.75 per every five 200 kHz channels (or part thereof) (Ten 200 kHz channels = €131.50.)
WMAS	470 - 694 MHz	BW ≤ 2. 5 MHz = €65.75 2.5 MHz < Bandwidth < 5.5 MHz = €131.50 5.5 MHz ≤ Bandwidth ≤ 7.5 MHz = €197.25 7.5 MHz < Bandwidth < 10.5 MHz = €263 10.5 MHz ≤ Bandwidth ≤ 12.5 MHz = €328.70 12.5 MHz < Bandwidth < 15.5 MHz = €394.50 15.5 MHz ≤ Bandwidth ≤ 17.5 MHz = €460.25 17.5 MHz < Bandwidth ≤ 20 MHz = €526
Wireless Camera	1980 - 2010 MHz, 2010-2025 MHz, 2025 – 2110 MHz, 2170 – 2200 MHz, 2200 - 2300 MHz, 6.425 – 7.125 GHz, 7.125 – 7.425 GHz, 10.3 – 10.5 GHz	€131.50 per 10MHz channel
Telemetry	174-230 MHz, 455-461 MHz	€65.75 per 12.5kHz channel €131.50 per 12.5kHz duplex channel
Wireless Broadband for audio and wireless cameras apparatus	3800-4200 MHz	€131.50 per 10MHz channel

Fees for short term PMSE licences

4.24 As detailed earlier, ComReg will increase the maximum duration for PMSE licences from six months to 12 months. However, while this would support users needing licences for longer durations and would be consistent with the general PMR framework, in Document 26/06a DotEcon advised that it may be prudent to include some financial incentive for not taking licences for longer than necessary. DotEcon noted that while there is currently no evidence of scarcity of PMSE spectrum, a proliferation of longer duration licences that are not required for the full duration could create a risk of artificial scarcity arising.[57]

4.25 To encourage users to only apply for longer licence durations where there is a genuine need, ComReg agrees with DotEcon's recommendation that for licences up to 3 months, the typical bandwidth fee will be set at €100. Taking the typical bandwidths from above, ComReg sets out the fees for short term PMSE licences in Table 7 below.

Table 7: PMSE fees for PMSE licences up to 3 months

[57] See DotEcon Report p37, Document 26/06a

Equipment	Frequency Ranges	Fees for Licences for up to 3 months
Two-way radio	169 MHz, 441 – 448 MHz, 455 - 456 MHz, 461 MHz, 465 MHz, 469 MHz	€50 per 12.5kHz simplex channel €100 per 12.5kHz duplex channel
Wireless microphone/In-ear Monitor	174-230 MHz, 470 - 703 MHz, 733 -753 MHz, 1785 - 1805 MHz	€50 per every five 200 kHz channels (or part of) (ten 200 kHz channels = €100)
WMAS	470 - 694 MHz	Bandwidth ≤ 2. 5 MHz = €50 2.5 MHz < Bandwidth < 5.5 MHz = €100 5.5 MHz ≤ Bandwidth ≤ 7.5 MHz = €150 7.5 MHz < Bandwidth < 10.5 MHz = €200 10.5 MHz ≤ Bandwidth ≤ 12.5 MHz = €250 12.5 MHz < Bandwidth < 15.5 MHz = €300 15.5 MHz ≤ Bandwidth ≤ 17.5 MHz = €350 17.5 MHz < Bandwidth ≤ 20 MHz = €400
Wireless Camera	1980 - 2010 MHz, 2010- 2025 MHz, 2025 – 2110 MHz, 2170 – 2200 MHz, 2200 - 2300 MHz, 6.425 – 7.125 GHz, 7.125 – 7.425 GHz, 10.3 – 10.5 GHz	€100 per 10MHz channel
Telemetry	174-230 MHz, 455-461 MHz	€50 per 12.5kHz simplex channel €100 per 12.5kHz duplex channel
Wireless Broadband for audio and wireless cameras apparatus	3800-4200 MHz	€100 per 10MHz channel

4.4 Indexing of Fees

4.26 In Document 25/46a, DotEcon advised that fees should be indexed to the Consumer Price Index ("CPI"). ComReg agrees with this and notes it would be consistent with ComReg's long established approach of applying an annual CPI adjustment to licence fees. The CPI is the official measure of inflation in Ireland and is, therefore, an appropriate and accessible benchmark for measuring changes to the value of money.[58]

4.5 Transition to new frameworks

4.27 To facilitate the transition to the new licensing frameworks for PMR and PMSE, ComReg intends to continue to operate the existing Licensing frameworks until 1 July 2028 for:

- Business Radio;
- Community Repeaters;
- Trunked Radio;
- Paging; and
- PMSE.

4.28 From the 1 July 2028, ComReg will no longer accept applications for licences under the existing Licensing frameworks and applications will be migrated to the new PMR and PMSE licensing frameworks.

4.29 In relation to Third Party Business Radio, ComReg reopened the licensing scheme on the 1st of September 2025, and this will remain open for applications until the 9th of June 2027 or until all allocated channels have been assigned. All new Third Party Business Radio licences will expire in full on midnight if 29 September 2030.[59] Upon expiry, Third Party Business Radio licensees will need to apply for a licence under the new PMR Licensing framework.

[58] Consumer Price Index - CSO - Central Statistics Office

[59] See ComReg Document 25/29.

Chapter 5

5 WBB LMP licensing framework in the 3.8-4.2 GHz Band

5.1 Chapters 5, 6, 8 and Annex 3 of this document relate to ComReg's WBB LMP Licensing Framework as follows:

- Chapter 5 (this chapter) sets out ComReg's response to consultation and final position having regard to:
  - (i) the views received from the one interested party (DECT Forum);
  - (ii) the views provided by Plum in its response document (Document 26/42b); and
  - (iii) recent developments, notably from the ongoing work in WG FM 60, other international updates and other matters;
- Chapter 6, while no submissions were received to the consultation on the matter, ComReg provides a general update to its draft RIA on the rollout obligation for WBB LMP Licences which now sets out ComReg final RIA in relation to same;
- Chapter 8 sets out ComReg's substantive decision for the WBB LMP licensing framework in the 3.8-4.2 GHz Band;
- Annex 3 sets out the final draft Regulations to establish a WBB LMP licensing framework in the 3.8-4.2 GHz Band, where ComReg will now proceed to make these Regulations with the consent of the Minister for Culture, Communications and Sport.

5.1 Introduction

5.2 In Chapter 5 of Document 26/06, ComReg set out its response to consultation and draft decision on its proposals for establishing a licensing framework for WBB LMP in the 3.8-4.2 GHz Band, which provides for the deployment of private 5G networks and other WBB LMP systems.

5.3 One submission was received in response to Document 26/06, which related to the proposed WBB LMP licensing framework, being from the DECT Forum; ("DECT Forum")

5.4 The remainder of this chapter is structured as follows:

- Section 5.2 considers the submission from the DECT Forum;
- Section 5.3 considers recent international developments and other related matters; and
- Section 5.4 ComReg sets out its Final position in relation to its WBB LMP licensing framework.

5.2 Consideration of submissions received to Document 26/06

5.2.1 Summary of ComReg's proposals in Document 26/06

5.5 In Chapter 5 of Document 26/06, ComReg set out in detail its proposals on various aspects of the proposed WBB LMP Licensing framework. Outlined below is a summary of the proposals most relevant to providing background information to the submission from DECT Forum. Where ComReg did not receive submissions related to the proposals set out its draft Decision (Document 26/06), ComReg does not set out a summary of the information, rather readers are referred to the assessment and Draft Decisions set out Document 26/06.

General Principles informing a WBB LMP Licensing Framework

5.6 In Section 5.3 of Document 26/06, ComReg took the view that the following seven high level principles informing the development of the Proposed WBB LMP framework were appropriate:

(i) A pragmatic approach;
(ii) Ensuring the efficient use of spectrum;
(iii) Promoting innovation and competition is preserved;
(iv) Technology and Service neutrality;
(v) Low to Medium Power – Local Area network connectivity;
(vi) Shared use of the 3.8-4.2 GHz Band; and
(vii) Make the full use of the 3.8-4.2 GHz Band available.

5.7 With regard to the principle of technology and service neutrality, ComReg noted that this is a key principle enshrined in the European and Irish regulatory framework for electronic communications, which was reflected in the EC harmonisation Decision for the 3.8-4.2 GHz Band[60].

5.8 ComReg took the view that its proposed WBB LMP licensing framework is

[60] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202502425

entirely in keeping with the principles of service and technology neutrality and can provide for the licensing of any technology or service compatible with the licensing framework principles, whether it be a 3GPP technology, DECT NR or any other technology. In that regard, ComReg noted Plum's view that no specific technical proposals for the licensing framework run counter to the principle of technology and service neutrality. ComReg also noted that 3GPP technologies were a real use for the band and that 3GPP-based WBB LMP networks were in place in other countries.

5.9 Further, on the basis of a suggestion from DECT Forum, ComReg ensured that the definition of base station in its draft Regulations for the proposed WBB LMP licensing framework would be broad enough to allow for all envisaged technology architectures in keeping with ECC Decision 24(01).

Synchronisation and Licensing Approach

5.10 ComReg considered that there are various use cases that could require varying frame structures, for example, some use cases could be more uplink heavy (e.g. outside broadcasts), while others might be more downlink heavy and be more compatible with the frame structure (i.e. Downlink: Uplink, 3:1)[61] used by all licensees in the 3.6 GHz Band. Therefore, ComReg proposed to permit licensees to propose frame structures most suitable to their use cases, although ComReg might suggest amendments to these proposals for reasons of efficient planning or licensing.

5.11 ComReg noted that WG FM60 work suggested that, to avoid interference to nearby WBB ECS base stations:

- synchronisation would be necessary in the lower 20 MHz of the band in all cases and for medium power use in the lower 60 MHz of the band; and
- a guard band (3800-3820 MHz) and restricted use (low power only in 3820-3860 MHz) at the lower end of the 3.8-4.2 GHz Band should be implemented for unsynchronised use.

5.12 To facilitate efficient spectrum use, ComReg proposed to license deployments compatible with the default frame structure in the lower part of the band and other frame structures in other parts of the band, so that spectrum efficiency would not be compromised by use of a guard band.

5.13 This proposal was in line with Plum's suggestion of adopting a light-touch approach, where possible, to provide some flexibility in the interests of technology neutrality, instead of mandating synchronisation, which in Plum's

[61] Frame configuration 2, as set out in the licences issued to the 3.6 GHz band licensees under S.I. 532 of 2016.

view would be too restrictive.

5.2.2 Summary of submissions received

The principle of service and technology neutrality

5.14 In relation to service and technology neutrality, DECT Forum contends that paragraph 5.35 of Document 26/06 suggests that ComReg only considers 3GPP based technology as an option for low/medium power wireless broadband networks and does not view DECT-2020 NR as a viable candidate technology for local area connectivity. It references the following wording in paragraph 5.35 "*Further, **ComReg also notes 3GPP technologies are a real use for the band** [emphasis added by DECT Forum] and notes that these technologies and systems are in place in other countries*."

5.15 The DECT Forum submits that DECT technology provides local connectivity solutions across a range of use case within the 1880-1900 MHz range, contends that the technology is proven and that DECT-2020 NR is very much a credible technology option in the 3.8-4.2 GHz band.

5.16 Further, DECT Forum contends, that ComReg refers to interference levels proposed by Plum where those specific levels relate to coexistence between 3GPP based systems and WBB LMP and it contends that there is no acknowledgement by Plum of DECT-2020 NR. DECT Forum in its submission acknowledges that the levels referred to by Plum are taken from the draft ECC recommendation being developed by FM60, but DECT Forum contends that this coupled with ComReg's comment in paragraph 5.35 give the impression that ComReg is of a single technology view. DECT Forum asks for assurances that this is not the case.

Licensing approach

5.17 DECT Forum notes that ComReg is following the work in FM60 and the development of the draft Recommendation on guidance on coordination between WBB LMP networks and WBB LMP and MFCN. It is highlighted that, on the basis of coexistence studies between DECT-2020 NR and MFCN that there is a low probability of DECT devices causing interference to MFCN below 3.8 GHz, and the draft Recommendation suggests a 20 MHz guard band (3800-3820 MHz) is sufficient to protect MFCN from DECT networks.

5.18 DECT Forum refers to where ComReg sets out its view that it will license deployments compatible with the default frame structure (as used in the 3.6 GHz Band) in the lower part of the 3.8-4.2 GHz band and license other frame structures in other parts of the band. DECT Forum submits that its assumption that "other frame structures" also covers use of DECT-2020 NR.

5.19 DECT Forum submits that it is unclear in the consultation what ComReg means by the “lower part” of the 3.8 GHz band. DECT Forum submits that its view is that for low power DECT operation ComReg is proposing allowing use from 3820 MHz as implied in paragraph 5.114. DECT Forum requests clarification on this point.

5.2.3 Summary of Plum’s Views

Technology Neutrality

5.20 Plum considers DECT Forum’s submission that 3GPP based interference levels (taken from an earlier draft ECC Recommendation) for coexistence requirements referred to in paragraph 5.181 of Document 26/06 might imply that only 3GPP technology is being considered. Plum notes that as no consultation responses had been received on these interference levels, they would be used by ComReg.

5.21 Plum considers that, although the latest FM60 draft Recommendation no longer explicitly specifies these absolute values for interference levels, they follow from the example values in that text. In Plum’s view, although originally derived with reference to 3GPP systems, these values will provide protection on a technology-neutral basis, including that of DECT NR.

Licensing Approach

5.22 Plum notes that DECT Forum requests clarity on the proposal to license deployments synchronised with MFCN in the lower part of the band, and whether DECT operation would be allowed from 3820 MHz upwards.

5.23 Plum expects that DECT systems, being low-power, could be licensed from 3820 MHz upwards. However, Plum also notes that ComReg’s proposal is to license synchronised systems in the lower part of the band in the first instance, with non-synchronised systems allocated elsewhere, the intention being to have no rigid partition between synchronised and non-synchronised systems, although this will evolve flexibly to reflect demand. Plum advises that the application of this strategy to DECT systems could be stated explicitly in ComReg’s licensing guidelines.

5.2.4 ComReg’s assessment

Service and technology neutrality

5.24 In ComReg’s view, DECT Forum’s contention that ComReg is only considering 3GPP systems in the 3.8-4.2 GHz Band is incorrect. In particular, ComReg observes that:

- As summarised above, ComReg’s proposed licensing framework in the

3.8-4.2 GHz Band is service and technology neutral and has taken on board DECT Forum's suggestions with regard to base station definitions to allow for DECT NR to fall within the definition; and

- Plum notes that the interference criteria established, while derived with 3GPP systems in mind, are sufficient for the protection of DECT NR systems.

5.25 ComReg notes that its statement in paragraph 5.35 of Document 26/06 that "*3GPP technologies are a real use of the band and notes that these technologies and systems are in place in other countries"* is indeed factual. DECT Forum contends that this statement in paragraph 5.35 *"suggests that ComReg only considers 3GPP based technology as an option for low/medium power wireless broadband networks and does not view DECT-2020 NR as a viable candidate technology local area connectivity"*

5.26 However, ComReg notes that the DECT Forum plainly omits in its submission the substantive part of paragraph 5.35 where ComReg states:

"Having considered DECT Forum's submission ComReg observes that Plum is of the view that no specific technical proposals run counter to this principle, and ComReg therefore remains of the view that the ***proposed WBB LMP licensing framework is entirely in keeping with the principles of service and technology neutrality*** *and can provide for the licensing of any technology or service compatible with the licensing framework principles* ***whether it be a 3GPP technology, DECT NR or indeed any other technology.****" (emphasis added)*

Licensing Approach

5.27 In relation to DECT Forum's submission seeking clarity on what ComReg terms the lower part of the band, ComReg has not established a set limit at this juncture as it will depend on the volume and bandwidth requirements of applications being received for licences. This is in keeping with the approach of adopting a light touch band segmentation approach to reflect the demand being expressed by applicants.

5.28 To clarify, it is not the case that ComReg would not license DECT NR systems in the lower part of the band. Rather, it would be ComReg's initial approach to license DECT NR systems in another part of the band and those systems that can synchronise with systems below 3.8 in the lower part of the band.

5.2.5 ComReg's Final position in relation to the submissions received to Document 26/06

5.29 In light of the above, ComReg's Final position is that the WBB LMP licensing framework is service and technology neutral, where ComReg will consider the licensing of any technology in the band compatible with the relevant EC harmonisation decision.

5.3 Consideration of recent international developments and other related matters

5.3.1 WG FM 60

5.30 With ECC Decision (24)01[62], CEPT has harmonised 3.8-4.2 GHz band for the shared use of low/medium power terrestrial wireless broadband systems providing local-area network connectivity.

5.31 The ECC working group (WG) responsible for the regulatory implementation of the shared use of the 3.8-4.2 GHz Band is WG FM60[63]. WG FM60 has been developing a series of recommendations that provide guidance to administrations for WBB LMP deployments, in line with earlier ECC work[64] on shared use of 3.8-4.2 GHz Band. The list of topics to be addressed in these guidelines and their status, as well as Plum's commentary and views on recent work from WG FM60, and ComReg's views on the same is outlined below.

Coexistence of WBB LMP with Fixed Services (FS) and Fixed Satellite Services (FSS) in 3.8-4.2 GHz

5.32 WG FM60 finalised the guidelines for the protection of the Fixed Service (FS) and the Fixed Satellite Service (FSS) when introducing WBB LMP networks in the 3.8-4.2 GHz Band, which were published as ECC Recommendation (25)03[65] on 17 October 2025. ComReg notes that this recommendation would not be relevant to its proposed WBB LMP licensing framework, as the 3.8 to 4.2 GHz Band is not available for the Fixed Service in Ireland, and as ComReg has closed the band for applications to license Satellite Earth Stations, given the absence of incumbent Satellite Earth Station licensees in the band in Ireland and no relevant licence applications having been received in the last decade.

[62] ECC/DEC/(24)01
[63] FM60 Webpage
[64] ECC/DEC/(24)01, CEPT Report 088, ECC Report 358 and ECC Report 362.

[65] ECC/REC/(25)03

Coexistence of WBB LMP with Radio altimeters above 4.2 GHz

5.33 WG FM60 has been tasked with developing guidelines to support the introduction of medium power WBB LMP using AAS operating in the 4.1-4.2 GHz frequency range in the close vicinity of airfields, while ensuring the protection of adjacent band radio altimeters operating above 4.2 GHz.

5.34 At its meeting in May 2026, FM60 revised the draft ECC Recommendation (26)02[66], following a public consultation, which it will forward to WG FM for consideration and approval for publication. It is expected that the ECC Recommendation will be published soon after the next ECC meeting scheduled to take place at the end of June 2026. Draft ECC Recommendation (26)02 sets out a method for defining coordination zones around runways, where administrations could consider coordination and/or mitigation measures to ensure that AAS WBB LMP deployments in 4.1-4.2 GHz do not cause interference to radio altimeters.

Coexistence between WBB LMP networks in-band and of WBB LMP with WBB ECS below 3.8 GHz

5.35 WG FM60 is also developing an ECC Recommendation to provide guidance on the coordination between WBB LMP networks in the 3.8-4.2 GHz Band and on the protection of MFCN below 3.8 GHz. In that connection, ECC recently made available Draft ECC Recommendation (26)03[67] for public consultation until 14 July 2026. A final ECC Recommendation is expected to issue in early Q4 2026.

5.36 To ensure protection of WBB ECS below 3.8 GHz, the draft ECC Recommendation recommends:

- synchronisation with WBB ECS for both low and medium power WBB LMP between 3800-3820 MHz and for medium power WBB LMP up to 3860 MHz; and
- specific limits for unwanted emissions into the 3.4-3.8 GHz band from WBB LMP base stations that are unsynchronised with WBB ECS.

5.37 With regard to measures for the coexistence between WBB LMP networks, the draft ECC Recommendation indicates that no or minimal coordination between WBB LMP base stations will be required in relation to:

- Co-channel synchronised operation;

[66] https://cept.org/documents/fm-60/94938/temp03_draft-ecc-recommendation-26-02-pc-resolution
[67] https://cept.org/files/2099/Draft%20ECC%20Recommendation%20(26)03.docx

- Co-channel semi-synchronised operation;
- Adjacent channel synchronised operation; or
- Adjacent channel semi-synchronised operation.

5.38 However, the draft ECC Recommendation indicates that co-channel unsynchronised operation may require detailed coordination, although additional coordination would not be required between unsynchronised WBB LMP networks operating in adjacent channels if the field strength of each cell produced by a base station does not exceed a specified value at the exclusive licensed local area edge. In that connection the draft ECC Recommendation sets out methodologies for carrying out detailed coordination between proposed new WBB LMP networks and existing WBB LMP networks, which are applicable to both 3GPP based and DECT-2020 NR based WBB LMP networks. These include:

- Co-channel synchronised operation - BS to terminal coordination;
- Co-channel unsynchronised operation - BS to BS coordination; and
- Adjacent channel unsynchronised operation - BS to BS coordination.

These methodologies entail calculating the maximum allowed interference levels within the victim WBB LMP network from a proposed new WBB LMP network.

5.39 Specifically, regarding coexistence between DECT-2020 NR low power networks, the draft ECC Recommendation indicates that spectrum management protocols (e.g. power control and listen-before-talk) inherent in the technology could facilitate multiple DECT-2020 NR networks sharing a channel and aligning transmissions. As such, an administration could choose to identify the same extended frequency band for DECT-2020 NR use in a geographical area with multiple DECT-2020 NR networks, and these networks could, autonomously, organise themselves in the spectrum by means of the DECT-2020 NR spectrum management protocols.

5.40 Further, regarding both coexistence between WBB LMP networks in-band and of WBB LMP with WBB ECS below 3.8 GHz the draft ECC Recommendation also suggests a number of additional complementary mitigation measures for administrations to consider such as reducing the transmit power, adjusting antenna pointing and down tilt, lowering antenna height, changing the antenna pattern etc.

Plum's commentary on recent WG FM60 work

5.41 In its first consultation report of July 2025[68] ("Plum July 2025 Report"), Plum referred to the relevant ongoing work at the time of WG FM60 on this topic. In the Plum June 2026 Update, Plum provides updated commentary on relevant changes in the most recent working draft ECC Recommendation since then.

5.42 Plum notes that the only change made by FM60 to the draft Recommendation that might impact the Plum conclusions is the removal of the absolute interference levels quoted in Table 3.1 of the Plum July 2025 Report, which summarised interference limits for coexistence between WBB LMP networks under consideration by WG FM60 at the time.

5.43 It should be noted that a review of Table 3.1 has indicated an error in the table for one of the scenarios. As such, while FM60 had specified that different levels would be applied for low power and medium power deployments, the same maximum interference (Imax) values were included by mistake for both in Table 3.1. Therefore, Plum has provided an update to Table 3.1 in the Plum June 2026 Update, to reflect the correct values. This updated table is reproduced here for clarification:

Table 8: FM60 draft coexistence limits (Update to Table 3.1 of Plum's First Report)

Interference Scenario		Low Power (I_{max})	Medium Power (I_{max})
Unsynchronised	Co-Channel (BS-BS)	-100dBm/5MHz	-103dBm/5MHz
	Co-Channel (BS-UE)	-98dBm/5MHz	
	Adjacent channel (BS-BS)	*<20MHz:* -57 dBm/5 MHz	*<20MHz:* -60 dBm/5 MHz
		>=20 MHz: -48 dBm/5 MHz	*>=20 MHz:* -51 dBm/5 MHz
	Adjacent channel (BS-UE)	Typically not an issue	
Synchronised	Co Channel (BS-UE)	-98dBm/5MHz	
	Adjacent channel	Typically not an issue for 3GPP systems	

5.44 Plum advises that, if the recommended equations and example values given in the most recent draft Recommendation from WG FM60 following its May 2026 meeting are applied, the results are unchanged from those quoted by Plum in Table 3.1 of the Plum July 2025 Report (as corrected). As such, Plum considers that the levels in that table remain appropriate as a basis for determining WBB LMP coexistence, while noting that they might be refined by ComReg in the future

[68] *"Licensing and coexistence of WBB services in the 3.8-4.2 GHz band - A report from Plum Consulting",* 2 July 2025, published by ComReg as Document 25/46b.

on the basis of operational experience.

5.45 In relation to synchronisation, Plum highlights the options set out in the draft ECC Recommendation for administrations to consider licensing on either a 'first-come, first-served basis or by specifying a default frame structure. In that connection Plum observes that if the band becomes heavily used, it may be necessary for ComReg to consider establishing common frame structures between licensees in certain parts of the band or geographic areas. In Plum's view, this would facilitate more efficient use if new licences were not possible in a particular area based on the existing frame structure. Plum suggests that this could be particularly important in areas where there is a high concentration of networks, so as to facilitate the licensing of more networks in a proportionate manner.

ComReg's View

5.46 ComReg continues to monitor and participate, as appropriate, in WG FM60 and in the development of the relevant deliverables that may issue from this group. In section 5.2.2 of Document 26/06, ComReg stated its view that its proposals for a WBB LMP licensing framework remained consistent with the then draft guidelines from WG FM60.

5.47 ComReg notes Plum's view that Plum's recommended interference limits for use in detailed coordination between WBB LMP networks remain appropriate, even though the latest draft guidance from WG FM60 no longer specifies absolute interference levels. ComReg agrees with Plum, as the limits recommended by Plum represent an approach appropriate to the initial phase of a new licensing scheme, and as it is possible that current draft guidance from WG FM60 could change in a finalised recommendation from WG FM60. In any case, if appropriate, ComReg may take on board further aspects from FM60 guideline documents as they develop further.

5.48 With regard to synchronised operation, ComReg agrees with Plum's observation that establishing common frame structures between licensees in certain congested parts of the band or geographic areas could be a useful approach so as to facilitate the licensing of more networks in a proportionate manner. ComReg will consider this on a case-by-case basis as appropriate.

5.3.2 Potential future work within CEPT to study feasibility of aerial terminal use in WBB LMP networks

5.49 The use of aerial terminals in WBB LMP networks has not yet been considered as part ComReg's WBB LMP licensing framework, as the EC Decision does not provide for harmonised technical and operational conditions for the use of aerial terminal stations in WBB LMP networks and relevant studies in CEPT Report 88 did not examine such use. Further, the EC Decision notes that, in accordance

with the existing legal framework, Member States are entitled to restrict the use of aerial terminal stations in the 3.8 – 4.2 GHz Band, subject to any harmonised conditions to become available at Union level in the future.

5.50 At the recent meeting of WG FM60 in May 2026, a proposal was drafted for a work item within CEPT to analyse feasibility and identify operation conditions for the usage of aerial terminal with WBB LMP non-AAS base stations in the 3.8 - 4.2 GHz Band, while ensuring the protection of services and applications in the band and in adjacent bands. However, WG FM did not approve this new work item at its June 2026 meeting, as not enough administrations supported it. Nevertheless, it was noted that interested administrations might re-submit a proposal for such a work item at future meetings, if there is sufficient support.

5.51 Participants at the WG FM60 meeting noted potential use cases such as aerial inspection of industrial sites, audio visual content production, and coverage at sports events. The work within CEPT is still at a very early stage and ComReg will continue to monitor this work, pending any relevant update to the harmonised technical conditions in the EC Decision.

5.3.3 International coordination Memorandum of Understanding (MoU) with Ofcom UK

5.52 Further to Section 5.11.7 of Document 26/06 relating to International/Cross border coordination, ComReg recently updated its MoU with Ofcom (UK) regarding the coordination approach to the deployment of WBB LMP services in the 3.8-4.2 GHz Band in each jurisdiction[69]. The updated MoU came into force on 1 May 2026.

5.53 Interested parties intending to operate close to the border with Northern Ireland, are referred to the interference levels agreed at the border and the approach to synchronisation adopted, as set out in the MoU.

5.54 As proposed in paragraph 5.211 of Document 26/06, it would be a condition of a WBB LMP licence to abide by the above MoU or any relevant coordination agreement entered into by ComReg.

5.3.4 Clarification on synchronisation Requirements

5.55 Previously in Document 25/46, ComReg noted, among other things, that the then draft EC Decision[70] provided a useful definition of synchronisation. The final

[69] https://www.comreg.ie/media/2026/04/UK-Ireland-MoU-703-MHz-43.5-GHz-April-2026-1.pdf

[70] RSCOM24-43rev4, *"Draft elements of a Commission Implementing Decision on the harmonisation of the 3 800-4 200 MHz frequency band for the shared use by terrestrial wireless broadband systems capable of providing local-area network connectivity in the Union"*, Radio Spectrum Committee, Working Document, 2 July 2025.

version of the EC Decision[71] provides a materially identical definition of synchronised operation as:

> *"operation of two or more different time division duplex (TDD) networks, where simultaneous uplink (UL) and downlink (DL) transmissions do not occur, that is at any given moment in time either all networks transmit in downlink or all networks transmit in uplink. 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 (I.e. common phase clock reference)".*

5.56 As such, for two networks to be capable of being synchronised, the following requirements must be met:

- both networks use compatible technologies;
- both networks use a common phase clock reference (typically based on GPS timing); and
- both networks use compatible frame-structures.

5.57 ComReg is providing this clarification to highlight the requirements for synchronisation for the benefit of intending licensees. ComReg also intends to set out this information in licence guidelines.

5.3.5 Consideration of challenges in synchronising low power indoor networks

5.58 Indoor small cells are exempt from synchronisation requirements in the 3.6 GHz Band under 3.6 GHz Band Liberalised Use Licences[72] and in the 2.3 GHz and 2.6 GHz[73] Bands under MBSA2 Liberalised Use Licences[74]. As such, indoor small cells in these bands are exempted from having to apply a more restrictive block edge mask for unsynchronised operation, compared to synchronised operation, on the condition that they do not cause harmful interference to any other licensees. ComReg set out this exemption as a pragmatic approach given the significant challenges of synchronisation and the lower potential for interference of indoor low power small cells.

5.59 ComReg intends to take a similar pragmatic approach to synchronisation with

[71] EU 2025/2425, *"European Commission Implementing Decision (EU) 2025/2425 of 2 December 2025 on the harmonisation of the 3 800-4 200 MHz frequency band for the shared use by terrestrial wireless broadband systems capable of providing local-area network connectivity in the Union"*.
[72] Under S.I. No. 532 of 2016.
[73] I.e in the part of the 2.6 GHz Band designated for TDD operation: 2570 to 2620 MHz.
[74] Under S.I. No. 264 of 2021.

regard to indoor low power WBB LMP base stations, given:

- similar challenges for synchronisation indoors;
- the equivalent maximum EIRP profile[75] for both 3.6 GHz Band small cells and low power WBB LMP base stations; and
- the similar and indeed more challenging propagation characteristics in the 3.8 – 4.2 GHz Band.

5.60 As such, for coordination purposes between WBB LMP networks, ComReg would assume that unsynchronised low power WBB LMP base stations are synchronised with neighbouring networks and that ComReg could thus allow closer re-use distances, as per synchronised use. However, this would be subject to the relevant licensee not causing interference to other users, in which case ComReg could take relevant measures under the licence regulations and in accordance with the EECC Regulations i.e. enforcement of compliance or amendment, withdrawal or suspension of the licence, as appropriate.

5.4 ComReg's final position in relation to the other aspects of the licensing framework where no submissions were received.

5.61 As set out above, ComReg only received one submission which related to service and technology neutrality and the licensing approach as raised by DECT Forum.

5.62 ComReg did not receive any submissions in relation to the other aspects of the WBB Licensing framework as set out in Document 26//06. While noting the updated information provided above, ComReg's final position is to put in place a WBB LMP licensing framework as set out in Document 26/06 noting the updates as provided above.

[75] **3.6 GHz Band small cells:** EIRP of less than or equal to 24 dBm per 20 MHz carrier
Low power WBB LMP base stations: EIRP per cell of ≤ 24 dBm/channel for BW ≤ 20 MHz and ≤ 18 dBm/5MHz for BW > 20 MHz.

6 WBB LMP Final Rollout and usage RIA

6.1 Introduction

6.1 In Section 6.9 of Document 25/46, ComReg set out its preliminary view that rollout and usage obligations should be attached to all WBB LMP licences. In ComReg's view, the standard rollout and usage obligation would include:

- A Base Station Rollout obligation: For each licence issued (low power and/or medium power) the licensee would be required to install, work and use one base station within 6 months of licence commencement.
- A Usage obligation: For each licence issued (low power and/or medium power) the licensee would be required to put all of the spectrum licensed into use within 6 months and actively use one or more user terminals within this time period. [76]
- A Base Station Log obligation: For each base station licensed, the licensee would be required to maintain a daily base station traffic log that is of sufficient detail to demonstrate to ComReg's satisfaction the usage of this base station on the WBB LMP network.
- A reporting obligation: at the appropriate time (e.g. at 6 months from licence commencement) licensees would be required to report to ComReg on the above obligations.

6.2 ComReg also noted that some applicants/licensees may have multi-year projects with deployments longer than 6 months. While pre-application discussions with ComReg on an appropriate licensing approach might resolve any 6 month timing issues (e.g. submitting applications in a phased manner), ComReg observed that there could also be exceptional cases. This would likely require sufficient evidence, including deployment plans, demonstrating intent/ability to use the spectrum (within a reasonable timeframe) and why an exception might be warranted.

6.3 This chapter sets out ComReg's final Regulatory Impact Assessment ("RIA") on the rollout and usage obligations to be attached to WBB LMP licences by outlining the relevant policy issues and assessing the various regulatory options to determine ComReg's preferred option, having regard to the impacts on stakeholders, competition and consumers.

6.4 ComReg has prepared this RIA having careful regard to the relevant information

[76] To demonstrate that all the licensed spectrum is being efficiently used applications for large amounts of bandwidth or applications which have a large impact on the availability of spectrum (i.e. medium power applications) would likely need to deploy multiple user terminals

available, including the following:

- Interviews with stakeholders conducted by DotEcon and ComReg on the potential use cases for WBB LMP;
- The DotEcon Reports (Document 25/46a which was published alongside the first consultation[77] and ComReg Document 26/06a which is published alongside ComReg's Draft Decision document[78]);
- The Plum Consulting Reports Document 25/46b (which was published alongside the first consultation), Document 26/06b (published alongside ComReg response to consultation and draft decision document) and Document 26/42b in as far as its relevant (published alongside this response to Consultation and substantive decision) ; and
- Submissions received to Consultation Documents 25/46 and 26/06.

RIA Framework

6.5 In general terms, a RIA is an analysis of the likely effect of proposed new regulation or regulatory change and, indeed, of whether regulation is necessary at all. The RIA should help identify regulatory options and establish whether the proposed regulation is likely to have the desired impact, having considered relevant alternatives and the impacts on stakeholders. The RIA is a structured approach to the development of policy and analyses the impact of regulatory options. In conducting a RIA, the aim is to ensure that all proposed measures are appropriate, effective, proportionate and justified.

6.6 A RIA should be carried out as early as possible in the assessment of regulatory options, where appropriate and feasible. The consideration of the regulatory impact facilitates the discussion of options, and a RIA should therefore be integrated into the overall analysis. This is the approach which ComReg follows in this document and this RIA should be read in conjunction with the overall Consultation.

6.7 In conducting a RIA, ComReg has regard to the RIA Guidelines[79] , while recognising that regulation by way of issuing decisions, for example, imposing obligations or specifying requirements in addition to promulgating secondary legislation, may be different to regulation exclusively by way of enacting primary or secondary legislation.

6.8 To ensure that a RIA is proportionate and does not become overly burdensome, a

[77] Document 25/46
[78] Document 26/06
[79] ComReg Document 07/56a, "Guidelines on ComReg's Approach to Regulatory Impact Assessment", published 10 August 2007, available at www.comreg.ie

common-sense approach is taken towards a RIA. As decisions are likely to vary in terms of their impact, if after initial investigation, a decision appears to have relatively low impact ComReg may carry out a lighter RIA in respect of that decision.

6.2 Structure of the RIA

6.9 As set out in ComReg's RIA Guidelines, ComReg's approach to the RIA is based on the following five steps:

- **Step 1:** Describe the policy issues and identify the objectives;
- **Step 2:** Identify and describe the regulatory options;
- **Step 3:** Determine the likely impacts on stakeholders;
- **Step 4:** Determine the likely impacts on competition; and
- **Step 5:** Assess the likely impacts and choose the best option.

6.10 In the following sections, ComReg identifies the relevant stakeholder groups, specific policy issues to be addressed and relevant objectives (i.e. Step 1 of the RIA process). This is followed by the identification of the policy issues that need to be addressed.

6.11 ComReg then considers these policy issues in accordance with the four remaining steps of ComReg's RIA process.

Identification of stakeholders and approach to Steps 3 and 4

6.12 The focus of Step 3 is to assess the likely impact of the proposed regulatory measures on stakeholders. Hence a necessary precursor is to identify such stakeholders. In this RIA, stakeholders fall into two main groups:

- Consumers; and
- Industry stakeholders.

6.13 The industry stakeholders comprise potential users of private 4G/5G networks in Ireland, such as industries and organisations requiring secure, high-performance wireless connectivity tailored to their specific operations. These are likely to span across the following sectors:

- Manufacturing
- Transport and logistics (ports, airports, warehouses)

- Energy and utilities
- Education and research
- Healthcare (hospitals and medical campuses)
- Agriculture
- Public safety and emergency services
- Smart cities and local authorities

6.14 The focus of Step 4 is to assess the impact on competition of the various regulatory options available to ComReg. In that regard, ComReg notes that it has various statutory functions, objectives and duties which are relevant to the issue of competition and these are primarily set out in Section 12 of the Act..

6.15 Of themselves, the RIA Guidelines and the Ministerial Policy Direction on Regulatory Impact Assessment[80] provide little guidance on how much weight should be given to the positions and views of each stakeholder group (Step 3), or the impact on competition (Step 4). Accordingly, ComReg has been guided by its primary statutory objectives which it is obliged to seek to achieve when exercising its functions. ComReg's statutory objectives in managing the radio frequency spectrum, as further outlined in Annex 1, include:

- promote competition[81];
- contribute to the development of the internal market[82];
- promote the interests of users within the Community[83]; and
- ensure the efficient management and effective use of the radio frequency spectrum in Ireland in accordance with a direction issued under Section 13 of the 2002 Act.

6.16 In addition, ComReg is guided by regulatory principles and obligations provided for under the European Union (Electronic Communications Code) Regulations 2022, S.I. No. 444 of 2022. Such principles and obligations are outlined further at Annex 1 and include:

[80] Ministerial Direction dated 21st February 2003
[81] Section 12 (1)(a)(i) of the Communications Regulation Act, 2002
[82] Section 12 (1)(a)(ii) of the Communications Regulation Act, 2002
[83] Section 12(1)(a)(iii) of the Communications Regulation Act, 2002

- Regulation 4(5) (d) of S.I. No. 444 of 2022 which requires ComReg to promote efficient investment and innovation in new and enhanced infrastructure.
- Regulation 29(1) of S.I. No. 444 of 2022 permits ComReg to attach conditions to individual rights of use for radio spectrum in accordance with Regulation 9(1) in such a way as to ensure optimal and the most effective and efficient use of radio spectrum.
- Regulation 29(3) of S.I. No.444 of 2022 provides that such conditions attached to individual rights of use shall specify the applicable parameters, including any deadline for exercising the rights of use, the non-fulfilment of which would entitle the Regulator to withdraw the right of use or impose other measures.
- Regulation 29(4) of S.I. No.444 of 2022 sets out that ComReg shall, in a timely and transparent manner, consult and inform interested parties regarding conditions attached to individual rights of use before their imposition. The Regulator shall determine in advance and inform interested parties, in a transparent manner, of the criteria for the assessment of the fulfilment of those conditions.

6.17 In this document, ComReg has adopted the following structure in relation to Step 3 and Step 4; the impact on industry stakeholders is considered first, followed by the impact on competition, followed by the impact on consumers. This order does not reflect any assessment of the relative importance of these issues but rather reflects a logical progression. In particular, a measure which safeguards and promotes competition should, in general, impact positively on consumers. In that regard, the assessment of the impact on consumers draws substantially upon the assessment carried out in respect of the impact on competition.

6.3 Step 1: Identify the policy issues & the objectives

Policy Issues

6.18 Rollout and usage obligations can be important regulatory tools for ensuring that spectrum rights are used efficiently. ComReg has employed rollout and usage obligations previously, for example the MBSA2 licences and 3.6 GHz Band licences[84]. Plum's benchmarking work[85] also highlights that a usage and rollout obligation for WBB LMP has been deployed elsewhere. For example:

- in the UK "*a licensee must commence regular transmissions within six*

[84] See Section 8.4 Document 20/122 and Section 6.5 Document 16/57.
[85] See Appendix C of Document 25/46b

months after the date on which their licence was issued."[86] and

- in Norway, "*All allocated transmission points must be implemented in accordance with the licence within 12 months of the licence coming into force*."[87]

6.19 In Document 25/46, ComReg noted that a rollout and usage obligation is also likely to be important in the case of WBB LMP licences as there might be situations where rights of use are used inefficiently or hoarded to the detriment of competition by denying rights of use to more efficient users. ComReg also notes that spectrum hoarding may be more likely to occur within a Private 5G licensing framework given that they are typically site specific, often in denser urban or industrial areas where demand for connectivity is likely to be high and the cost of holding a licence is not a sufficient deterrent in itself. Therefore, the risk of spectrum hoarding is particularly of note in the assignment of WBB LMP rights of use.

6.20 ComReg observes that a rollout and usage obligation could ensure, for example, that one or more user terminals would need to be in active use and traffic would need to be transmitted on all the licensed spectrum. Applications for large amounts of bandwidth or applications which have a large impact on the availability of spectrum (i.e. medium power applications) would be required to demonstrate that all the licensed spectrum is being efficiently used.

6.21 In the context of this RIA, the policy issue to be addressed is to determine what rollout obligations (if any) are appropriate to attach to WBB LMP rights of use in the 3.8-4.2 GHz Band.

6.22 In considering this policy issue, there are a number of objectives which ComReg must balance. On the one hand, if operators granted licences do not roll out services in a timely manner, that would be detrimental to the effective management and use of the radio spectrum. This could justify the attachment of rollout obligations on those licences. In contrast, the imposition of overly onerous obligations could have negative consequences such as requiring unnecessary and therefore inefficient investment in infrastructure or even discouraging users with requirements for WBB LMP licences who would otherwise efficiently deploy services.

6.23 Accordingly, the policy issue for ComReg is to determine whether a rollout and usage obligation(s) would be appropriate and, if so, identify an appropriate obligation(s) which would ensure an efficient level of rollout without significantly discouraging the deployment of WBB LMP services in the 3.8-4.2 GHz Band.

[86] Ofcom's Shared Access Licence Guidance Document, paragraph 2.34
[87] Nkom's "Regulation of local networks in 3.8-4.2 GHz", Section 5.

Objectives

6.24 In considering the policy issue, ComReg aims to carry out its assessment in accordance with its statutory objectives (as outlined in Annex 1). In particular, Schedule 1 to the EECC Regulations (S.I 444 of 2022) provides that obligations to ensure the effective and efficient use of spectrum may be attached to spectrum rights of use. Such obligations can include the use of rollout or usage obligations, or both.

6.25 In addition, and as we have outlined, the focus of this RIA is to assess the potential impacts of the proposed measure(s) on stakeholders, competition and consumers. ComReg can then identify and implement the most appropriate and effective means to set a rollout and usage obligation (if any) for WBB LMP licences in the 3.8-4.2 GHz Band, while achieving its relevant statutory objectives under Section 12 of the 2002 Act of promoting competition by, among other things:

- Encouraging efficient use and ensuring effective management of radio frequencies;
- Promoting regulatory predictability by ensuring a consistent regulatory approach;
- Safeguarding competition to the benefit of consumers and promoting, where appropriate, infrastructure based competition;
- Contributing to the development of the internal market; and
- Promoting the interests of EU citizens.

6.26 ComReg is also mindful of the "connectivity" objectives associated with the Implementing Decision.

"*The 3 800-4 200 MHz frequency band can enable the deployment of terrestrial wireless broadband systems to provide* ***local-area network connectivity*** *for a variety of services and applications, on the basis of technology neutrality. The* ***wide range of local use cases*** *across different industrial and non-industrial environments, both indoors and outdoors, will benefit from harmonised technical conditions*." Recital 1 – emphasis added)[88]

6.27 Having identified the policy issues and objectives, ComReg now identifies the regulatory options to be assessed over the remainder of this RIA.

[88] Commission Implementing Decision (EU) 2025/2425, Recital 1

6.4 Step 2: Identify and describe the regulatory options

6.28 In light of the above, ComReg considers that the following regulatory options are available.

6.29 **Option 1** would be the 'do nothing option' which would be to impose no rollout or usage obligation. This would mean that each potential licensee would have full flexibility to choose how extensive, or timely their rollout would be regardless of the amount of spectrum rights of use attached to a licence. An operator could choose to provide no services, only to provide services in high density areas, or choose to use some or all of the bandwidth assigned.

Identifying other policy options

6.30 The 3.8-4.2 GHz Band can enable the deployment of terrestrial WBB LMP systems to provide local-area network connectivity for a variety of services and applications, all on the basis of technology neutrality. The wide range of use cases across various settings, both indoor and outdoor, means that there is no uniform rollout and usage option that would accommodate all stakeholders because depending on the relevant project a shorter or longer rollout may be required. Therefore, any option considered below is composed of the following.

I. a Standard Rollout period that would apply to all licences following assignment of rights of use.

II. a Longer Rollout period up to three years which may be provided by ComReg, at its discretion, subject to sufficient evidence and justification.

III. any exceptional circumstances beyond the longer rollout period would be assessed by ComReg on a case-by-case basis.

6.31 Each option below considers a different Standard Rollout because the large majority of rollout and usage requirements should fall into this category. In relation to the Longer Rollout period, ComReg notes that respondents indicated that a two year rollout and usage period would be sufficient for most typical network deployments. However, ComReg notes that for more expansive deployments, such as those including larger outdoor areas like campuses or innovation centre, additional time may be necessary to address logistical challenges, site preparations and testing etc. It would be important that those cases (even if rare) could be reasonably accommodated under the Longer Rollout period and not treated on an exceptional basis which would require more substantial evidence and primarily be reserved for major infrastructural projects or those of national/regional significance.

6.32 In that regard, ComReg is of the view that the Longer Rollout period should be three years. Again, it is important to note that a Longer Rollout period of three years, would allow ComReg to provide a period of up to three years where justified,

noting that in most cases a short extension above the Standard Rollout period is all that would be required and provided. This also aligns with the 3 year rollout period for the 3.6 GHz rights of use where the time to procure, order, deliver and install the equipment would be similar for a private network.

6.33 In Document 25/46, ComReg proposed that the standard rollout and usage obligation would include a Base Station Rollout obligation such that licensees would be required to install, work and use one base station within 6 months of licence commencement. For each licence issued (low power or medium power) the licensee would also be required to put all of the spectrum licensed into use within 6 months and actively use one or more user terminals within this period.

6.34 ComReg also recognised that some applicants (in exceptional circumstances) may have a need for a rollout and usage obligation that would necessitate a longer rollout and usage obligation to the standard approach. In such cases, the applicant would need to provide ComReg with sufficient evidence to justify a Longer Rollout obligation. Upon granting of the licence, the licensee would then need to demonstrate compliance with the Longer Rollout and usage obligations agreed with ComReg.

6.35 Given that respondents in response to Document 25/46 have provided views of a potential 6-month rollout and usage requirement, **Option 2** for purpose of this RIA includes a standard 6-month rollout and usage obligation with up to 3 years allowed where sufficient justification is provided to ComReg.

Responses to consultation

6.36 Further, ComReg notes that respondents to Document 25/46 did not disagree with ComReg's proposed approach to include a rollout and usage obligation for WBB LMP licences. However, respondents were of the view that the timeframes for rollout and usage should be extended beyond 6 months (as provided under Option 2) to between 18 and 24 months, primarily on account of concerns around lead times to order and deploy equipment. ComReg notes that its rollout and usage proposal in Document 25/46 had considered the time required to procure equipment etc. However, to the extent that there would be projects whose rollout would extend beyond 6 months because of the time required for procurement, ComReg believes an additional three months would address such concerns.

6.37 However, ComReg is of the view that any lengthening of the 6-month rollout and usage obligation proposed in Document 25/46 must be balanced against ComReg's spectrum management functions (e.g. the efficient use of the radio spectrum). As such ComReg is of the view that a rollout period of 9 months would be appropriate. ComReg also notes that this would align with rollout timelines imposed on licensees in other European countries. For example, WBB LMP licences in Sweden, the Netherlands, Germany and Belgium have rollout periods of

between six months and one year.

6.38 Therefore, **Option 3 would** impose a standard nine-month rollout and usage obligation with up to 3 years allowed where sufficient justification is provided to ComReg.

6.39 Finally, ComReg notes that **Option 4** would be to make a 2 - 3 year period as the standard rollout period across all licensees. This would be in line with respondents' requests for a rollout period of 18 - 24 months.

Reporting obligation with rollout requirements

6.40 All options above would also include appropriate reporting obligations to ensure that the licensee is complying with the rollout obligation specified in its licence. The reporting obligations would be the same across all options that include a rollout and usage obligation. This would be in keeping with ComReg's general approach to ensuring licensees comply with the terms and conditions specified in their licence.

Conclusion on policy options

6.41 Given the above, ComReg considers that the four regulatory options available to it are:

- **Option 1 –** No rollout or usage obligation. This would mean that each licensee would have full flexibility to choose how extensive, or timely their rollout would be regardless of the amount of spectrum rights of use assigned.
- **Option 2 –** A 6 month rollout and usage obligation as standard with up to 3 years allowed where sufficient justification is provided to ComReg.
    - For each standard rollout rights of use issued (low power or medium power), the licensee would be required to install, work and use the spectrum rights of use on at least one base station and one terminal station within 6 months of it's commencement.
    - Where up to 3 years has been provided by ComReg, the licensee would be required to install, work and use the spectrum rights of use on the base station(s) and terminal station(s) as set out in its rollout commitments within that period.
- **Option 3 -** A 9-month rollout and usage obligation as standard with up to 3 years allowed where sufficient justification is provided to ComReg.
    - For each standard rollout rights of use issued (low power or medium power), the licensee would be required to install, work and use the

spectrum rights of use on least one base station and one terminal station within 9 months of it's commencement.

- Where up to 3 years has been provided by ComReg, the licensee would be required to install, work and use the spectrum rights of use on at the base station(s) and terminal stations as set out in its rollout commitments within that period.

- **Option 4 –** A 2 - 3 year rollout and usage obligation as standard. For each licence issued (low power or medium power), the licensee would be required to install, work and use one base station within 3 years of licence commencement. Longer rollout periods would be considered on an exceptional basis only.

6.5 Step 3: Impact on Stakeholders

6.42 This section provides information on the impacts on industry stakeholders arising from the regulatory options above. As set out above, the industry stakeholders comprise potential users of private 4G/5G networks in Ireland spanning a wide variety of sectors requiring secure, high-performance, wireless connectivity tailored to their specific operations. Stakeholders support or otherwise is likely to vary depending on their rollout requirements and therefore no single option would be supported by all stakeholders. Nonetheless, the assessment below considers the issues that appear likely to arise in considering each option.

Option 1

6.43 Under Option 1, each licensee would have full flexibility to choose when and how to rollout their networks. A licensee could choose to rollout entirely or only deploy part of their spectrum rights of use. However, Option 1 would make it more likely for spectrum hoarding to occur because there would be no obligation on a licensee to use spectrum rights efficiently or at all and ComReg would be unable to take compliance action to ensure the efficient use of the radio spectrum. Therefore, stakeholders are unlikely to prefer such an approach because any spectrum *sterilised* due to inefficient use or hoarding could be in geographic areas (urban or industrial estates) where spectrum use would be required by such stakeholders.

6.44 Indeed, ComReg notes that no respondent to Document 25/46 advocated no rollout and usage obligation. Stakeholders are not opposed to a rollout and usage obligation, rather ComReg considers that a key consideration for stakeholders is the timeframe for complying with the rollout and usage obligation. Stakeholders preference for a rollout and usage obligation to prevent spectrum hoarding/inefficient use needs to be balanced against the desire to have flexibility in providing services to certain regions in line with their commercial strategy.

6.45 Therefore, ComReg is of the view that stakeholders are unlikely to prefer Option 1.

Option 2

6.46 Under Option 2, a six-month rollout and usage obligation would apply with up to 3 years available where sufficient justification is provided to ComReg. Respondents to Document 25/46 accepted the need for a rollout requirement but expressed concern over the six-month period because, in their view, it did not provide sufficient time for the procurement of network equipment. However, longer periods beyond the 6 month period could be accommodated under this Option by providing sufficient justification and proposals for its rollout to ComReg.

6.47 This approach would require licensees to provide additional details on its rollout plan in the form of a commitment to achieve the rollout and usage plan as envisaged. If approved, the proposed rollout plan would be included as a condition of the licence to be monitored by ComReg. Such a process would not be onerous and if licensees have genuine plans that would require a rollout and usage period longer than 6 months there should be little difficulty in justifying it.

6.48 Separately, it should be noted that this approach would have higher spectrum fees due to the Longer Rollout (see Chapter 7). However, one of the objectives in setting fees is that they are set at a level that would be unlikely to choke off demand and the higher fees would be significantly less than the opportunity costs of not having access to the spectrum[89] caused by potential hoarding or inefficient use.

6.49 Therefore, ComReg is of the view that stakeholders are likely to prefer Option 2 over Option 1 because it protects against spectrum hoarding/inefficient use and provides a six-month rollout period as standard which would be sufficient for most network deployments. Moreover, it provides the opportunity for a Longer Rollout period where required.

6.50 However, some stakeholders while preferring Option 2 to Option 1 would likely prefer other options that avoided the administrative overhead of engaging with ComReg and that also avoided the higher fees associated with a Longer Rollout.

Option 3

6.51 Option 3 would increase the length of time for a standard rollout by three months to nine months, with further justification to ComReg required for longer periods. Stakeholders are likely to prefer Option 3 over Option 2 because it avoids the need to provide additional justification to ComReg where a rollout period of up to nine months would be sufficient and also avoids the associated higher spectrum fees

[89] For example, absent the use of WBB LMP spectrum potential licensees may need to use mobile networks, narrowband PMR or licence exempt spectrum which may not provide sufficient assurances in terms of speed, latency reliability, security and control, depending on their requirements.

that would be needed for a nine month rollout and usage period under Option 2.

6.52 A standard nine-month period would also likely cover most rollout and usage requirements, noting that such a period is more closely aligned with the rollout obligations of licensees in other European countries.[90] A standard nine-month rollout would also likely resolve respondents issues around the need for the rollout period to provide more time to procure equipment before being able to rollout and use the spectrum rights of use. An additional three months for the standard rollout should be more than sufficient to procure the equipment needed for a private 5G deployment.

6.53 Therefore, ComReg is of the view that stakeholders are likely to prefer Option 3 over Options 1 and 2 because it provides a longer standard rollout period.

Option 4

6.54 Option 4 would provide a lengthy rollout and usage condition of 2 - 3 years. However, such a time period would again open up the possibility of inefficient use and hoarding because any obligation would apply over an extended period (i.e. more than a year). Therefore, some respondents would be unlikely to prefer Option 4, particularly those for whom the six and nine month rollout periods would be sufficient.

6.55 Notwithstanding, some respondents requested that the rollout period be adjusted to allow for longer rollout periods in the region of 18-24 months. These stakeholders would likely prefer this option because it would provide them with control over when and how they roll out their networks and would avoid the need to engage with ComReg over longer periods.

6.56 Therefore, some stakeholders would prefer Option 3 over Option 4 while other would prefer Option 4 over Option 3.

6.6 Step 4: Impact on competition and consumers

Impact on competition

6.57 There are different elements to competition that are relevant in determining the impacts of each of the options. There is a natural overlap between the aims of each of the options and an assessment of ComReg's compliance with some of its statutory functions, particularly that of promoting competition, in accordance with Section 12 of the 2002 Act. These include:

- Encouraging efficient use and ensuring the effective management of radio

[90] See Appendix C of Plum Report, Document 25/46b

frequencies and numbering resources[91] (“Efficiency and Spectrum Management - Section 4.6”);

- Ensuring that there is no restriction or distortion of competition in the electronic communications sector[92] (“Distortions to competition" – Section 4.7);
- Promoting efficient investment and innovation in new and enhanced infrastructures[93] (“Efficient Investment and Innovation” – Section 4.8); and
- Safeguarding competition to the benefit of consumers and promoting, where appropriate, infrastructure-based competition[94] (“Infrastructure based competition” – Section 4.9).

Option 1

6.58 Under Option 1, licensees would have a high degree of flexibility and could choose their own rollout and usage levels which could have a positive impact on competition through, among other things, increased infrastructure-based competition. However, it would also provide the weakest safeguard that spectrum would be used efficiently. This Option would likely give rise to an increased risk of spectrum hoarding/inefficient use which in turn would create artificial scarcity for spectrum for WBB LMP services. For example, some users may use only a subset of the spectrum rights of use attached to their licence or not fully deploy services in the area(s) for which they have a licence to operate. Such an approach would be unlikely to ensure the efficient use and effective management of the radio spectrum.

6.59 In such instances, other users with genuine requirements for spectrum may not be able to deploy services using the spectrum that is required. This is particularly relevant for use cases that have an outdoor requirement where there is a higher likelihood of competing demand for the spectrum rights of use or for areas with a higher density of users (i.e. ports, urban areas, campuses or industrial estates). The inefficient use or hoarding of spectrum could preclude companies from access to an essential input in the provision of innovative connectivity services and/or preclude other providers from offering those same services. This would not encourage the effective use or promote efficient investment because it could create outcomes where spectrum goes unused, despite demand existing for that spectrum.

6.60 Therefore, ComReg is of the view that competition would not be best promoted

[91] Section 12(2)(a) of the 2002 Act.
[92] Section 12(2)(a) of the 2002 Act.
[93] Regulation 4(5)(d) of S.I. No. 444 of 2022.
[94] Regulation 4(5) of S.I. No. 444 of 2022.

under Option 1.

Option 2

6.61 Under Option 2, licensees would be required to rollout services within 6 months of a licence being granted. By setting a minimum rollout and usage obligation sufficiently high (i.e. 6 months), Option 2 should mitigate the risk of spectrum not being used, or used inefficiently because rollout and usage would need to occur within 6 months. As noted by DotEcon, a rollout period of 6 months "*would protect against inefficient assignment and use of spectrum that could arise if licences were granted without a clear immediate use for the spectrum, thereby preventing access to other potential users".*[95]

6.62 This Option would mean that licensees are assessed for rollout and usage compliance before the renewal of their licence which would then inform ComReg's decision to renew the licence. This would better support ComReg in ensuring the effective management of the radio spectrum because rights of use can be reassigned annually if licence conditions are not being met (and/or fees not paid). It would also ensure that the spectrum for WBB LMP is being used efficiently by imposing a timely yet reasonable rollout and usage obligation, lowering the risk that users with a genuine need would be restricted or denied access to spectrum on account of other users not using spectrum efficiently.

6.63 However, this protection needs to be balanced against the risk that the rollout period is overly restrictive such that providers do not have sufficient time to rollout a network and put it into use (including having sufficient time to procure network equipment). If the rollout and usage period is not sufficiently long, it could deter potential licensees from utilising the spectrum altogether and switch to less efficient approach using alternative spectrum or networks. Such an outcome would not promote efficient investment and innovation in new and enhanced infrastructures.

6.64 ComReg is of the view that such an outcome is unlikely to arise under this Option because six months is already an appropriate period and a Longer Rollout could be accommodated once sufficient justification is provided to ComReg. As previously noted, this would not be an onerous process and there is no reason why the act of providing additional justification to ComReg would create any concerns for competition. On the contrary, additional information and justification for a Longer Rollout would better allow ComReg to better manage the radio spectrum as required under Section 12 of the 2002 Act.

6.65 ComReg also notes that that Longer Rollout period would be accompanied by higher fees to reflect the additional administrative cost that would fall on ComReg and to encourage potential licensees to use the standard rollout obligation. In that

[95] DotEcon Report p.8, Document 26/42a.

regard, ComReg again notes that one of the objectives of setting these fees is that they should not choke off demand, therefore there is little reason to be concerned that such fees under this Option would restrict or distort competition. Moreover, ComReg notes that these fees would be pro-competitive because they create incentives for licensees to complete their rollout and usage in a timely fashion and use the standard rollout obligation where appropriate.

6.66 Therefore, ComReg is of the view that competition would be better promoted under Option 2 compared to Option 1.

Option 3

6.67 Option 3 has the same impacts on competition as Option 2 except the impact of the additional 3 months needs to be considered. In assessing the appropriate balance between preventing spectrum hoarding and/or inefficient use on the one hand and providing licensee with sufficient time to complete their rollout on the other, an additional three months is unlikely to materially increase the risk of hoarding. For hoarding to be successful it typically requires spectrum to be hoarded for an extended period. This prolonged hoarding forces alternative (and potentially more efficient users) to either delay service deployment or resort to less efficient technologies and other spectrum bands to deliver the services they require, as they would otherwise have to wait for preferred spectrum to become available. In that regard, an additional three months, thereby bringing rollout to nine months, seems unlikely to significantly increase the risk of spectrum hoarding. Rather it would afford licensees with additional time to address deployment challenges, including procurement delays and supply chain issues, thereby supporting a more efficient and efficient rollout.

6.68 As noted by DotEcon, "*For standard applications, a rollout period in the region of nine months would seem to balance the concerns raised by respondents about the longer time horizons for network deployment, whilst also protecting against spectrum sitting unused for significant periods of time and denying access to other potential operators who could make more immediate use of a valuable resource*."[96] This would also promote more efficient investment decisions and innovation in new and enhanced infrastructures because such an approach is more in line with the approach in other jurisdictions.

6.69 In that regard, Option 3 would likely strike a better balance between encouraging the efficient use of spectrum, and also ensuring that ComReg is best placed to effectively manage the spectrum for WBB-LMP. A 9 month rollout timeframe would provide licensees with more time to rollout their service compared to Option 2, while also allowing ComReg to take any action arising from non-compliance prior to the annual renewal of the licence. This would reduce the risk of spectrum being

[96] DotEcon Report p.8, Document 26/42a.

inefficiently used, thereby reducing the risk of other users being inefficiently denied access to spectrum.

6.70 Therefore, ComReg is of the view that competition would be better promoted under Option 3 compared to Option 1 and Option 2.

Option 4

6.71 Option 4 would provide the extended rollout of period of 2 -3 years as standard. This would ensure that all projects, regardless of their size or scope, would be able to rollout at any time within a three year period. While applying a 2 - 3 year rollout and usage period as standard would provide flexibility to accommodate all projects subject to spectrum availability (including the more extensive rollouts), ComReg is of the view that the majority of WBB LMP projects should be completed within a 6 - 9 month time period given experience in other jurisdictions. In that regard, Option 4 would impose a disproportionally relaxed obligation on the more typical deployments, resulting in unnecessarily slow rollouts for a proportion of the typical cases, undermining the overall objective of timely network deployment and effective spectrum management.

6.72 This would also increase the risk of spectrum hoarding because a longer period up to three years would increase the effectiveness of such strategies. This does not mean that more complex sites or multi-location deployments do not need a Longer Rollout period. A Longer Rollout for these projects can be reasonably accommodated by providing sufficient justification to ComReg under Options 2 and 3. However, ComReg would not be ensuring the effective management and use of the radio spectrum by having an extended rollout requirement as standard across all projects because this would not provide the more typical projects with the correct incentives to rollout and use spectrum rights of use as early and as efficiently as possible.

6.73 Option 4 would also mean that ComReg would only be determining compliance with the obligation potentially up to three years after rights of use have been assigned. This option would mean that ComReg would only be able to observe compliance with the rollout obligation prior to the second renewal of the licence. Compared to Option 2, this would mean that any action arising from non-compliance with the rollout obligation would only be taken in the second year of a licence. While ComReg recognises that there may be some use cases that have an evidenced need for a Longer Rollout window, ComReg is of the view that such instances would need to be appropriately justified. Provided an applicant can provide sufficient evidence to justify a Longer Rollout, such a use case could be facilitated with a Longer Rollout.

Impact on consumers

6.74 ComReg notes that consumers are not direct users of WBB LMP systems. For

example, according to the European 5G Observatory[97] "*Private networks are best defined as those networks that are not typically utilised by consumers (for mobile voice and data services) but use network elements and resources to provide dedicated secure services to private enterprises such as factories, plants, large campuses, ports and airports*"

6.75 It is therefore appropriate to consider the impacts on consumers in the context of ensuring that spectrum rights of use are efficiently used to facilitate the effective deployment of WBB LMP use cases used by industry stakeholders, which in turn provide goods and services that consumers are likely to value. In that sense, ComReg considers that the primary consumer impacts to be considered are how the policy options impact inputs to downstream services which are valued by consumers.

6.76 The efficient assignment of WBB LMP licences are an important issue for consumers, as it will affect the choice, price, and quality of a range of services made available to consumers. For example:

- Efficient assignment and use enables more widespread adoption of private 5G which boosts industrial innovation and productivity in manufacturing, logistics and industry by providing secure, reliable, low latency communications for automation, robotics and real time monitoring promoting more efficient supply chains that benefits consumers in the provision of other goods and services..
- Private 5G has the potential to offload traffic from public networks that would likely be required absent the available spectrum, reducing congestion in dense areas like cities, airports, university campuses and innovation centres.
- Private 5G could be used to improve and integrate important public services such as traffic management, transport and healthcare.
- Consumers are also likely to benefit from the increased competition between traditional telecom operators and third-party providers which would not be possible absent the efficient use of the radio spectrum

6.77 Further, it can be generally assumed that what is good for competition, and what promotes investment in infrastructure, is, good for consumers. This is because increased competition between operators brings benefits to their customers in terms of price, choice and quality of services. In that regard, options that are good for competition are likely to be good for consumers. With that in mind, ComReg reminds the reader that Option 3 is preferred in terms of the likely impact on

[97] See p.56 of the European 5G Observatory Report 2025. Available at 5G Observatory report 2025 | Shaping Europe's digital future

competition and the efficient use of the radios spectrum.

6.78 Therefore, ComReg is of the view that consumers are likely to prefer Option 3.

6.7 ComReg's preferred Option

6.79 This RIA considers a number of regulatory measures available to ComReg within the context of the analytical framework set out in ComReg's RIA Guidelines (i.e., impact on industry stakeholders, impact on competition and impact on consumers).

6.80 In light of the above, ComReg is of the view that Option 3 (a 9 month rollout and usage obligation as standard with up to 3 years allowed where sufficient justification is provided to ComReg) is preferred in terms of the impact on stakeholders, competition and consumers.

7 Final Decision Instrument Narrowband PMR, D07/26

This chapter sets out ComReg's final decision document based on the views expressed by ComReg in the preceding chapters and their supporting annexes.

Decision

1.1 DEFINITIONS AND INTERPRETATIONS

1. In this draft Decision, save where the context otherwise admits or requires:

"Communications Regulation Act 2002" means the Communications Regulation Act, 2002, (No. 20 of 2002), as amended;

"ComReg" means the Commission for Communications Regulation, established under section 6 of the Communications Regulation Act 2002;

"EECC Regulations" means the European Union (Electronic Communications Code) Regulations 2022, S.I. No. 444 of 2022;

"Electronic Communications Network" and **"Electronic Communications Service"** have the meanings assigned to them in the EECC Regulations;

"Minister" means the Minister of Environment, Climate and Communications;

"**Licence**" means a licence granted in accordance with section 5 of the Wireless Telegraphy Act 1926 in accordance with and subject to the matters prescribed in Regulations to keep, have possession of, install, maintain, work and use Apparatus in a specified place in the State granted to the licensee;

"**Licence Fee**" means the relevant fee as set out in Schedule 2 which applies to a Licence as set out in draft form in Schedule 4 to the Private Mobile Radio Licence Regulations;

"**Private Mobile Radio licence**" means a non-exclusive Licence in the form set out in Schedule 1 granted in accordance with section 5 of the Act of 1926 in accordance with and subject to the matters prescribed in Regulations to keep, have possession of, install, maintain, work and use Apparatus in a specified place in the State, in accordance with and subject to the terms and conditions set out therein and the matters prescribed in the Private Mobile Radio Licence Regulations.

"Private Mobile Radio licence Regulations" means means the Wireless Telegraphy (Private Mobile Radio Licence) Regulations 202X, as set out in draft form in Annex 3 of 26/42;

"**Private Mobile Radio Spectrum Lease Licence**" means a non-exclusive Licence in the form set out in Schedule 3 granted under section 5 of the Act of 1926 to keep and have possession of Apparatus in a specified place in the State, in accordance with and subject to the terms and conditions set out therein and the matters prescribed in Regulations.

"**Programme Making and Special Events Licence**" means a non-exclusive Licence in the form set out in Schedule 2 granted on a Non-Interference and Non-Protected Basis in accordance with section 5 of the Act of 1926 in accordance with and subject to the matters prescribed in Regulations to keep, have possession of, install, maintain, work and use Apparatus in a specified place in the State, in accordance with and subject to the terms and conditions set out therein and the matters prescribed in the Private Mobile Radio Licence Regulations;

"Wireless Telegraphy Act 1926" means the Wireless Telegraphy Act, 1926 (No. 45 of 1926), as amended.

1.2 DECISION-MAKING CONSIDERATIONS

2. In arriving at its decisions in this document, ComReg has had regard to:

   I. the contents of, and the materials and reasoning referred to in, as well as the materials provided by respondents in connection with, the below-listed ComReg documents (insofar as they are relevant to the present Decision):

      a) ComReg Document 25/46; and

      b) ComReg Document 26/42 [document to which this draft Decision including draft Regulations are attached].

   II. The consultants' reports commissioned, and the advice obtained by ComReg, in relation to the subject matter of the documents and materials listed above

   III. the powers, functions, objectives and duties of ComReg, including, without limitation those under and by virtue of:

      a) the Communications Regulation Act 2002, and, in particular, sections 10, 12 and 13 thereof;

      b) Regulations 4, 5, 9 ,14, 15, 16, 17, 20, 24, and 27, 28, 30, 31, 34, 36, 99(1)(c), 105 and 110 of the EECC Regulations;

      c) Sections 5 and 6 of the Wireless Telegraphy Act 1926; and

d) the applicable Policy Directions made by the Minister under section 13 of the Communications Regulation Act 2002.

IV. and, noting that it has:

a) given all interested parties the opportunity to express their views and make their submissions in accordance with Regulation 36 of the EECC Regulations and Regulation 101 of the EECC Regulations;

b) considered such representations; and

c) where necessary, evaluated the matters to be decided, in accordance with ComReg's RIA Guidelines (ComReg Document 07/56a) and the RIA Guidelines issued by the Department of An Taoiseach in June, 2009,

1.3 DECISIONS

3. Having had regard to the above considerations, ComReg has decided:

I. subject to obtaining the consent of the Minister to the making by it of the Private Mobile Radio Licence Regulations, to make those regulations under section 6 of the Wireless Telegraphy Act 1926, prescribing relevant matters in relation to Private Mobile Radio Licences, Programme Marking and Special Events Licences, or Private Mobile Radio Spectrum Lease Licences, including prescribing the form of the Licence concerned, its duration, fees, and the conditions and restrictions subject to which it is granted.

II. under section 5 of the Wireless Telegraphy Act 1926, and upon application being properly made to it and upon payment of relevant Licence Fee, to grant a Private Mobile Radio Licence, Programme Marking and Special Events Licence, or Private Mobile Radio Spectrum Lease Licence, under section 5 of the Wireless Telegraphy Act 1926 to a relevant applicant subject to the conditions and restrictions (including conditions as to suspension and withdrawal), prescribed in the Private Mobile Radio Licence Regulations as currently set out in Annex 2 of Document 25/06 [this document]

Duration of Licence

III. that a PMR Licence shall, unless it has been revoked, withdrawn or surrendered, remain in force from the date of grant for a period of one year unless renewed.

IV. that a PMSE Licence shall, unless it has been revoked, withdrawn or surrendered, remain in force from the date of grant for a period of up to one year, and shall not be renewed.

Licence Fees

V. that the PMR and PMSE Licence Fees shall be calculated in accordance with Schedule 4 as set out in the Private Mobile Radio Licence Regulations.

VI. that if a PMR Licence is surrendered by the Licensee, the Licensee may be entitled to a refund of the relevant Licence Fee on a pro rata monthly basis.

VII. that if a PMR or PMSE Licence is suspended or withdrawn due to a finding by ComReg of non-compliance with any relevant licence conditions, the Licensee shall not be entitled to be repaid any part of the Licence Fee paid by the Licensee, but shall still be liable to pay any sums, including interest, that are outstanding.

VIII. that if the amount of radio frequency spectrum specified in a PMR Licence is reduced, the Licensee may be entitled to a refund of the relevant Licence Fee already paid in the relevant year on a pro rata monthly basis having regard to the nature of the amendment.

1.4 EFFECTIVE DATE

This Decision Instrument shall come into force on the day of its making.

1.5 MAINTENANCE OF OBLIGATIONS

If any section or clause contained in this Decision Instrument is found to be invalid or prohibited by the Constitution, by any other law or judged by a court to be unlawful, void or unenforceable, that section or clause shall, to the extent required, be severed from this Decision Instrument and rendered ineffective as far as possible without modifying the remaining section(s) or clause(s) of this Decision Instrument and shall not in any way affect the validity or enforcement of this Decision Instrument.

1.6 STATUTORY POWERS NOT AFFECTED

Nothing in this document shall operate to limit ComReg in the exercise of its discretions or powers, or the performance of its functions or duties, or the attainment of objectives under any laws applicable to ComReg from time to time.

GARRETT BLANEY

COMMISSIONER

THE COMMISSION FOR COMMUNICATIONS REGULATION

The 18 day of June 2026

8 Final Decision Instrument WBB LMP – D08/26

This chapter sets out ComReg's draft decision document based on the views expressed by ComReg in the preceding chapters and their supporting annexes.

Decision

1.1 DEFINITIONS AND INTERPRETATIONS

1. In this Decision, save where the context otherwise admits or requires:

"3.8- 4.2 GHz Band" means spectrum in the range 3800 – 4200 MHz.

"3.8- 4.2 GHz Band EC Decision" means Decision (EU) 2025/2425

"Communications Regulation Act 2002" means the Communications Regulation Act, 2002, (No. 20 of 2002), as amended;

"ComReg" means the Commission for Communications Regulation, established under section 6 of the Communications Regulation Act 2002;

"EECC Regulations" means the European Union (Electronic Communications Code) Regulations 2022, S.I. No. 444 of 2022;

"Electronic Communications Network" and **"Electronic Communications Service"** have the meanings assigned to them in the EECC Regulations;

"Minister" means the Minister of Culture, Communications and Sport;

"**Licence Fee**" means the relevant fee which applies to a WBB LMP Licence as set out in draft form in Schedule 2 to the Wireless Broadband Low Medium Power Licence Regulations;

"Wireless Broadband Low Medium Power Licence Regulations" or "**WBB LMP Licensing Regulations"** means the Wireless Telegraphy (Wireless Broadband Low Medium Power Licence) Regulations 202X, as set out in draft form in Annex 3 of Document 26/42;

"Wireless Broadband Low Medium Power Licence" or "**WBB LMP Licence**" means a non-exclusive Licence in the form set out in Schedule 1 to the WBB LMP Regulations granted under section 5 of the Act of 1926 to keep and have possession of Apparatus for a WBB LMP Network in a specified place in the State in accordance with and subject to the terms and conditions contained in the Licence and the matters prescribed in the WBB LMP Regulations;

"Wireless Broadband Low Medium Power Spectrum Lease Licence" or "**WBB LMP Spectrum Lease Licence**" means a non-exclusive Licence in the form set out in Schedule 2 to the WBB LMP Licensing Regulations granted under section 5 of the Act of 1926 to keep and have possession of Apparatus for a WBB LMP Network in a specified place in the State in accordance with and subject to the terms and conditions contained in the Licence and the matters prescribed in the WBB LMP Licensing Regulations;

"Wireless Telegraphy Act 1926" means the Wireless Telegraphy Act, 1926 (No. 45 of 1926), as amended.

1.2 DECISION-MAKING CONSIDERATIONS

2. In arriving at its decisions in this document, ComReg has had regard to:

I. the contents of, and the materials and reasoning referred to in, as well as the materials provided by respondents in connection with, the below-listed ComReg documents (insofar as they are relevant to the present Decision):

a) ComReg Document 25/46;

b) ComReg Document 26/06; and

c) ComReg Document 26/42; [document to which this draft Decision including draft Regulations are attached].

II. The consultants' reports commissioned, and the advice obtained by ComReg, in relation to the subject matter of the documents and materials listed above;

III. the powers, functions, objectives and duties of ComReg, including, without limitation those under and by virtue of:

a) the Communications Regulation Act 2002, and, in particular, sections 10, 12 and 13 thereof;

b) the EECC Regulations, in particular Regulations 4, 5, 1 4, 15, 16, 17, 2 0 , 2 4 , 27, 28, 30, 31, 34, 36, 99(1)(c), 105 and 110;

c) the 3.8-4.2 GHz Band EC Decision

d) Sections 5 and 6 of the Wireless Telegraphy Act 1926; and

e) the applicable Policy Directions made by the Minister under section 13 of the Communications Regulation Act 2002.

and, noting that it has:

aa) given all interested parties the opportunity to express their views and make their submissions and

representations in accordance with Regulations 36 and 101 of the EECC Regulations;

bb) considered such representations; and

cc) where necessary, evaluated the matters to be decided, in accordance with ComReg's RIA Guidelines (ComReg Document 07/56a) and the RIA Guidelines issued by the Department of An Taoiseach in June, 2009,

1.3 DECISIONS

3. Having had regard to the above considerations, ComReg has decided:

I. subject to obtaining the consent of the Minister to the making by it of the Wireless Broadband Low Medium Power Licence Regulations, **to make those regulations** under section 6 of the Wireless Telegraphy Act 1926, prescribing relevant matters in relation to a WBB LMP Licence and WBB LMP Lease Licence, including prescribing the form of the Licence concerned, its duration, fees, and the conditions and restrictions subject to which it is granted;

II. under section 5 of the Wireless Telegraphy Act 1926, and upon application being properly made to it and upon payment of relevant Licence Fee, **to grant** WBB LMP Licences, to a relevant applicant subject to the conditions and restrictions (including conditions as to suspension and withdrawal), prescribed in the WBB LMP Licensing Regulations as currently set out in Annex 3 of Document 26/42;

Duration of Licence

III. that a WBB LMP Licence shall, unless it has been suspended or withdrawn, remain in force from the date of grant for a period of one year unless renewed;

Conditions of licences

IV. to attach technical conditions to a WBB LMP Licence in accordance with the 3.8-4.2 GHz Band EC Decision;

V. to attach licensing conditions to a WBB LMP Licence as generally described in Chapter 5 of Document 26/06 [this document] and as set out in the draft WBB LMP Licensing Regulations;

Licence Fees

VI. that the Licence Fee shall be calculated in accordance with Schedule 2 of the WBB LMP Licensing Regulations;

VII. that if a WBB LMP Licence is surrendered by the Licensee, the Licensee may be entitled to a refund of the relevant Licence Fee on a pro rata monthly basis;

VIII. that if a WBB LMP Licence is suspended or withdrawn due to a finding by ComReg of non-compliance with any relevant licence conditions, the Licensee shall not be entitled to be repaid any part of the Licence Fee paid by the Licensee, but shall still be liable to pay any sums, including interest, that are outstanding; and,

IX. that if the amount of radio frequency spectrum specified in a WBB LMP Licence is reduced, the Licensee may be entitled to a refund of the relevant Licence Fee already paid in the relevant year on a pro rata monthly basis having regard to the nature of the amendment.

1.4 EFFECTIVE DATE

4. This Decision Instrument shall come into force on the day of its making.

1.5 MAINTENANCE OF OBLIGATIONS

5. If any section or clause contained in this Decision Instrument is found to be invalid or prohibited by the Constitution, by any other law or judged by a court to be unlawful, void or unenforceable, that section or clause shall, to the extent required, be severed from this Decision Instrument and rendered ineffective as far as possible without modifying the remaining section(s) or clause(s) of this Decision Instrument and shall not in any way affect the validity or enforcement of this Decision Instrument.

1.6 STATUTORY POWERS NOT AFFECTED

6. Nothing in this document shall operate to limit ComReg in the exercise of its discretions or powers, or the performance of its functions or duties, or the attainment of objectives under any laws applicable to ComReg from time to time.

GARRETT BLANEY

COMMISSIONER

THE COMMISSION FOR COMMUNICATIONS REGULATION

The 18 day of June 2026

9 Next steps

9.1 Next Steps

9.1 ComReg envisages that the next step in this process will be the making and publication of the licensing regulations under Wireless Telegraphy Acts following the obtaining of the required consent of the Minister.

Annex 1: Legal Framework

A 1.1 ComReg's relevant functions pursuant to Section 10 of the Communications Regulation Act 2002, as amended, include the management of the radio frequency spectrum. ComReg's primary objectives in carrying out its statutory functions

A 1.2 In the context of electronic communications are to:

- ensure the efficient management and use of the radio frequency spectrum in Ireland in accordance with a direction under section 13 of the 2002 Act;
- promote competition[98] ;
- contribute to the development of the internal market [99]; and
- promote the interests of users within the Community[100] .

A 1.3 Regulation 27 of the Code Regulations governs the management of radio spectrum. Regulation 27(1) requires that ComReg, subject to any directions issued by the Minister pursuant to Section 13 of the 2002 Act and having regard to its objectives under Section 12 of the 2002 Act, Regulation 4 of the Code Regulations, and Article 4 of the Directive, ensure:

(a) the effective management of radio frequencies for ECN and ECS;

(b) that the allocation of, and the granting of individual rights of use for radio spectrum for ECN and ECS are based on objective, transparent, pro-competitive, non-discriminatory and proportionate criteria; and

(c) ensure that harmonisation of the use of radio frequency spectrum by ECN and ECS across the EU is promoted, consistent with the need to ensure its effective and efficient use and in pursuit of benefits for the consumer such as competition, economies of scale and interoperability of networks and services, having regard to all decisions and measures adopted by the European Commission in accordance with Decision No.676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in EU (namely the Radio Spectrum Decision).

[98] Section 12 (1)(a)(i) of the 2002 Act.
[99] Section 12 (1)(a)(ii) of the 2002 Act.
[100] Section 12(1)(a)(iii) of the 2002 Act.

A 1.4 Regulation 27(3) provides that, without prejudice to Regulation 27(4), ComReg must ensure that all types of technology used for the provisions of ECN or ECS may be used in the radio spectrum declared available for ECSs in the Radio Frequency Plan published under Section 35 of the 2002 Act in accordance with EU law.

A 1.5 Regulation 27(4)101 provides that, notwithstanding Regulation 27(3), ComReg may, through licence conditions or otherwise, provide for proportionate and non-discriminatory restrictions to the types of radio network or wireless access technology used for electronic communications services where this is necessary to –

- avoid harmful interference,
- protect public health against electromagnetic fields,
- ensure technical quality of service,
- ensure maximisation of radio frequency sharing;
- safeguard the efficient use of spectrum, or
- ensure the fulfilment of a general interest objective as defined by or on behalf of the Government or a Minister of the Government in accordance with Regulation 27(7)[102] .

A 1.6 Regulation 28(1) of the Code Regulations provides that ComReg shall facilitate the use of radio spectrum, including shared use, under a general authorisation under Regulation 6 of the Code Regulations, and limit the granting of individual rights of use for radio spectrum where such rights are necessary to maximise efficient use in light of demand and taking into account the criteria set out in Regulation 28(2).

A 1.7 Regulation 28(2) of the Code Regulations provides that ComReg may decide to grant individual rights of use for radio frequencies by way of a licence taking account of:

(a) the specific characteristics of the radio spectrum concerned;

(b) the need to protect against harmful interference;

(c) the development of reliable conditions for radio spectrum sharing, where appropriate;

(d) the need to ensure technical quality of communications or service;

[101] Regulation 27(4) of the Code Regulations.
[102] Regulation 27(7) of the Code Regulations.

(e) objectives of general interest as laid down by or on behalf of the Government or a Minister of the Government in conformity with EU law; and

(f) the need to safeguard the efficient use of spectrum.

A 1.8 Regulation 28(3) provides that when considering whether to grant individual rights of use for the harmonised radio spectrum, taking into account technical implementing measures adopted in accordance with Article 4 of the Radio Spectrum Decision, ComReg shall seek to minimise problems of harmful interference, including in cases of shared use of radio spectrum on the basis of a combination of general authorisation and individual rights of use.

A 1.9 Regulation 29(1) of the Code Regulations provides that ComReg shall attach conditions to individual rights of use for radio spectrum in accordance with Regulation 9(1) in such a way as to ensure optimal and the most effective and efficient use of radio spectrum. Regulation 29(7) provides that Regulation 29 is without prejudice to the Act of 1926.

A 1.10 Regulation 20(1) of the Code Regulations provides that:

"When granting a right of use for radio spectrum in relation to which — (a) the harmonised usage of the radio spectrum involved in accordance with any international agreements or European Union rules, (b) any relevant access conditions and procedures under any international agreements or European Union rules, or (c) any selection procedure in accordance with international agreements or European Union rules, apply, the Regulator shall grant the right of use for such radio spectrum in accordance therewith and shall not impose any further conditions, additional criteria or procedures which would restrict, alter or delay the grant of the right of use concerned provided that all conditions which may be specified by the Regulator to be complied with by the holder of the right of use in the State have been satisfied."

A 1.11 Regulation 34(1) provides that:

"The Regulator shall promote effective competition and avoid distortions of competition in the internal market when deciding to grant, amend or renew rights of use for radio spectrum for electronic communications networks and services in accordance with these Regulations."

Annex 2 – Draft PMR and PMSE Licensing Regulations

Draft WT (PMR AND PMSE LICENCES) REGULATIONS 2026

A 1.1 <u>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 Culture, Communications and Sports under section 37 of the Communications Regulation Act 2002, as amended.</u>

A 1.2 ComReg may make such editorial changes to the text of any final regulations as it considers necessary and without further consultation, where such changes would not affect the substance of the regulations.

STATUTORY INSTRUMENTS

S.I. No. of 2026

WIRELESS TELEGRAPHY (PRIVATE MOBILE RADIO AND PROGRAMME MAKING AND SPECIAL EVENTS LICENCES) REGULATIONS 2026

S.I. No. of 2026

WIRELESS TELEGRAPHY (PRIVATE MOBILE RADIO AND PROGRAMME MAKING AND SPECIAL EVENTS LICENCES) REGULATIONS 2026

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), and with the consent of the Minister for Culture, Communications and Sports(as adapted by the Tourism, Culture, Arts, Gaeltacht, Sport and Media (Alteration of Name of Department and Title of Minister) Order 2025 (S.I. No. 236 of 2025)) 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 (Private Mobile Radio and Programme Making and Special Events Licences) Regulations 2026.

Interpretation and Definitions

2. (1) In these Regulations, except where the context otherwise requires:

"Act of 1926" means the Wireless Telegraphy Act 1926 (No. 45 of 1926);

"Act of 1972" means the Wireless Telegraphy Act 1972 (No. 5 of 1972);

"Act of 2002" means the Communications Regulation Act 2002 (No. 20 of 2002);

"Apparatus" means apparatus for wireless telegraphy as defined in section 2 of the Act of 1926;

"Base Station" means a Land Station in the Land Mobile Service located at a fixed location which communicates with Land Mobile Stations;

"Commission for Communications Regulation" or "Commission" means the Commission for Communications Regulation established under the Act of 2002;

"Consumer Price Index" or "CPI" means the consumer price index as published from time to time by the Central Statistics Office;

"Central Statistics Office" means the Central Statistics Office of Ireland or its successor;

"Bandwidth" means a specific portion of the radio spectrum that is used for transmitting and receiving information;

"EECC Regulations" means the European Union (Electronic Communications Code) Regulations 2022 (S.I. No. 444 of 2022);

"Electronic Communications Network" and "Electronic Communications Service" have the meanings assigned to them in the EECC Regulations;

"equivalent isotropically radiated power" or "e.i.r.p." means the product of the power supplied to the antenna and the absolute or isotropic gain in a given direction relative to an isotropic antenna;

“Individual Rights of Use” means the individual rights of use for radio spectrum to use certain radio frequencies for Electronic Communications Networks or services as specified in a Licence and subject to licence conditions;

“Land Mobile Service” means a mobile service either (i) between Base Stations and Land Mobile Stations, or (ii) between Land Mobile Stations;

“Land Mobile Station” means Apparatus in the Land Mobile Service capable of surface movement within the geographical limits of the State;

“Land Station” means Apparatus in the mobile service not intended to be used while in motion;

“Lease” has the meaning set out in the Transfer and Lease Regulations;

"Licence Fee" means the relevant fee as set out in Schedule 4 which applies to a PMR or PMSE Licence;

“Licence” means a non-exclusive licence granted in accordance with section 5 of the Act of 1926 in accordance with and subject to the matters prescribed in these Regulations to keep, have possession of, install, maintain, work and use Apparatus in a specified place in the State granted to the licensee;

“Licensee” means the holder of a Licence;

“Non-exclusive”, in relation to a Licence, means that the Commission is not precluded from authorising the keeping and having possession by persons other than the Licensee, on a Non-Interference and Non-Protected Basis, of Apparatus for wireless telegraphy for the radio frequency spectrum specified in the Licence;

“Non-Interference and Non-Protected Basis” means that the use of Apparatus for wireless telegraphy is subject to no Harmful Interference being caused to any Radiocommunication Service, and that no claim may be made for the protection of Apparatus for wireless telegraphy used on this basis against Harmful Interference originating from Radiocommunication Services;

“Harmful Interference” has the meaning set out in the EECC Regulations;

“Mobile Station” means Apparatus in the mobile service intended to be used while in motion or during halts at unspecified points;

“Network” means any system using Apparatus to provide Terrestrial Radiocommunications;

“Paging Permit” means a permit issued under the Act of 1926, as amended, to operate a Paging System on a non-interfering and non-protected basis.

“Paging System” means a one-way communication network or public address system used to broadcast announcements, alerts, or messages to a specific area or group of people.

“Private Mobile Radio” means a private radio system, not connected to a public communications network, used to provide a Land Mobile Service;

“Private Mobile Radio Licence” or “PMR Licence” means a non-exclusive Licence in the form set out in Schedule 1 granted in accordance with section 5 of the Act of 1926 in accordance with and subject to the matters prescribed in these Regulations to keep, have possession of, install, maintain, work and use Apparatus in a specified place in the State, in accordance with and subject to the terms and conditions set out therein and the matters prescribed in these Regulations;

“Private Mobile Radio Spectrum Lease Licence” or “PMR Spectrum Lease Licence” means a non-exclusive Licence in the form set out in Schedule 3 granted under section 5 of the Act of

1926 to keep and have possession of Apparatus in a specified place in the State, in accordance with and subject to the terms and conditions set out therein and the matters prescribed in these Regulations;

"Programme Making and Special Events" or "PMSE" means a PMR wireless service used in the production of live theatre and concert events as well as supporting activities such as news gathering, sports events and outside broadcasts;

"Programme Making and Special Events Licence" or "PMSE Licence" a non-exclusive Licence in the form set out in Schedule 2 granted on a Non-Interference and Non-Protected Basis in accordance with section 5 of the Act of 1926 in accordance with and subject to the matters prescribed in these Regulations to keep, have possession of, install, maintain, work and use Apparatus in a specified place in the State, in accordance with and subject to the terms and conditions set out therein and the matters prescribed in these Regulations;

"Private Mobile Radio Network" or "PMR Network" means a closed or private user group which can operate in simplex, semi or full duplex modes, using the granted Rights of Use, providing Land Mobile Services;

"Programme Making and Special Events Network" or "PMSE Network" means a closed or private user group which can operate in simplex, semi or full duplex modes, using the granted Rights of Use, providing Land Mobile Services;

"Radio Equipment Regulations" means the European Union (Radio Equipment) Regulations 2026 (S.I. No. 14 of 2026);

"Radiocommunication Service" means a service as defined in the Radio Regulations of the International Telecommunication Union involving the transmission, emission or reception of radio waves for specific telecommunication purposes;

"Shared Rights of Use" means the shared rights of use for radio spectrum to use certain radio frequencies for Electronic Communications Networks or services as specified in a Licence and subject to licence conditions;

"Terrestrial Radiocommunication" means any radiocommunication other than space radiocommunication or radio astronomy;

"Transfer" has the meaning set out in the Transfer and Lease Regulations;

"Transfer and Lease Regulations" means the Wireless Telegraphy (Transfer and Lease of Individual Rights of Use For Radio Spectrum for the Provision of Electronic Communications Networks and Services) Regulations, 2025 (S.I. No. 99 of 2025);

"Transferee" has the meaning set out in the Transfer and Lease Regulations;

"Transferor" has the meaning set out in the Transfer and Lease Regulations;

"Wireless Telegraphy" has the same meaning as set out in section 2 of the Act of 1926.

(2) In these Regulations –

(a) a reference to a Regulation or a Schedule is to a Regulation of, or a Schedule to, these Regulations, unless it is indicated that reference to some other enactment is intended;

(b) a reference to a paragraph or subparagraph is to the paragraph or subparagraph of the provision in which the reference occurs unless it is indicated that reference to some other provision is intended;

(c) a word or expression that is used in these Regulations and that is also used in the Act of 2002 has, unless the context otherwise requires, the same meaning in these Regulations that it has in that Act; and

(d) a word or expression that is used in these Regulations and that is also used in the EECC 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 PMR Licences, PMSE Licences and (so far as applicable) PMR Spectrum Lease Licences.

Limitation of Licence

4. (1) A Licence granted under these Regulations does not grant to the Licensee named therein any right, interest or entitlement other than the right to keep, install, maintain, work and use, at specified locations in the State, Apparatus for wireless telegraphy for the purpose of the provision of a PMR Network or PMSE Network.

(2) Nothing in these Regulations shall absolve the Licensee from any requirement in law to obtain such additional approvals, consents, Licences, permissions and authorisations that may be necessary for the discharge of the obligations or the exercise of entitlements under the Licence. The Licensee is responsible for all costs, expenses and other commitments, financial and non-financial, in respect of the Licence and the operation of a PMR Network or PMSE Network and the Commission shall bear no responsibility for such costs, expenses or commitments.

Application for Licences and Form of Licences

5. (1) An application for a Licence will be made to the Commission in such form as may be determined by the Commission.

(2) A person who makes an application under paragraph (1) of this Regulation shall furnish to the Commission such information as the Commission may reasonably require for the purpose of assessing the application and carrying out its functions under the Act of 1926, the Act of 2002 and the EECC Regulations and, if the person, without reasonable cause, fails to comply with this paragraph, the Commission may refuse to grant a Licence to the person.

(3) The grant of a Licence is subject to payment of the prescribed fee as set out in Schedule 4 to these Regulations.

(4) Subject to Regulation 7, a PMR Licence shall be in the form specified in Schedule 1 with such variation, if any, whether by addition, deletion or alteration as the Commission may determine from time to time or in any particular case in accordance with the EECC Regulations.

(5) Subject to Regulation 7, a PMSE Licence shall be in the form specified in Schedule 2 with such variation, if any, whether by addition, deletion or alteration as the Commission may determine from time to time or in any particular case in accordance with the EECC Regulations.

Duration and Renewal of Licences

6. (1) A PMR Licence shall, unless it has been withdrawn or had its duration reduced under Regulation 8, remain in force from the date of grant for a period of not greater than one year unless renewed under these Regulations, subject to paragraph (3).

(2) A PMR Licence may be renewed from time to time by the Commission under this Regulation, subject to paragraph (3).

(3) Prior to the expiration of a PMR Licence, the Commission may, by notice in writing given to the Licensee or sent to the Licensee at the address of the Licensee specified in the PMR Licence and subject to the payment of the relevant fees in advance of the expiry date, renew the PMR Licence for one year from the day following the expiration of the last previous period during which it was in force. The granting or renewal of a PMR Licence shall not be construed as warranting that the PMR Licence shall be renewed at any time in the future.

(4) In considering whether to renew a PMR Licence, the Commission shall have particular regard to:

(a) whether the Licensee has complied with these Regulations and the conditions attached to the expiring PMR Licence;

(b) the efficient management and use of radio spectrum; and

(c) the avoidance of Harmful Interference.

(5) A PMSE Licence shall, unless it has been withdrawn or had its duration reduced under Regulation 8, remain in force from the date of grant for a period of not greater than one year and shall then expire.

Conditions of PMR and PMSE Licences

7. (1) It shall be a condition of a Licence that:

(a) the Licensee shall comply with these Regulations and the conditions attached to the Licence;

(b) the Licensee shall ensure that the Apparatus is used only on such radio frequency spectrum and at the locations as may be specified in the Licence and such radio frequencies shall be used in an efficient manner;

(c) the Licensee shall make payments of the fees as set out in Schedule 4 to these Regulations, and in accordance with Regulation 10 of these Regulations;

(d) the Licensee shall request the Commission to consider and decide on an amendment to the licence to reflect any proposed changes to the information contained in the Licence;

(e) the Licensee shall furnish such information and reports in respect of the Licence, including relating to the Apparatus and its use as may be requested by the Commission from time to time;

(f) The Licensee shall submit to the Commission information detailing the location(s) and technical information of deployed Apparatus under Part 2 of the PMR Licence within 30 days of each anniversary of the commencement of a PMR Licence, in a format as may be determined by the Commission;

(g) the Licensee shall ensure that the Apparatus, or any part thereof, shall be installed, maintained, operated and used so as not to cause Harmful Interference;

(h) the Licensee shall ensure compliance with any special conditions imposed under section 8 of the Act of 1972 and subject to which this Licence is deemed by subsection (3) of that section to be issued;

(i) the Licensee shall ensure compliance with any commitments made by the Licensee prior to the granting of a PMR Licence or PMSE Licence, or renewal of a PMR Licence, or, where applicable, to the invitation for application for rights of use;

(j) the Licensee shall ensure that, save as may be required by law, access to, and use of, the Apparatus is restricted to the Licensee, employees or agents of the Licensee, persons authorised by or on behalf of the Licensee, and third-parties to whom the Licensee is providing PMR or PMSE services;

(k) where the Commission is satisfied that a Licensee has failed to comply with any provision of these Regulations or a condition of the Licence, and the Commission has served on the Licensee a written notice prohibiting the use of Apparatus by such date and time as may be specified in the notice, then the Licensee will cease to use that Apparatus on or before the applicable date and time until such notice has been withdrawn by the Commission, and the Licensee shall take such measures as may be specified by the Commission in the notice;

(l) the Licensee shall upon becoming aware of any event likely to materially affect their ability to comply with these Regulations, or any conditions set out or referred to in the Licence, notify the Commission of that fact in writing within 5 working days;

(m) the Licensee shall on request from an authorised officer of the Commission permit the inspection of the Apparatus, enable access to the site or sites on which the Apparatus is located and produce the associated Licence for inspection;

(n) the spectrum rights of use granted to the licensee shall be restricted to the operation and functioning of the Licensee's PMR Network or PMSE Network;

(o) the Licensee shall comply with all obligations under relevant international agreements such as the ITU Radio Regulations and memoranda of understanding published by the Commission, relating to the use of apparatus or the frequencies to which they are assigned;

(p) the Licensee shall ensure that all apparatus, or any part thereof, complies with the Radio Equipment Regulations; and

(q) The Licensee may use the granted spectrum Rights of Use to provide PMR or PMSE services to third-parties.

Enforcement, Amendment, Withdrawal and Suspension

8. (1) Enforcement by the Commission of compliance by a Licensee with conditions attached to their Licence shall be in accordance with the Wireless Telegraphy Act 1926, the EECC Regulations, as applicable, and the Communications Regulation and Digital Hub Development Agency Act 2023, as applicable, and any other requirements under applicable national or European Community law.

(2) The Commission may amend the Licence from time to time where objectively justifiable and in a proportionate manner. Any amendment shall be made subject to and in accordance with the EECC Regulations, and any other requirements under applicable national

or European Union law.

(3) Without prejudice to paragraph (2) of this Regulation, at the request of the Licensee, the Commission may, if it considers it appropriate to do so, amend the Licence by adding to, deleting from or altering the radio frequency spectrum specified in the Licence on which the Apparatus may be used. Any such amendment shall be affected by notice in writing from the Commission specifying the amendment and given to the Licensee or sent to the Licensee at the address specified in the Licence or notified to the Commission pursuant to the Licence.

(4) A Licence may be suspended or withdrawn by the Commission in accordance with the EECC Regulations, as applicable, and any other requirements under applicable national or European Community law.

Spectrum Transfers and Leases

9. (1) The Licensee shall notify the Commission of its intention to Transfer or Lease any rights of use for radio frequencies attaching to a PMR Licence in accordance with the Transfer and Lease Regulations.

(2) The Licensee may only Transfer or Lease the rights of use for radio frequencies attaching to a licence in accordance with the Transfer and Lease Regulations.

(3) The Commission may grant a Licence to a Transferee in accordance with the Transfer and Lease Regulations.

(4) The Commission may grant a PMR Spectrum Lease Licence to a Lessee in accordance with the Transfer and Lease Regulations.

(5) Subject to Regulation 7, a PMR Spectrum Lease Licence to which these Regulations apply shall be in the form specified in Schedule 3, with such variation, if any, whether by addition, deletion or alteration as the Commission may determine from time to time or in any particular case in accordance with the EECC Regulations.

(6) The commencement date and expiry date of a PMR Spectrum Lease Licence shall be set by the Commission with reference to the commencement date and expiry date of the relevant Lease and shall be specified in the PMR Spectrum Lease Licence. A PMR Spectrum Lease Licence to which these Regulations apply shall in any event expire on or before the expiry date of the PMR Licence of the relevant Lessor.

(7) A PMR Spectrum Lease Licence may be suspended or withdrawn by the Commission in accordance with the EECC Regulations, including if the associated PMR Licence of the relevant Lessor has been revoked, suspended or withdrawn under these Regulations.

Licence Fees

10. (1) Fees as set out and provided for in Part 1 of Schedule 4 are hereby prescribed in relation to PMR Licences for the purpose of section 6 of the Act of 1926, as amended.

(2) Fees as set out and provided for in Part 2 of Schedule 4 are hereby prescribed in relation to PMSE Licences for the purpose of section 6 of the Act of 1926, as amended.

(3) The fees set out and provided for in Part 1 of Schedule 4 shall be payable by the Licensee to the Commission on the date of first granting of a PMR Licence and thereafter annually on or before each anniversary of the date of first granting of a PMR Licence.

(4) The fees set out and provided for in Part 2 of Schedule 4 shall be payable by the Licensee to the Commission on the date of first granting of a PMSE Licence.

(5) Fees shall be paid to the Commission electronically by way of Electronic Funds Transfer, Credit/Debit Card, or such other means, and on such terms (including terms as to the place of payment) as the Commission may decide. Where the date of payment falls on a Saturday, a Sunday or a public holiday, payment shall be made on or before the last working day before the date of payment.

(6) If a PMR Licence is suspended or withdrawn, the Licensee may be entitled to a refund on a pro rata monthly basis for the remaining period of the PMR Licence of the relevant fee.

(7) If a Licence is suspended or withdrawn due to a finding by the Commission of non-compliance with any relevant licence conditions, the Licensee shall not be entitled to be repaid any part of the fee paid by the Licensee, but shall still be liable to pay any sums, including interest, that are outstanding.

(8) Failure by a Licensee to pay part or all of a fee required under this Regulation on or before the date it falls due shall constitute non-compliance by the Licensee concerned with these Regulations, and the Commission, in respect of such non-payment of a fee, may take enforcement action in accordance with Regulation 8 and may take steps to recover the amount due in accordance with paragraphs 7 and 8 of this Regulation.

(9) Where a fee or part of a fee is not paid in time, the Licensee concerned shall pay to the Commission interest on the fee or part thereof that was or is outstanding. Interest shall accrue from the date when such fee or part thereof fell due until the date of payment of such fee or part thereof and shall be calculated at the same rate payable in respect of late payments in commercial transactions pursuant to the European Communities (Late Payment in Commercial Transactions) Regulations 2012 (S.I. No. 580 of 2012), as amended.

(10) Any fee payable and owed by a Licensee under this Regulation may be recovered by the Commission from the Licensee as a simple contract debt in any court of competent jurisdiction.

Commencement and Transitional Arrangements

11. (1) Subject to paragraph (2) of this Regulation, these Regulations will come into effect on 1 July 2028. The following Regulations will continue in force and then be revoked on 1 July 2028:

- S.I. No. 646/2005 – Wireless Telegraphy (Third Party Business Radio Licence) Regulations, 2005.
- S.I. No. 435/2002 - Wireless Telegraphy (Mobile Radio Systems) Regulations, 2002.
- S.I. No. 114/1992 - Wireless Telegraphy (Business Radio Licence) (Amendment) Regulations, 1992.
- S.I. No. 83/1988 - Wireless Telegraphy (Community Repeater Licence) Regulations, 1988.
- S.I. No. 75/1986 - Wireless Telegraphy (Business Radio Licence) (Amendment) Regulations, 1986.
- S.I. No. 84/1985 - Wireless Telegraphy (Business Radio Licence) (Amendment) Regulations, 1985.

- S.I. No. 88/1983 - Wireless Telegraphy (Business Radio Licence) (Amendment) Regulations, 1983.
- S.I. No. 73/1982 - Wireless Telegraphy (Business Radio Licence) (Amendment) Regulations, 1982.
- S.I. No. 114/1981 - Wireless Telegraphy (Business Radio Licence) (Amendment) Regulations, 1981.
- S.I. No. 193/1980 - Wireless Telegraphy (Business Radio Licence (Amendment) Regulations, 1980.
- S.I. No. 181/1957 - Wireless Telegraphy Act, 1926. Wireless Telegraphy (Business Radio.
- S.I. No. 2/1956 - Wireless Telegraphy Act, 1926. Wireless Telegraphy (Business Radio Licence) Regulations, 1956.
- S.I. No. 320/1949 - Wireless Telegraphy (Business Radio Licence) Regulations, 1949.

(2) A licence granted under the Wireless Telegraphy (Business Radio Licence) Regulations, 1949 (S.I. No. 320/1949), as amended, the Wireless Telegraphy (Community Repeater Licence) Regulations, 1988, the Wireless Telegraphy (Mobile Radio Systems) Regulations, 2002, and the Wireless Telegraphy (Third Party Business Radio Licence) Regulations, 2005, in force immediately before the effective date of these Regulations will continue in force as until its expiry date.

(3) Paging Permits in force immediately before the effective date of these Regulations will expire on the effective date of these Regulations.

SCHEDULE 1

WIRELESS TELEGRAPHY ACT, 1926

WIRELESS TELEGRAPHY (PRIVATE MOBILE RADIO AND PROGRAMME MAKING AND SPECIAL EVENTS LICENCES) REGULATIONS, 2026

Part 1

Licence Number: .....

The Commission for Communications Regulation, in exercise of the powers conferred on it by section 5(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), grants to the Licensee specified, authorisation to keep, have possession of, install, maintain, work and use Apparatus for PMR as specified in Part 2 of this Licence subject to the Licensee observing the terms and conditions and restrictions as prescribed by the Wireless Telegraphy (Private Mobile Radio Licence) Regulations, 2026 (S.I. of 2026).

Licensee: .....

Address: .....

Commencement and Termination Dates (if applicable):

The Licence comes into effect on ***DD/MM/YY*** and, subject to withdrawal or suspension, expires on DD/MM/YY.

Signed: .....

on behalf of the Commission for Communications Regulation

Date: .....

Part 2

Apparatus Location and Details

Service Area centre point (Decimal Degrees)		
Coverage Area (km^2)		
Base Station Location(s) (Decimal Degrees)		
Channel assignment(s)	**Base Tx:**	**Mobile Tx:**
Rights of Use	**Individual**	**Shared**
Bandwidth (kHz)		
Maximum e.i.r.p. (W)	Base: Mobile:	
Number of mobile stations		
Antenna Type		
Antenna Gain (dBi)		
Antenna Height above ground (m)		

Part 3

Special conditions imposed under section 8 of the Act of 1972

Part 4

Commitments made by the Licensee

SCHEDULE 2

WIRELESS TELEGRAPHY ACT, 1926

WIRELESS TELEGRAPHY (PRIVATE MOBILE RADIO AND PROGRAMME MAKING AND SPECIAL EVENTS **LICENCES) REGULATIONS, 2026**

Programme Making and Special Events Licence

Part 1

Licence Number: .....

The Commission for Communications Regulation, in exercise of the powers conferred on it by section 5(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), grants to the Licensee specified, authorisation to keep, have possession of, install, maintain, work and use Apparatus for Programme Making and Special Events as specified in Parts 2 and 3 of this Licence subject to the Licensee observing terms and conditions and restrictions as prescribed by the Wireless Telegraphy (Private Mobile Radio and Programme Making and Special Events Licences) Regulations, 2026 (S.I. of 2026). The Licence Conditions will be specified by the Commission in accordance with the Transfer and Lease Regulations.

Licensee: .....

Address: .....

Commencement and Termination Dates (if applicable):

The Licence comes into effect on ***DD/MM/YY*** and, subject to withdrawal or suspension, expires on DD/MM/YY.

Signed: .....

on behalf of the Commission for Communications Regulation

Date: .....

Part 2

Apparatus Location and Details

Service Area centre point (Decimal Degrees)		
Coverage Area (km^2)		
Indoor/Outdoor		
Type of Apparatus		
Base Station Location(s) (Decimal Degrees)		
Channel assignment(s)	**Base Tx:**	**Mobile Tx:**
Bandwidth (kHz)		
Maximum e.i.r.p. (W)	Base: Mobile:	
Number of mobile stations		
Antenna Type		
Antenna Gain (dBi)		
Antenna Height above ground (m)		

Part 4

Special conditions imposed under section 8 of the Act of 1972

Part 5

Commitments made by the Licensee

SCHEDULE 3

WIRELESS TELEGRAPHY ACT, 1926

WIRELESS TELEGRAPHY (PRIVATE MOBILE RADIO AND PROGRAMME MAKING AND SPECIAL EVENTS **LICENCES) REGULATIONS, 2026**

Private Mobile Radio Spectrum Lease Licence

Part 1

Licence Number: .....

The Commission for Communications Regulation, in exercise of the powers conferred on it by section 5(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), grants to the Licensee specified, authorisation to keep, have possession of, install, maintain, work and use Apparatus for PMSE as specified in Part 2 of this Licence subject to the Licensee observing terms and conditions and restrictions as prescribed by the Wireless Telegraphy (Private Mobile Radio and Programme Making and Special Events Licences) Regulations, 2026 (S.I. of 2026). The Licence Conditions will be specified by the Commission in accordance with the Transfer and Lease Regulations.

Licensee: .....

Address: .....

Commencement and Termination Dates (if applicable):

The Licence comes into effect on ***DD/MM/YY*** and, subject to withdrawal or suspension, expires on DD/MM/YY.

Signed: .....

on behalf of the Commission for Communications Regulation

Date: .....

Part 2

Apparatus Location and Details

Service Area centre point (Decimal Degrees)		
Coverage Area (km^2)		
Base Station Location(s) (Decimal Degrees)		
Channel assignment(s)	**Base Tx:**	**Mobile Tx:**
Rights of Use	**Individual**	**Shared**
Bandwidth (kHz)		
Maximum e.i.r.p. (W)	Base: Mobile:	
Number of mobile stations		
Antenna Type		
Antenna Gain (dBi)		
Antenna Height above ground (m)		

Part 3

Commitments made by the Licensee

SCHEDULE 4

Part 1

FEES PAYABLE FOR PMR LICENCES

The annual fee payable for a PMR Licence ("Licence Fee") is equal to the fee for that PMR Licence in the base year of 2026 (the "Base Fee"), indexed to the annual rate of inflation since 2026 using the Consumer Price Index. The fee for a PMR licence is calculated as follows:

$$\mathbf{A = \alpha[1 + \beta c]\, \gamma^{E}}$$

Where:

- A is the fee for an annual PMR licence;
- α is the fee for a channel. The base fee is set at €263 for a 12.5 kHz duplex channel;
- β is the premium value for a Licence with national coverage. β is set at 4;
- c is the variable associated with the coverage area of the licence. If the coverage area of the licence is national, then c=1. If the coverage area of the licence is on-site (<=1km^2), then c=0. If the coverage area of the licence is greater than on-site but less than national, c is the area covered by the PMR Licence expressed as a proportion of national coverage which is 70,273 km².
- γ is the proportionate premium for Individual Rights of Use Licences relative to Licences with Shared Rights of Use. γ is set at 3.
- E is a binary variable that is associated with the spectrum Rights of Use of a PMR Licence. If the PMR Licence requires Individual Rights of Use, then E=1. If the PMR Licence requires Shared Rights of Use, then E=0.

The inflation adjustment is set in the following formula as follows:

$$B = \frac{CPI_t}{CPI_{2026}} * 100$$

Where CPI_t represents the 12-month Consumer Price Index published by the Central Statistics Office, for year *t*, the year immediately preceding the application. CPI_{2026} represents the 12-month Consumer Price Index figures published by the Central Statistics Office for 2026. The first indexation shall take place on the 1st of July of 2029 and shall occur annually thereafter on that same date.

The annual fee indexed to the Consumer Price Index is equal to:

$$C = A \times B$$

Where:

- A is the fee for a PMR Licence; and
- B is the CPI adjustment for the relevant period.

Where a PMR Licence is required for a period less than 12 months, Licence Fees are applied pro-rata using the number of months for which the licence is granted as follows:

$$F = C \times \frac{D}{12}$$

Where:

- C is the annual fee indexed to the Consumer Price Index;
- D is the number of whole months for which the PMR Licence is granted; and
- F is the appropriate fee to be paid.

If a Licence is granted for a period of less than one month, then, for the purpose of these calculations only, the licence shall be considered as a licence granted for a period of one month.

Part 2

FEES PAYABLE FOR PMSE LICENCES

The fee payable for a PMSE Licence ("PMSE Licence Fee") is equal to the fee for that PMSE Licence in the base year of 2026 (the "PMSE Base Fee"), indexed to the annual rate of inflation since 2026 using the Consumer Price Index. The annual base fees for PMSE Licences are set out in Table 1 below:

Table 1: Base fees for PMSE Licences up to 12 months durations

Apparatus	**Annual Base Fee**
Two-way radio	€65.75 per 12.5 kHz simplex channel
Wireless microphone/In-ear Monitor	€65.75 per every five 200 kHz simplex channels (or part thereof)
Wireless Multichannel Audio Systems	Bandwidth ≤ 2. 5 MHz = €65.75 2.5 MHz < Bandwidth < 5.5 MHz = €131.50 5.5 MHz ≤ Bandwidth ≤ 7.5 MHz = €197.25 7.5 MHz < Bandwidth < 10.5 MHz = €263 10.5 MHz ≤ Bandwidth ≤ 12.5 MHz = €328.70 12.5 MHz < Bandwidth < 15.5 MHz = €394.50 15.5 MHz ≤ Bandwidth ≤ 17.5 MHz = €460.25 17.5 MHz < Bandwidth ≤ 20 MHz = €526
Wireless Camera	€131.50 per 10 MHz channel
Telemetry	€65.75 per 12.5 kHz simplex channel
Wireless Broadband	€131.50 per 10 MHz channel

Where a PMSE Licence is granted for less than or equal to 3 months, the base fees for the PMSE Licence are set out in Table 2 below:

Table 2: Base fees for PMSE Licences up to 3 months durations

Apparatus	Fee for licences up to 3 months
Two-way radio	€50 per 12.5 kHz simplex channel
Wireless microphone/In-ear Monitor	€50 per every five 200 kHz simplex channels (or part thereof)
Wireless Multichannel Audio Systems	Bandwidth ≤ 2. 5 MHz = €50 2.5 MHz < Bandwidth < 5.5 MHz = €100 5.5 MHz ≤ Bandwidth ≤ 7.5 MHz = €150 7.5 MHz < Bandwidth < 10.5 MHz = €200 10.5 MHz ≤ Bandwidth ≤ 12.5 MHz = €250 12.5 MHz < Bandwidth < 15.5 MHz = €300 15.5 MHz ≤ Bandwidth ≤ 17.5 MHz = €350 17.5 MHz < Bandwidth ≤ 20 MHz = €400
Wireless Camera	€100 per 10 MHz channel
Telemetry	€50 per 12.5 kHz simplex channel
Wireless Broadband	€100 per 10 MHz channel

The inflation adjustment for PMSE Licences is set as follows:

$$B = \frac{CPI_t}{CPI_{2026}} * 100$$

Where CPI_t represents the 12-month Consumer Price Index published by the Central Statistics Office, for year *t*, the year immediately preceding the application. CPI_{2026} represents the 12-month Consumer Price Index figures published by the Central Statistics Office for 2026. The first indexation shall take place on the 1st of July of 2029 and shall occur annually thereafter on that same date.

The annual fee indexed to the Consumer Price Index is equal to:

$$C = A \times B$$

Where:

- A is the fee for a PMSE Licence; and
- B is the CPI adjustment for the relevant period.

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

[DATE]

Commissioner.

The Minister for Culture, Communications and Sport (as adapted by the Tourism, Culture, Arts, Gaeltacht, Sport and Media (Alteration of Name of Department and Title of Minister) Order 2025 (S.I. No. 236 of 2025)), 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 Culture, Communications and Sport,

[DATE]

Minister for Culture, Communications and Sport.

EXPLANATORY NOTE

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

These Regulations provide for the grant of Licences for Apparatus for PMR and PMSE for the regulation of such Apparatus, and for the payment of fees by persons granted Licences for that Apparatus.

Annex 3 – Draft Wireless Broadband Low Medium Power Licensing Regulations

Draft WT (WBB LMP Licence) Regulations 2026

A 1.1 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 Culture, Communications and Sport under section 37 of the Communications Regulation Act 2002, as amended.

A 1.2 ComReg may make such editorial changes to the text of any final regulations as it considers necessary and without further consultation, where such changes would not affect the substance of the regulations.

STATUTORY INSTRUMENTS

S.I. No. of 2026

WIRELESS TELEGRAPHY (WIRELESS BROADBAND LOW MEDIUM POWER LICENCE) REGULATIONS 2026

S.I. No. of 2026

WIRELESS TELEGRAPHY (WIRELESS BROADBAND LOW MEDIUM POWER LICENCE) REGULATIONS 2026

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), and with the consent of the Minister for Culture, Communications and Sport (as adapted by the Tourism, Culture, Arts, Gaeltacht, Sport and Media (Alteration of Name of Department and Title of Minister) Order 2025 (S.I. No. 236 of 2025)) 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 (Wireless Broadband Low Medium Power Licence) Regulations 2026.

Interpretation and Definitions

2. (1) In these Regulations, except where the context otherwise requires:

"3.8-4.2 GHz Band" means radio frequency spectrum in the range 3800 MHz to 4200 MHz;

"Act of 1926" means the Wireless Telegraphy Act 1926 (No. 45 of 1926);

"Act of 1972" means the Wireless Telegraphy Act 1972 (No. 5 of 1972);

"Act of 2002" means the Communications Regulation Act 2002 (No. 20 of 2002);

"Apparatus" means apparatus for wireless telegraphy as defined in section 2 of the Act of 1926;

"Base Station" means a fixed Apparatus providing the gateway between the back-end network, for example the gateway to the internet or the user's fixed infrastructure, and the WBB LMP network Apparatus and is either a

(i) Low Power Base Station; or

(ii) Medium Power Base Station;

"Commission for Communications Regulation" or "Commission" means the Commission for Communications Regulation established under the Act of 2002;

"Consumer Price Index" or "CPI" means the consumer price index as published from time to time by the Central Statistics Office;

"Central Statistics Office" means the Central Statistics Office of Ireland or its successor;

"Decision of 2025" means the European Commission Implementing Decision (EU) 2025/2425 of 2 December 2025 on the harmonisation of the 3.8 – 4.2 GHz

Band for the shared use by terrestrial wireless broadband systems capable of providing local-area network connectivity in the Union;

“EECC Regulations” means the European Union (Electronic Communications Code) Regulations 2022 (S.I. No. 444 of 2022);

“Electronic Communications Service” or “ECS” have the meaning assigned to it in the EECC Regulations;

“equivalent isotropically radiated power or “EIRP” means the product of the power supplied to the antenna and the absolute or isotropic gain in a given direction relative to an isotropic antenna;

“Harmful Interference” has the meaning set out in the EECC Regulations;

“Lease” has the meaning set out in the Transfer and Lease Regulations;

“Lessee” has the meaning set out in the Transfer and Lease Regulations;

“Lessor” has the meaning set out in the Transfer and Lease Regulations;

"Licence Fee" means the relevant fee as set out in Schedule 2 which applies to a WBB LMP Licence;

“Licence” means a non-exclusive licence granted in accordance with section 5 of the Act of 1926 in accordance with and subject to the matters prescribed in these Regulations to keep, have possession of, install, maintain, work and use Apparatus in a specified place in the State granted to the Licensee, being one of:

(a) a WBB LMP Licence; or

(b) a WBB LMP Spectrum Lease Licence;

“Licensee” means the holder of a Licence;

“Low Power Licence Area” means an area defined by the centre of a circle with a radius of 50 metres, where Low Power Base Stations can be worked and used;

“Low Power Base Station” means a Base Station that has a EIRP in accordance with the EIRP power per cell for Low Power Base Stations set out in Table 1 of Part 6 of Schedule 1 and, if outdoors, has a maximum antenna height of 10 metres above ground level;

“Medium Power Base Station” means a Base Station that has a EIRP in accordance with the EIRP power per cell for Medium Power Base Stations set out in Table 1 of Part 6 of Schedule 1 and is in accordance with the technical parameters for the Base Station as set out in the WBB LMP Licence;

“Non-exclusive”, in relation to a Licence, means that the Commission is not precluded from authorising the keeping and having possession by persons other than the Licensee, on a Non-Interference and Non-Protected Basis, of Apparatus for wireless telegraphy for the radio frequency spectrum specified in the Licence;

“Non-Interference and Non-Protected Basis” means that the use of Apparatus for wireless telegraphy is subject to no Harmful Interference being caused to any Radiocommunication Service, and that no claim may be made for the protection of Apparatus for wireless telegraphy used on this basis against Harmful Interference originating from Radiocommunication Services;

"Radio Altimeter" means a downward-looking radar ranging system that measures the height of an aircraft above terrain and obstacles with a high degree of accuracy, integrity, and availability, during all phases of flight;

"Radio Equipment Regulations" means the European Union (Radio Equipment) Regulations 2026 (S.I. No. 14 of 2026);

"Radiocommunication Service" means a service as defined in the Radio Regulations of the International Telecommunication Union involving the transmission, emission or reception of radio waves for specific telecommunication purposes;

"Terminal Station" means fixed or mobile user equipment connected to a WBB LMP network which communicates with a Base Station;

"Transfer" has the meaning set out in the Transfer and Lease Regulations;

"Transfer and Lease Regulations" means the Wireless Telegraphy (Transfer and Lease of Individual Rights of Use for Radio Spectrum for the Provision of Electronic Communications Networks and Services) Regulations, 2025 (S.I. No. 99 of 2025);

"Transferee" has the meaning set out in the Transfer and Lease Regulations;

"WBB ECS" means Wireless Broadband Electronic Communications Services;

"Wireless Broadband Low/Medium Power Network" or "WBB LMP Network" means a low /medium power terrestrial wireless broadband system used for the provision of local-area wireless connectivity in accordance with the harmonised technical conditions set out in the Decision of 2025;

"Wireless Broadband Low/Medium Power Licence" or "WBB LMP Licence" means a non-exclusive Licence in the form set out in Schedule 1 granted under section 5 of the Act of 1926 to keep and have possession of Apparatus for a WBB LMP Network in a specified place in the State in accordance with and subject to the terms and conditions contained in the Licence and the matters prescribed in these Regulations;

"Wireless Broadband Low/Medium Power Spectrum Lease Licence" or "WBB LMP Spectrum Lease Licence" means a non-exclusive Licence in the form set out in Schedule 2 granted under section 5 of the Act of 1926 to keep and have possession of Apparatus for a WBB LMP Network in a specified place in the State in accordance with and subject to the terms and conditions contained in the Licence and the matters prescribed in these Regulations;

"Wireless Telegraphy" has the same meaning as set out in section 2 of the Act of 1926.

(2) In these Regulations –

(a) a reference to a Regulation or a Schedule is to a Regulation of, or a Schedule to, these Regulations, unless it is indicated that reference to some other enactment is intended;

(b) a reference to a paragraph or subparagraph is to the paragraph or subparagraph of the provision in which the reference occurs unless it is indicated that reference to some other provision is intended;

(c) a word or expression that is used in these Regulations and that is also used in the Act of 2002 has, unless the context otherwise requires, the same meaning in these Regulations that it has in that Act; and

(d) a word or expression that is used in these Regulations and that is also used in the EECC 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 WBB LMP Licences and WBB LMP Spectrum Lease Licences.

Limitation of Licence

4. (1) A Licence granted under these Regulations does not grant to the Licensee named therein any right, interest or entitlement other than the right to keep, install, maintain, work and use, at specified locations in the State, Apparatus for the purpose of the provision of a WBB LMP Network.

(2) Nothing in these Regulations shall absolve the Licensee from any requirement in law to obtain such additional approvals, consents, licences, permissions and authorisations that may be necessary for the discharge of the obligations or the exercise of entitlements under the Licence. The Licensee is responsible for all costs, expenses and other commitments, financial and non-financial, in respect of the Licence and the operation of a WBB LMP Network and the Commission shall bear no responsibility for such costs, expenses or commitments.

Application for Licences and Form of Licences

5. (1) An application for a Licence will be made to the Commission in such form as may be determined by the Commission.

(2) A person who makes an application under paragraph (1) of this Regulation shall furnish to the Commission such information as the Commission may reasonably require for the purpose of assessing the application and carrying out its functions under the Act of 1926, the Act of 2002 and the EECC Regulations and, if the person, without reasonable cause, fails to comply with this paragraph, the Commission may refuse to grant a Licence to the person.

(3) The grant of a WBB LMP Licence is subject to payment of the prescribed fee as set out in Schedule 2 to these Regulations.

(4) A WBB LMP Licence shall be in the form specified in Schedule 1 with such variation, if any, whether by addition, deletion or alteration as the Commission may determine from time to time or in any particular case in

accordance with the EECC Regulations.

Duration and Renewal of Licences

6. (1) A WBB LMP Licence shall, unless it has been withdrawn or had its duration reduced under Regulation 8, remain in force from the date of grant for a period of not greater than one year unless renewed under these Regulations, subject to paragraph (3).

(2) A WBB LMP Licence may be renewed from time to time by the Commission under this Regulation.

(3) Prior to the expiration of a WBB LMP Licence, the Commission may, by notice in writing given to the Licensee or sent to the Licensee at the address of the Licensee specified in the WBB LMP Licence and subject to the payment of the relevant fees in advance of the expiry date and the Licensee meeting its licence conditions, renew the WBB LMP Licence for one year from the day following the expiration of the last previous period during which it was in force. The granting or renewal of a WBB LMP Licence shall not be construed as warranting that the WBB LMP Licence shall be renewed at any time in the future.

(4) In considering whether to renew a WBB LMP Licence, the Commission shall have particular regard to:

(a) whether the Licensee has complied with these Regulations and the conditions attached to the expiring WBB LMP Licence;

(b) the efficient management and use of radio spectrum; and

(c) the avoidance of Harmful Interference.

Conditions of Licences

7. (1) It shall be a condition of a Licence that:

(a) the Licensee shall comply with these Regulations and the conditions attached to the Licence;

(b) the Licensee shall ensure that any Apparatus complies with the Decision of 2025;

(c) the Licensee shall ensure that any Apparatus used within its WBB LMP Network is tuneable so as to be capable of operating across the whole of the 3.8-4.2 GHz Band;

(d) the Licensee shall ensure that the Apparatus is used only on such radio frequency spectrum and at the locations as may be specified in the Licence and such radio frequencies shall be used in an efficient manner;

(e) the licensee shall ensure compliance with any measures that the Commission may specify from time to time in order to protect Radio Altimeters operating above 4.2 GHz from Harmful Interference;

(f) the licensee shall ensure compliance with any measures that the Commission may specify from time to time in order to:

i. protect users in the 3.4 – 3.8 GHz frequency range from Harmful Interference; and

ii. ensure coexistence of WBB LMP Networks within the 3.8 GHz – 4.2 GHz Band;

(g) the Licensee shall make payments of the fees as set out in Schedule 2 to these Regulations, and in accordance with Regulation 10 of these Regulations;

(h) the Licensee shall request the Commission to consider and decide on an amendment to the licence to reflect any proposed changes to the information contained in the Licence;

(i) the Licensee shall furnish such information and reports in respect of the Licence, including relating to the Apparatus and its use as may be requested by the Commission from time to time;

(j) The Licensee shall submit to the Commission information detailing the location(s) and technical information of deployed Base Stations and Apparatus under Parts 2, 3, 4 and 5 of the Licence annually at a time and in a format as may be determined by the Commission;

(k) the Licensee shall ensure that the Apparatus, or any part thereof, shall be installed, maintained, operated and used so as not to cause Harmful Interference;

(l) the Licensee shall ensure compliance with any special conditions imposed under section 8 of the Act of 1972 and subject to which this Licence is deemed by subsection (3) of that section to be issued;

(m) the Licensee shall ensure compliance with any commitments made by the Licensee prior to the granting or renewal of a WBB LMP Licence or, where applicable, to the invitation for application for rights of use;

(n) the Licensee shall ensure that, save as may be required by law, access to, and use of, the Apparatus is restricted to the Licensee, employees or agents of the Licensee, and persons authorised by or on behalf of the Licensee;

(o) where the Commission is satisfied that a Licensee has failed to comply with any provision of these Regulations or a condition of the Licence, and the Commission has served on the Licensee a written notice prohibiting the use of Apparatus by such date and time as may be specified in the notice, then the Licensee will cease to use that Apparatus on or before the applicable date and time until such notice has been withdrawn by the Commission, and the Licensee shall take such measures as may be specified by the Commission in the notice;

(p) the Licensee shall upon becoming aware of any event likely to materially affect their ability to comply with these Regulations, or any conditions set out or referred to in the Licence, notify the Commission of that fact in writing within 5 working days;

(q) the Licensee shall on request from an authorised officer of the Commission permit the inspection of the Apparatus, enable access to the site or sites on which the Apparatus is located and produce the associated Licence for inspection;

(r) the spectrum rights of use granted to the licensee shall be restricted to the operation and functioning of the Licensee's WBB LMP Network;

(s) the Licensee shall comply with all obligations under relevant international agreements such as the ITU Radio Regulations and memoranda of understanding published by the Commission, relating to the use of apparatus or the frequencies which are assigned to them under the Licence; and

(t) ensure that all apparatus, or any part thereof, complies with the Radio Equipment Regulations.

Enforcement, Amendment, Withdrawal and Suspension

8. (1) Enforcement by the Commission of compliance by a Licensee with conditions attached to their Licence shall be in accordance with the EECC Regulations and the Communications Regulation and Digital Hub Development Agency Act 2023, as appropriate and any other requirements under applicable national or European Community law.

(2) The Commission may amend the Licence from time to time where objectively justifiable and in a proportionate manner. Any amendment shall be made subject to and in accordance with the EECC Regulations, and any other requirements under applicable national or European Union law.

(3) Without prejudice to paragraph (2) of this Regulation, at the request of the Licensee, the Commission may, if it considers it appropriate to do so, amend the Licence by adding to, deleting from or altering the radio frequency spectrum specified in the Licence on which the Apparatus may be used. Any such amendment shall be subject to payment of the appropriate amendment fee as specified by the Commission and shall be effected by notice in writing from the Commission specifying the amendment and given to the Licensee or sent to the Licensee at the address specified in the Licence or notified to the Commission

pursuant to the Licence.

(4) A Licence may be suspended or withdrawn by the Commission in accordance with the EECC Regulations, and any other requirements under applicable national or European Community law.

Spectrum Transfers and Leases

9. (1) The Licensee shall notify the Commission of its intention to Transfer or Lease any rights of use for radio frequencies attaching to a licence in accordance with the Transfer and Lease Regulations.

(2) The Licensee may only Transfer or Lease the rights of use for radio frequencies attaching to a licence in accordance with the Transfer and Lease Regulations.

(3) The Commission may grant a Licence to a Transferee in accordance with the Transfer and Lease Regulations.

(4) The Commission may grant a WBB LMP Spectrum Lease Licence to a Lessee in accordance with the Transfer and Lease Regulations.

(5) A WBB LMP Spectrum Lease Licence to which these Regulations apply shall be in the form specified in Schedule 3, with such variation, if any, whether by addition, deletion or alteration as the Commission may determine from time to time or in any particular case in accordance with the EECC Regulations.

(6) The commencement date and expiry date of a WBB LMP Spectrum Lease Licence shall be set by the Commission with reference to the commencement date and expiry date of the relevant Lease and shall be specified in the WBB LMP Spectrum Lease Licence. A WBB LMP Spectrum Lease Licence to which these Regulations apply shall in any event expire on or before the expiry date of the Licence of the relevant Lessor.

(7) A WBB LMP Spectrum Lease Licence may be suspended or withdrawn by the Commission in accordance with the EECC Regulations, including if the associated Licence of the relevant Lessor has been revoked, suspended or withdrawn under these Regulations.

Licence Fees

10. (1) Fees as set out and provided for in Schedule 2 are hereby prescribed in relation to WBB LMP Licences for the purpose of section 6 of the Act of 1926, as amended.

(2) The fees set out and provided for in Schedule 2 shall be payable by the Licensee to the Commission prior to the grant or renewal of a WBB LMP Licence, or prior to the grant of additional rights of use under a WBB LMP Licence where appropriate.

(3) Fees shall be paid to the Commission by way of Electronic Funds Transfer or such other means, and on such terms (including terms as to the place of payment) as the Commission may decide. Where the date of payment falls on a Saturday, a Sunday or a public holiday, payment shall be made on or before the last working day before the date of payment.

(4) Fees for any period of less than one year shall be calculated on a pro rata monthly basis for such period.

(5) If a WBB LMP Licence is suspended or withdrawn, the Licensee may be entitled to a refund on a pro rata monthly basis for the remaining period of the WBB LMP Licence of the relevant fee.

(6) If a WBB LMP Licence is suspended or withdrawn, due to a finding by the Commission of non-compliance with any relevant licence conditions, the Licensee shall not be entitled to be repaid any part of the fee paid by the Licensee.

(7) Failure by a Licensee to pay part or all of a fee required under this Regulation on or before the date it falls due shall constitute non-compliance by the Licensee concerned with these Regulations, and the Commission, in respect of such non-payment of a fee, may take enforcement action in accordance with Regulation 8 and may take steps to recover the amount due in accordance with paragraphs 8 and 9 of this Regulation.

(8) Where a fee or part of a fee is not paid in time, the Licensee concerned shall pay to the Commission interest on the fee or part thereof that was or is outstanding. Interest shall accrue from the date when such fee or part thereof fell due until the date of payment of such fee or part thereof and shall be calculated at the same rate payable in respect of late payments in commercial transactions pursuant to the European Communities (Late Payment in Commercial Transactions) Regulations 2012 (S.I. No. 580 of 2012), as amended.

(9) Any fee payable and owed by a Licensee under this Regulation may be recovered by the Commission from the Licensee as a simple contract debt in any court of competent jurisdiction.

(10) The fee for a WBB LMP Licence granted on foot of a Transfer is the annual licence fee specified in paragraph 1 of this Regulation with respect to the rights being transferred.

SCHEDULE 1

WIRELESS TELEGRAPHY ACT, 1926

WIRELESS TELEGRAPHY (WIRELESS BROADBAND LOW MEDIUM POWER LICENCE) REGULATIONS, 2026

Wireless Broadband Low Medium Power Licence

Part 1

Licence Number: .....

The Commission for Communications Regulation, in exercise of the powers conferred on it by section 5(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), grants to the Licensee specified, authorisation to keep, have possession of, install, maintain, work and use Apparatus for WBB LMP Networks as specified in Parts 2, 3, 4 and 5 of this Licence subject to the Licensee observing the terms and conditions and restrictions as prescribed by the Wireless Telegraphy (Wireless Broadband Low Medium Power Licence) Regulations, 2026 (S.I. of 2026), including but not limited to, the following:

(1) The Licensee shall ensure that it complies with all of the conditions contained within the Regulations and within Parts 1 to 7 of this Licence; and

(2) The Licensee shall ensure that it makes payment of all fees as detailed in the Regulations.

Licensee: .....

Address: .....

Commencement and Termination Dates (if applicable):

The Licence comes into effect on **DD/MM/YY** and, subject to withdrawal or suspension, expires on **DD/MM/YY**.

Signed: .....

on behalf of the Commission for Communications Regulation

Date: .....

Part 2

Details of Low Power Licence Areas and Base Stations

For each Low Power Licence Area on the Licence:

Licence Area Details	*For each Base Station within the Licence Area:* **Base station Details**
Licence Area ID Address Commencement Date Coordinates of Centre Point of Low Power Licence Area Frequencies Assigned (MHz) Frame Structure being used (as appropriate) Target Service	Base Station ID/Name Base Station Location (Decimal Degrees) Base Station Sectors (No.) Max EIRP (dBm/MHz) / sector (as appropriate) Antenna Height above ground (m) Antenna Tilt Antenna Radiation Restrictions (as appropriate) (dB/degrees) Equipment Index Reference (antenna and radio)

Part 3

Details of Medium Power Base Stations

For each Medium Power Base Station on the Licence:

Base Station and Apparatus Details
Base Station ID/Name
Base Station Location (Decimal Degrees)
Base Station Sectors (No.)
Commencement Date
Frequencies Assigned (MHz)
Max EIRP (dBm/MHz) / sector (as appropriate)
Antenna Height above ground (m)
Antenna Tilt
Antenna Radiation Restrictions (as appropriate) (dB/degrees)
Frame structure
Target Service
Equipment Index Reference (antenna and radio)

Part 4

Terminal Stations

Terminal Station and Apparatus
Terminal Stations (Mobile): • Quantity • Equipment index references Terminal Stations (Fixed): • Number • Equipment index references • Location (Decimal Degrees) • Max EIRP (dBm/MHz) • Antenna Height above ground (m):

Part 5

The Apparatus to which this Licence applies

Equipment Index Reference	**Terrestrial System**	**Equipment Description (Antenna, Base Station, Terminal Station (mobile), Terminal Station (Fixed)**	**Manufacturer**	**Model**

Part 6

Licence Conditions

Section 1: Technical Conditions

1. Definitions

"Active Antenna Systems" or "AAS" means a Base Station and an 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 excludes long-term beam shaping such as fixed electrical down tilt. In AAS Base Stations, the antenna system is integrated as part of the Base Station system or product;

"Non-Active Antenna Systems" or "non-AAS" means a Base Station and an antenna system that provides one or more antenna connectors, which are connected to one or more separately designed passive antenna elements to radiate radio waves. The amplitude and phase of the signals to the antenna elements is not continually adjusted in response to short term changes in the radio environment;

2. Permitted Terrestrial Systems

Only Terrestrial Systems compatible with the Decision of 2025 may be worked and used in the 3.8 – 4.2 GHz Band.

3. Duplex Mode

In the 3.8 – 4.2 GHz Band, the duplex mode of operation is TDD.

4. Base Station In-block Requirements

The technical conditions defined in **Table 1** below shall apply to base stations unless otherwise specified by the Commission in the Licence.

Table 1: Maximum in-block EIRP per cell for WBB LMP base stations operating in the 3.8 – 4.2 GHz frequency band

Type of Base Station	EIRP per cell (Note 1 and Note 2)
Low Power Base Station	≤ 24 dBm/channel for BW ≤ 20 MHz ≤ 18 dBm/5MHz for BW > 20 MHz
Medium Power Base Station	≤ 44 dBm/channel for BW ≤ 20 MHz

	≤ 38 dBm/5MHz for BW > 20 MHz
Note 1: In a multi-sector site, the value per 'cell' corresponds to the value for one of the sectors. Note 2: Higher EIRP levels may be authorised by the Commission in exceptional and duly justified cases, provided that protection of FSS receiving earth stations and FS links (where appropriate at national level) in the band as well as terrestrial systems providing WBB ECS below 3 800 MHz and Radio Altimeters operating above 4 200 – 4 400 MHz frequency band is ensured, taking into account their future development, including in the neighbouring EU Member States. The network coverage shall remain local (i.e. no nationwide networks).	

5. Base Station Out-of-Band Requirements

The technical conditions defined in Table 2 below shall apply to Base Stations.

Table 2: Maximum unwanted emission levels above 4 200 MHz for WBB LMP base stations

Frequency range	Non-AAS base station EIRP limit [dBm/5 MHz per cell] (Note 1)	AAS medium power base station TRP limit [dBm/5 MHz per cell]
4 200-4 205 MHz	11	1
4 205-4 240 MHz	8	-3
Note 1: In a multi-sector base station site, the value per 'cell' corresponds to the value for one of the sectors.		

6. Terminal Station in-block requirements

The following parameters shall apply to Terminal Stations unless otherwise specified by the Commission in the Licence:

- Maximum WBB LMP Terminal Station power: 28 dBm TRP (including a 2 dB tolerance); and
- Transmission power control is mandatory and shall be activated.

For fixed Terminal Stations, the Commission may specify an alternative in-block EIRP limit, provided that protection of in-band and adjacent band incumbent services and cross-border obligations are fulfilled.

7. International Coordination

The Licensee shall comply with all Memoranda of Understanding ('MoU'), published by the Commission, between the Commission and its neighbouring national regulatory authorities responsible for communications matters, in particular the Office of Communications ("Ofcom") in the UK, or its successors, in relation to the 3.8-4.2 GHz Band.

8. WBB LMP Technical Conditions for Low Power Licence Area

Low Power Licence Area: Base Stations may be worked and used anywhere within 50m of the centre point, and connected Terminal Stations may be worked and used inside or outside of the Low Power Licence Area.

Maximum EIRP: As specified in Table 1 of Part 6 for a Low Power Base Station.

Maximum Antenna Height: 10m above ground level for antennas located outdoors. No restriction for antennas located indoors.

9. WBB LMP Technical Conditions for Medium Power Base Stations

Details of a licensed Medium Power Base Station will be as set out in the licence schedule and will include details as set out in Part 3 and other details as may be specified by the Commission.

Section 2: Rollout and usage requirements

1. Standard rollout obligation

(1) Licensees shall achieve and maintain for each Low Power Licence Area and Medium Power Base Station at least one Base Station and one Terminal Station within 9 months of licence commencement.

(2) For each Base Station, the licensee shall maintain a daily Base Station traffic log that is of sufficient detail to demonstrate to the Commission's satisfaction the usage of the Base Station (e.g. traffic transmitted over the WBB LMP Network both in the uplink and downlink as appropriate, radio frequencies used, time of transmissions) on the WBB LMP Network and the interactions with Terminal Stations on the network.

2. Longer rollout obligation

(1) Licensees that have been granted a Licence that is based on licence commitments set out in Part 7 of this Licence shall achieve and maintain for the remaining duration of the Licence the number of Base Stations and Terminal Stations as specified on the Licence.

(2) For each Base Station, the licensee shall maintain a daily Base Station traffic log that is of sufficient detail to demonstrate to Commission's satisfaction the usage of the Base Station (e.g. traffic transmitted over the WBB LMP Network both in the uplink and downlink as appropriate, radio frequencies used, time of transmissions) on the WBB LMP Network and the interactions with Terminal Stations on the network.

3. Reporting of compliance on rollout and usage obligation

(1) The Licensee that has a standard rollout obligation shall submit a Rollout and Usage Compliance Report setting out its rollout and usage within 30 days of the date on which the 9 month rollout obligation comes into effect as specified on the licence.

(2) The Licensee that has a longer rollout obligation shall submit an Annual Rollout and Usage Compliance Report setting out its rollout and usage within 30 days of the anniversary of the Licence and at other times as may be reasonably requested by the Commission.

(3) In the Rollout and Usage Compliance Report the Licensee shall notify the Commission whether or not it has met the applicable rollout and usage obligation(s) ("Annual Rollout Compliance Report"). Where the Licensee has failed to meet the relevant rollout and usage obligation, the Licensee shall provide detailed reasons and supporting information for same.

(4) The information required for this Rollout and Usage Compliance Report will be specified by the Commission in advance and the Rollout and Usage Compliance Report shall have sufficient detail and granularity to allow the Commission to verify the contents of the Licensee's Rollout and Usage Compliance Report.

(5) The Commission may publish details of these reports subject to the provisions of the Commission's guidelines on the treatment of confidential information.

(6) Failure by the Licensee to submit the Rollout and Usage Compliance Report to the Commission within the specified time period shall be deemed to be non-compliance by the Licensee with these reporting obligations and the rollout and usage obligations.

(7) The Commission reserves the right to inspect any Base Station and any associated infrastructure installed by a Licensee at any time to ensure that the system is configured and operating in accordance with its Licence conditions and the Licensee shall facilitate any such

inspections by the Commission within such time as may be specified by the Commission.

(8) In addition to the Rollout and Usage Compliance Report as identified above, the Commission reserves the right to require a Licensee to provide additional material or information in respect of their Licence as it deems appropriate in line with its statutory obligations and duties, which may include but is not limited to, an up-to-date list of the technical capabilities and locations of Base Stations covered by the Licence.

Part 7

Details of Rollout, Usage and Reporting commitments by the Licensee

Low Power Licence Areas:

For each Low Power Licence Area on the Licence:

licence area	Rollout	Usage	Reporting
Licence area ID	Minimum number of Base Stations to be worked and used Date by which Base Station is to be worked and used Interim milestones (as appropriate)	Date by which the Licensee shall put all spectrum assigned for the Low Power License Area into use and actively use one or more Terminal Stations Interim milestones (as appropriate)	Date by which the Licensee shall report to the Commission on its compliance with its Rollout and Usage obligations for the Low Power Licence Area

Medium Power Base Stations:

For each Medium Power Base Station on the Licence:

Base Station	Rollout	Usage	Reporting
Base Station ID	Date by which Base Station is to be worked and used Interim milestones (as appropriate)	Date by which the Licensee shall put all spectrum assigned into use at the Medium Power Base Station and actively use one or more Terminal Stations Interim milestones (as appropriate)	Date by which the Licensee shall report to the Commission on its compliance with its Rollout and Usage obligations for the Medium Power Base Station

Other Rollout, Usage, Reporting Obligations based on Licensee Commitments (as appropriate):

SCHEDULE 2

FEES PAYABLE IN CONNECTION WITH WBB LMP LICENCES

The annual fee payable for a WBB LMP Licence ("Licence Fee") is equal to the fee for that WBB LMP Licence in the base year of 2026 (the "Base Fee"), indexed to the annual rate of inflation since 2026 using the Consumer Price Index. The inflation adjustment is set in the following formula as follows:

$$Indexing\ Multiplier = \frac{CPI_t}{CPI_{2026}} * 100$$

Where CPI_t represents the 12-month Consumer Price Index published by the Central Statistics Office, for year *t*, the year immediately preceding the application. CPI_{2026} represents the 12-month Consumer Price Index published by the Central Statistics Office for 2026. The first indexation shall take place on the 1st of August 2028 and shall occur annually thereafter on that same date.

The annual fee indexed to the Consumer Price Index is equal to:

C = A x B

Where:

- A is the base fee for an annual WBB LMP Licence; and
- B is the CPI adjustment for the relevant period.

The base fee for an annual WBB LMP Licence is calculated as follows:

$$A = \delta + \sum_{i=1}^{n} e_i\,\tau + \sum_{j=1}^{m} e_j(\tau + \mu \cdot b_j \cdot p_j)$$

Where:

- δ is the fixed component of the licence fee, which is set at €400;
- $e_i\tau$ represents the annual fee before CPI indexation associated with a Low Power Licence Area i;
- $e_j\ (\tau + \mu \cdot b_j \cdot p_j)$ represents the annual fee before CPI indexation associated with a Medium Power Base Station j;
- n is the number of low power areas included on the licence;
- where e_i is the rollout variable for Low Power Licence Area i, which is set at 3 for years during which the Licensee is

subject to a longer rollout obligation for Low Power Licence Area i, and which is otherwise set at 1;

- τ is the fixed fee per Low Power Service Area or Medium Power Base Station, which is set at €100;
- m is the number of Medium Power Base Stations included on the licence;
- where e_j is the rollout variable for Medium Power Base Station j, which is set at 3 for years during which the Licensee is subject to a longer rollout obligation for Medium Power Base Station j, and which is otherwise set at 1;
- μ controls the general level of the variable component of the fee for each Medium Power Base Station, and is set at 5;
- b_j is the bandwidth in MHz licensed for Medium Power Base Station j; and
- p_j is a power band value for each Medium Power Base Station j on the Licence, determined from **Table 3**, which depends on the medium power band in which the maximum licensed power of Medium Power Base Station j occurs.

Table 3: *Power band value by medium power band*

Medium power band	**BW ≤ 20 MHz**		**BW > 20 MHz**		**Power Band Value P**
	Range	**Mid-point**	**Range**	**Mid-point**	
Low Medium	24 to <31 dBm	27.5 dBm	18 to <25 dBm	21.5 dBm	1
Mid Medium	31 to <38 dBm	34.5 dBm	25 to <32 dBm	28.5 dBm	5
High Medium	38 to 44 dBm	41 dBm	32 to 38 dBm	35 dBm	23

Where an additional Low Power Licence Area or Medium Power Base Station is added to a WBB LMP Licence after commencement or renewal of that Licence and before the next renewal of that Licence, the relevant fee for that Low Power Licence Area or Medium Power Base Station shall be the annual fee for a Low Power Licence Area or Medium Power Base Station, as applicable, adjusted (a)

on a pro rata monthly basis for the remaining period until the next renewal of the WBB LMP Licence and (b) according to the CPI indexation for the relevant period.

SCHEDULE 3

WIRELESS TELEGRAPHY ACT, 1926

WIRELESS TELEGRAPHY (WIRELESS BROADBAND LOW MEDIUM POWER LICENCE) REGULATIONS, 2026

Wireless Broadband Low Medium Power Spectrum Lease Licence

Part 1

Licence Number: .....

The Commission for Communications Regulation, in exercise of the powers conferred on it by section 5(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), grants to the Licensee specified, authorisation to keep, have possession of, install, maintain, work and use Apparatus for WBB LMP Networks as specified in Parts 2 to 5 of this Licence subject to the Licensee observing terms and conditions and restrictions as prescribed by the Wireless Telegraphy (Wireless Broadband Low Medium Power Licence) Regulations, 2026 (S.I. of 2026). The Licence Conditions will be specified by the Commission in accordance with the Transfer and Lease Regulations.

Licensee: .....

Address: .....

Commencement and Termination Dates (if applicable):

The Licence comes into effect on **DD/MM/YY** and, subject to withdrawal or suspension, expires on **DD/MM/YY**.

Signed: .....

on behalf of the Commission for Communications Regulation

Date: .....

Part 2

Details of Low Power Licence Areas and Base Stations

For each Low Power Licence Area on the Licence:

Licence Area Details	*For each Base Station within the Licence Area:* **Base station**
Licence Area ID Address Commencement Date Coordinates of Centre Point of Low Power Licence Area Frequencies Assigned (MHz) Frame Structure being used (as appropriate) Target Service	Base Station ID/Name Base Station Location (Decimal Degrees) Base Station Sectors (No.) Max EIRP (dBm/MHz) / sector (as appropriate) Antenna Height above ground (m) Antenna Tilt Antenna Radiation Restrictions (as appropriate) (dB/degrees) Equipment Index Reference (antenna and radio)

Part 3

Details of Medium Power Base Stations

For each Medium Power Base Station on the Licence:

Base Station and Apparatus Details
Base Station ID/Name
Base Station Location (Decimal Degrees)
Base Station Sectors (No.)
Commencement Date
Frequencies Assigned (MHz)
Max EIRP (dBm/MHz) / sector (as appropriate)
Antenna Height above ground (m)
Antenna Tilt
Antenna Radiation Restrictions (as appropriate) (dB/degrees)
Frame structure
Target Service
Equipment Index Reference (antenna and radio)

Part 4

Terminal Stations

Terminal Station and Apparatus
Terminal Stations (Mobile): • Number • Equipment index references Terminal Stations (Fixed): • Number • Equipment index references • Location (Decimal Degrees) • Max EIRP (dBm/MHz) • Antenna Height above ground (m):

Part 5

The Apparatus to which this Licence applies

Equipment Index Reference	**Terrestrial System**	**Equipment Description (Antenna, Base Station, Terminal Station (mobile), Terminal Station (Fixed)**	**Manufacturer**	**Model**

Part 6

Licence Conditions

The Licence Conditions will be specified by the Commission in accordance with the Transfer and Lease Regulations.

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

[DATE].

Commissioner.

The Minister for Culture, Communications and Sport (as adapted by the Tourism, Culture, Arts, Gaeltacht, Sport and Media (Alteration of Name of Department and Title of Minister) Order 2025 (S.I. No. 236 of 2025)), 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 Culture, Communications and Sport,

[DATE].

Minister for Culture, Communications and Sport.

EXPLANATORY NOTE

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

These Regulations provide for the grant of Licences for Apparatus for WBB LMP Networks for the regulation of such Apparatus, and for the payment of fees by persons granted Licences for that Apparatus.