

Telemetry Systems

The introduction of a proposed new licensing framework in the VHF and UHF frequency bands

Consultation, draft Decision with draft Regulations

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1 Introduction

A telemetry system is a wireless telegraphy system, generally operating in the 400 MHz frequency band using narrowband SCADA¹ technology, by which automated measurements are made and other data collected at remote or inaccessible locations, and transmitted to receiving stations for monitoring, recording or remote-control purposes.

- These systems are primarily used by organisations such as utility and industrial companies, where continuous monitoring of operations and control of equipment at multiple locations is necessary to ensure the proper function of processes and equipment. The telemetry licensing regime does not cover smart metering applications which operate using 2G (or GSM) technology mainly at 900 MHz or 1800 MHz by ESB Networks DAC ("ESBN")², and on certain frequencies, such as 433 MHz or 868 MHz on a licence-exempt basis³.
- 3 In order to meet the demand, in 2014, ComReg introduced a licensing regime for telemetry systems under the Wireless Telegraphy (Licensing of Telemetry Systems) Regulations 2014, S.I. 240 of 2014.⁴
- 4 Licences for telemetry systems are granted for a maximum period of 10 years and cannot be renewed following the expiry date of the licence.
- 5 Telemetry licences are available under two different licence types:
 - a) National; and
 - b) Regional:
 - i. On-site licence;
 - ii. Local Area licence; and
 - iii. Wide Area licence.
- 6 Since 2014, ComReg has issued:

¹ SCADA means Supervisory Control and Data Acquisition systems that connect remote pieces of infrastructure wirelessly to control centres, providing utilities with real-time situational awareness on the status of their systems, which include, for example, energy management systems which optimise generation and high-voltage transmission of energy.

² https://www.esbnetworks.ie/existing-connections/meters-and-readings/smart-meter-upgrade/exposures

³ Permitted Short Range Devices In Ireland | Commission for Communications Regulation (comreg.ie)

⁴ https://www.irishstatutebook.ie/eli/2014/si/240/made/en/pdf

 three National licences have been issued – two to ESBN and one to Uisce Éireann, and those licences expire on 9 July 2024; and

- ten Regional licences:
 - o two on-site licences;
 - o five Local Area licences; and
 - two wide area licences.

Two of which were cancelled by the Licensees, and the remainder expire on various dates between 21 September 2027 and 26 July 2033.

- 7 ComReg notes that two of its strategic goals⁵ relevant to this consultation are as follows:
 - Goal 1.6 "The management of spectrum and numbers facilitates competition, enhances connectivity and promotes efficient investment."
 - Goal 5.3 "ComReg is proactive on engagement with a range of stakeholders".
- Therefore, the purpose of this consultation is to consult on a new licensing regime for telemetry systems to determine if licensees still require a regime for telemetry systems following the expiry of their current licences.
- 9 ComReg seeks and welcomes the views of interested parties on all aspects of ComReg's preliminary views as set out in this document. Those views will be used to inform ComReg's future consideration of a new licensing regime for telemetry systems.
- 10 This document is laid out as follows:
 - Chapter 2: sets out background information;
 - Chapter 3: describes the preliminary views regarding a proposed licensing regime for telemetry systems;
 - Chapter 4: sets out the regulatory impact assessment;
 - Chapter 5: sets out draft decision instrument;
 - Chapter 6: sets out the next steps in the process;

⁵ ComReg Document 23/34 – Electronic Communications Strategy Statement: 2023-2025 – published 13 April 2023

- Annex 1: sets out the relevant Legal Framework;
- Annex 2: sets out the proposed frequency plan and list of channels;
- Annex 3: sets out the proposed adaptive cellular frequency plan for national licences;
- Annex 4: sets out the cell-centre co-ordinates proposed adaptive cellular frequency plan; and
- Annex 5: sets out the proposed draft licensing regulations.

2 Background

11 This chapter provides some background information relevant to the telemetry systems licensing regime.

2.1 Current licensing regime

- 12 The following two types of telemetry licences are available under the telemetry licensing regime:
 - National telemetry licences; and
 - Regional telemetry licences:
 - o On-site;
 - Local Area; and
 - Wide Area.

Regional - On-site

13 An on-site telemetry system, for which an on-site Licence is required, is defined as a low power system with a maximum permitted ERP level of 1 W. Only systems for which the transmitter and receiver are on the same site (e.g. a premises, compound or complex) are considered to be on-site systems.

Regional - Local Area

14 A local area telemetry system, for which a Local Area Licence is required, is defined as a system which has a coverage area greater than 1 km radius but less than 12.5 km radius from the base station.

Regional – Wide Area

15 A wide area telemetry system, for which a Wide Area Licence is required, is defined as a system that has a coverage area requirement greater than 12.5 km and less than 25 km radius from the base station.

National

A national telemetry system, for which a national telemetry licence is required, is defined as a system that has national coverage to enable operators, predominantly utility companies (i.e. gas, electricity and water), with sites distributed across the State, to control and monitor their network infrastructure. Such national networks require higher power levels and often include repeater stations which are required to overcome terrain, buildings and other obstacles that may obstruct links to remote sites.

2.2 Current spectrum allocation for telemetry systems

National licences

- 17 There are 72 UHF duplex channels currently allocated for national telemetry services within the 456.9875 458.475 MHz paired with 462.4875 463.975 MHz frequency ranges ("Telemetry Bands"). The channels are arranged into six national spectrum blocks, nos. 1 to 6, each with twelve frequencies assigned using the 12-cell reuse pattern (labelled "A" to "M", see Figure 1) of an adaptive cellular frequency plan ("ACP"), see Annex 3. Licensees may use their assigned frequencies outside of the assigned cells but only where the licensee can demonstrate that interference will not be caused to other licensees.
- 18 One block (Block 3) has been assigned to Uisce Éireann, and two blocks (Blocks 1 and 2), which comprises two separate licences, to ESB Networks DAC ("ESBN").
- 19 ComReg notes that regarding:
 - ESBN:
 - From 2014 2019, it rolled out a project of replacing its previous SCADA system operating in the VHF band. That project deployed an average of over 100 stations per annum;
 - From 2019 onwards approximately it deployed circa 45-50 stations per annum; and
 - currently has approximately 650 stations deployed under its National Telemetry licence.
 - Uisce Éireann currently has 443 stations deployed under its National Telemetry licence.

Regional licences

20 There are 15 VHF and 24 UHF duplex channels allocated for regional telemetry services. The VHF channel allocations are within the 165.25005 - 165.50005 MHz paired with 170.05625 - 170.30625 MHz frequency range, and the UHF channel allocations are within the 455.54375 - 455.84375 MHz paired with 469.54375 - 469.84375 MHz frequency ranges.

21 To date, 1 VHF channel and 9 UHF channels have been assigned to regional licences.

2.3 Telemetry licences granted since 2014

- 22 To date, ComReg has granted the following Telemetry licences:
 - three National licences
 — two to ESBN and one to Uisce Éireann, and those licences will expire on 9 July 2024; and
 - 10 Regional licences:
 - o two on-site licences;
 - o six Local Area licences; and
 - o two wide area licences.

Licence type	Licence reference	Licence commencement date	Licensee	Licence cancellation date	Licence expiry date
National	T1001	09-07-2014	ESB Networks DAC		09-07- 2024
National	T1002	09-07-2014	ESB Networks DAC		09-07- 2024
National	T1003	09-07-2014	Uisce Éireann		09-07- 2024
Regional (On-site)	T1006	23-01-2018	Glan Agua Ltd	13-07-2018	
Regional (On-site)	T1007	10-08-2018	Dublin City Council		10-08- 2028
Regional (Local area)	T1004	21-09-2017	Bord Na Mona Powergen Plc		21-09- 2027
Regional (Local area)	T1013	26-07-2023	Hydro International Ltd		26-07- 2033

Regional (Local area)	T1012	19-07-2022	Jan De Nul N.V.		19-07- 2032
Regional (Local area)	T1011	14-02-2023	M P & E Trading Company Limited t/a EMR Integrated Solutions		14-02- 2033
Regional (Local area)	T1010	19-07-2023	Hydro International Ltd		19-07- 2033
Regional (Wide Area)	T1008	17-07-2020	Jan De Nul N.V.	23-08-21	

Table 1: Commencement, cancellation, and expiry dates for telemetry system licences issued by ComReg since 2014

23 The three national licences authorise the use of telemetry systems which support the national electrical and water supplies, while the regional licences are typically used to support energy generation, waste management, and water treatment at specific locations throughout the country.

2.4 Memoranda of Understanding

- 24 On the 4 August 2021, ComReg and Ofcom signed a Memoranda of Understanding ("MoU") between Ireland and the United Kingdom ("UK") for the frequency coordination of Scanning Telemetry Networks.⁶
- 25 The MoU describes the procedures for the coordination of Scanning Telemetry networks in the UHF frequency range 456.9875 458.5 / 462.4875 464.0 MHz.
- 26 Both administrations have adopted a common adaptive cellular frequency plan ("ACP"⁷), comprising of 72 (2 x 12.5 kHz) channels arranged over a 12-cell reuse pattern (see Figure 1), with 6 channels available per cell⁸. In Ireland, there are, at present, two main utility operators (Electricity and Water), utilising two blocks of 12 (2x12.5 kHz) channels for electricity services and one block of 12 (2x12.5 kHz) channels for water services on a national ACP.

⁶ https://www.comreg.ie/media/2021/08/Finalised-Telemetry_MoU_UK_ROI_Signed_4-Aug-21-1.pdf

⁷ The ACP defines cells with a radius = 25 km and a twelve cell cluster (A, B, C, D, E, F, G, H, J, K, L, M) that is repeated and extends across the entire UK & Northern Ireland & Ireland; this gives a frequency re-use distance of 150 km. Six radio channels are allocated to each cell and each utility (e.g., Gas, Electricity & Water) has access to two of these channels.

⁸ The 72 2x12.5 kHz channels available in Ireland across the 2 x 1.4875 MHz ST band are not entirely contiguous, consisting also of some interleaved 12.5 kHz channels which are offset by 6.25 kHz. In the UK, channels are contiguous across the 2 x 1MHz which gives 2 x 80 12.5 kHz Channels (i.e. 72 + 8)

27 All 36 currently licensed channels in Ireland are allocated according to the common 12-cell reuse pattern. The National Irish Grid Reference coordinates for the centre of each cell are shown in Annex 4.

In the UK, there are two national licences operating on the national ACP; one licence allowing access to 48 (2 x12.5 kHz) channels (with 24 channels allocated to the gas industry and 24 channels allocated to the electricity industry) and the other licence allowing access to 24 (2 x 12.5 kHz) channels which are allocated to the water industry⁹. All 72 channels are allocated in the UK across the common 12-cell reuse pattern. A further 8 (2x12.5 kHz) channels are also available in the UK primarily for non-utility applications which do not form part of the UK ACP.

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⁹ Seventy two of the eighty channels available in the UK are specified in the Adaptable Cellular Plan.

3 Proposed Future Telemetry Licensing Framework

- 29 ComReg observes that a number of the existing telemetry licences will expire in 2024. ComReg also observes that Regulation 8 of S.I. No. 240/2014¹⁰ states "that a licence shall not be renewed nor shall it remain in effect following its expiry date and all rights and entitlements under that licence, including all spectrum rights of use, shall cease altogether as and from its expiry date". Therefore, ComReg is now seeking views from interested parties to determine the potential demand for a new licensing regime for telemetry services which is the subject of this consultation.
- 30 ComReg notes that the current licensing regime has supported the delivery of important telecommunications services and thus it is prudent to consult on a new licensing regime to ensure that telemetry services can continue to be provided where required.¹¹
- 31 Of further consideration is the potential to consider whether there is any continuing need for ESBN's (and other national utility companies¹²) national telemetry licence given the 2019 award of radio spectrum rights of use in the 400 MHz band where the current licences reside, share similar propagation characteristics, and cater for the transfer of data from remote stations.
- 32 Even if that proves to be the case, the matter of timely migration may also need consideration. Therefore, there may be a need for national utility companies to have access to a telemetry system licensing regime for a short period of time.

¹⁰ Wireless Telegraphy (Licensing of Telemetry Systems) Regulations 2014

¹¹ ComReg notes that in 2019 it awarded spectrum rights of use to ESBN and issued a 400 MHz licence for radio spectrum in two parts:

 $[\]bullet$ Part A consisted of one 2 x 3 MHz Lot (410 - 413 MHz / 420 - 423 MHz) for the provision of wireless communications for Smart Grids; and

[•] Part B consisted of ten Lots of 2 × 100 kHz on a technology and service neutral basis. These Lots may be used to support Smart Grid, or for a range of other uses including Business Radio type applications.

Those spectrum rights of use may potential remove the ESBN's (and other national utility companies) requirement for a national telemetry licence as the spectrum for both licence types is within the 400 MHz band and shares similar propagation characteristics, and both licence types provide for the transfer of data from remote stations.

¹² ComReg noted in section 2.6 of ComReg Document 19/80 that "that ex-post competition law should provide sufficient restraint on the winning Network Utility Operator from denying reasonable and necessary access to any other Network Utility Operator/s to a Smart Grid and/or associated spectrum." and "Any future agreement between ESBN and other Network Utility Operators would be a commercial matter and subject to the same competition rules as other commercial agreements, where compliance with competition law is a matter for the parties subject to the agreement."

33 Given that the current licensing regime has, ostensibly at least, proven to be effective, ComReg is of the preliminary view that the proposed new licensing approach should generally mirror the current regime regarding the frequency allocations, the ACP, as well as licence conditions, duration, and types. ComReg's preliminary view regarding spectrum fees is to set fees on a similar basis to the 2014 Regulations but adjusted to take account of the change in the Consumer Price Index ("CPI") since 2014.¹³

34 This section sets out ComReg's preliminary views on a proposed new licensing regime.

3.1 Licence types

- 35 A telemetry system uses apparatus for wireless telegraphy to transmit control information or data from outstations in remote locations. Examples of the data that may be transmitted over telemetry systems include control commands, measurement readings such as temperature, electrical current or liquid flow rates, or the status of equipment activity, etc.
- 36 Telemetry systems are used by organisations such as utility and industrial companies, where continuous monitoring of operations and control of equipment at multiple locations is necessary in order to ensure the proper function of processes and equipment.
- 37 Telemetry systems vary greatly in terms of their complexity and the size of the geographic areas that they span. The data may be transmitted bi-directionally (duplex) or in one direction only (simplex). A point-to-point telemetry system consists of a base station and a remote outstation. Larger networks (known as point-to-multipoint systems) may comprise multiple remote outstations communicating with one or more base stations.
- 38 Telemetry networks broadly fall into three size categories. These are:

1. Small - On-site Telemetry Networks

39 On-site systems can be found particularly in the pharmaceutical and manufacturing industries, where the equipment requiring monitoring and control is located within a single premises or complex, typically within a radius of one kilometre. Due to the relatively short distances covered by such systems, the transmit power level required for communication is low and antenna heights are restricted to that required to achieve reliable communications within the premises. Due to the relatively low transmit power level, this configuration allows greater frequency reuse than the two systems described below.

¹³ Consumer Price Index - CSO - Central Statistics Office

2. Medium - Local Area and Wide Area Telemetry Networks

40 Examples of operators of medium sized systems, spanning several kilometres, are local authorities and smaller utility companies with monitoring requirements at remote or geographically dispersed sites. Higher transmit power levels are required to communicate over these distances and antennas are sited in higher locations to achieve reliable communications over wider areas. This configuration limits frequency reuse.

3. Large - National Telemetry Networks

- 41 An example of operators of nationwide telemetry systems is utility companies (i.e. gas, electricity and water) with sites distributed across the State, who wish to control and monitor their network infrastructure. Such national networks also require higher power levels and often include repeater stations which are required to overcome terrain, buildings and other obstacles that may obstruct links to remote sites.
- 42 ComReg notes that the electricity, gas and water sectors in Northern Ireland operate telemetry systems within a similar licensing framework¹⁴ and ComReg's national telemetry proposals could facilitate interconnection of systems in both jurisdictions.
- 43 In light of the above, ComReg proposes that four types of licence types should be made available for telemetry services under a new licensing regime. Those four licensing types would be the same as the licence types available under the current regime:
 - a) National; and
 - b) Regional:
 - i. On-site licence;
 - ii. Local Area licence; and
 - iii. Wide Area licence.
- 44 An on-site licence types would be used for a low power telemetry system where the transmitter and receiver are on the same site.
- 45 Local and wide area Regional licences are intended to facilitate networks spanning multiple sites over a geographic area, therefore, ComReg proposes that:

¹⁴ https://www.ofcom.org.uk/__data/assets/pdf_file/0026/77336/tfac_ofw49.pdf - Fixed Point-to-Point and Point-to-Multipoint Scanning Telemetry Radio Services Operating in the Frequency Ranges 457.5 to 458.5 MHz paired with 463.0 to 464.0 MHz

 local area licence types would have a coverage area greater than 1 km radius but less than 12.5 km radius from the base station; and

• wide area licence types would be used for a telemetry system with a coverage area requirement greater than 12.5 km and less than 25 km radius from the base station.

This would facilitate reuse of frequencies and co-ordination between licensees, ensuring efficient use of the radio spectrum.

A national licence type would provide national coverage to enable national utility companies (i.e. electricity, gas, and water), manage their networks across the State. National networks generally require higher power levels and often include repeater stations to overcome terrain, buildings and other obstacles that may obstruct links to remote sites. Therefore, ComReg further proposes that the issuing of national telemetry licences would continue to be only issued to electricity, gas, and water network operators.

3.2 Technical conditions

- 47 ComReg proposes that the following technical conditions would apply to each of the proposed licence types:
 - On-site systems are generally deployed within a single premises or complex, typically within a radius of one kilometre. Due to the relatively short distances covered by such systems, a low transmit power level is sufficient to achieve effective communications. Therefore, ComReg proposes that on-site licence types would have a maximum effective radiated power ("ERP") of 1 Watt per base station;
 - The maximum ERP allowed for a local area licence would be determined on a case-by-case basis and would be subject to the applicant provide justification for their proposed ERP. This would include, but not be limited to, the applicant providing coverage predications as part of the application process;
 - The maximum ERP for wide area licence types allowed would be determined on a case-by-case basis and would be subject to the applicant provide justification for their proposed ERP. This would include, but not be limited to, the applicant providing coverage predications as part of the application process; and

 A national licence type would provide national coverage to enable utility companies (i.e. electricity, gas, and water), manage their networks across the State. National networks generally require higher power levels and often include repeater stations to overcome terrain, buildings and other obstacles that may obstruct links to remote sites. Therefore, ComReg proposes to allow a maximum ERP would be 50 Watts per base station as currently permissible under the current telemetry system licensing regime.

Licence Type	Maximum ERP (W)
Onsite	1
Local Area	On a case-by-case basis
Wide Area	On a case-by-case basis
National	50

3.3 Frequency allocations

48 ComReg proposes the frequencies set out in Annex 2 be allocated for national and regional licences, and any frequency assignments for the national licences be used in line with the ACP as set out in Annex 3 for the reasons set out below.

National licences

- 49 The proposed UHF frequency allocations for national licences are designed to be adaptable and flexible regarding frequency reuse in adjacent cells. In this regard ComReg notes that there have been no requests from licensees to alter frequency assignments nor has there been any reports of harmful interference during the current licensing regime. Consequently, ComReg is therefore of the preliminary view that there is no requirement to amend the national telemetry frequency allocations.
- 50 The proposed frequencies have also been chosen to correspond to those of the UK channel plan, where possible, as this would continue to ease cross-border coordination but also facilitate cross-border national utility networks (i.e. electricity, gas, and water), if required. The assignment of frequencies to different blocks was chosen to prevent adjacent channels being present in the same block, as much as possible.

51 Given the effectiveness of the current licensing regime, the allocated 72 channels for national licences would continue to be sub-divided into six national spectrum blocks, each comprising twelve 2 x 12.5 kHz duplex channels. A full listing of the national channel arrangements is provided in Table 1 of Annex 2.

- 52 Given the finite amount of spectrum available for national licences, ComReg proposes the following measures to ensure the efficient use of the radio spectrum:
 - no licensee would be granted rights of use to more than two national blocks of spectrum; and
 - applicants for two national blocks would be required to satisfactorily demonstrate its need for the radio spectrum. This would include, but not be limited to, the submission of a detailed network plan outlining, amongst other things, network loading and existing and proposed deployments. 15
- 53 Any assigned blocks would be used in line with the ACP detailed in Annex 3.

Regional licences

54 Turning to the proposed regional licences, ComReg notes that demand has been relatively low with just 1 VHF channel and 9 UHF channels having been assigned. Therefore, ComReg is of the preliminary view that it would seem proportionate to reduce the number of allocated channels, where the number of VHF channels would be reduced from 15 to 5, and the number of UHF channels would be reduced from 24 to 14, see Annex 2. However, if demand for additional spectrum where to arise in the future, ComReg could revisit the matter.

3.3.1 National adaptive cellular plan and reuse pattern

- 55 The current cellular reuse pattern for national telemetry blocks can be viewed in Figure 1 below. It depicts a 12-channel cluster shown in black, surrounded by the cells of the neighbouring channel clusters which is illustrated in red.
- 56 This frequency reuse pattern minimises co-channel interference between cells as the centres of cells using the same frequency are separated by a distance of 150 kilometres. The frequency reuse pattern is the basis for the national ACP in Annex 3.

¹⁵ For any application received, ComReg may seek independent advice relating to such material and to consult as appropriate to determine the veracity of said material.

57 ComReg proposes to continue to use the adaptive cellular plan and reuse pattern for national telemetry licences. Licensees would be allowed to use their assigned frequencies outside of the assigned cells but only where it can be shown that it would not cause harmful interference to other licensees.

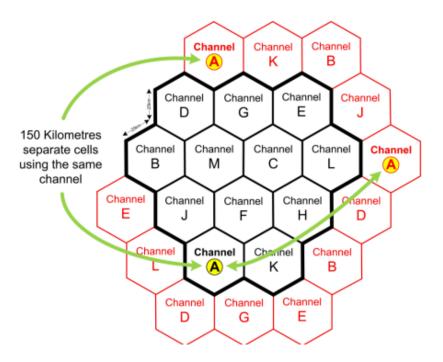


Figure 1: National cellular frequency reuse pattern

3.4 Licence Duration

- 58 Under the current telemetry licensing regime, licences are issued for a maximum period of 10 years on a first-come-first-served basis. All licences, upon reaching the expiry date, expire immediately and in full, and cannot be renewed or extended while all associated spectrum rights also expire.
- 59 In its Document 13/77¹⁶, ComReg set out its position on the duration of licences and noted that the issuing of wireless telegraphy licences of fixed, finite duration is beneficial as it enables ComReg to ensure that the spectrum at issue is used efficiently, through its periodic re-release. In this regard, it was further noted that ComReg has a statutory obligation to encourage the efficient use and ensure the effective management of the radio frequency spectrum.

¹⁶ ComReg Document 13/77 – The Introduction of a Licensing Framework for VHF and UHF Telemetry Systems, Changes to Current Frequency Assignments and Spectrum Release Proposals: Response to Consultation 13/13 – published 2 August 2013

60 ComReg notes that Regulation 31(1) of the European Union (Electronic Communications Code) Regulations 2022¹⁷ provides that:

"Rights of use for radio spectrum shall be in force for such period as the Regulator considers appropriate in light of the objectives pursued in accordance with Regulation 36(2) and (3), taking due account of the need to ensure competition, as well as, in particular, effective and efficient use of radio spectrum, and to promote innovation and efficient investments, including by allowing for an appropriate period for investment amortisation"

- 61 In that regard, ComReg notes that, licences of finite duration allow a spectrum manager to maintain the co-ordination of spectrum bands because among other things:
 - they ensure that there are no long-term barriers to releasing bands in line with international harmonisation measures, which is particularly important where international harmonisation is necessary to support the introduction of new and innovative services to a spectrum band;
 - they ensure that the desired change in line with international harmonisation can be brought about without perverse incentives emerging for incumbent firms to hold out strategically with a view to gaining more rent;
 - they provide a sufficiently flexible approach to address future co-ordinated approaches that may be taken to particular spectrum bands at an EU-wide level; and
 - in light of the above factors, they better promote competition, spectrum efficiency and the internal market.
- 62 ComReg notes the current telemetry licences will expire at different dates across a 9-year period from 2024 to 2033. ComReg is of the preliminary view that a more efficient method for setting the expiry of licences, under a new telemetry licensing regime, would be to have a 'sunset' condition where all licences, regardless of date of issue would expire immediately and in full on the same date, and would not be renewed thereafter. This would mean that any licences granted after 2024 would have a licence duration of less than 10 years.

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¹⁷ S.I. No. 444/2022 - European Union (Electronic Communications Code) Regulations 2022 https://www.irishstatutebook.ie/eli/2022/si/444/made/en/print

63 This would ensure that no long-term barriers prevail to releasing the relevant spectrum in the event in the future, particularly if any future international spectrum harmonisation measures materialise. It should also provide licensees with sufficient time to obtain a return on investment in line with the expected life-cycle of the technology deployed.

Therefore, ComReg proposes to grant licences of finite duration by proposing a 10-year 'sunset' condition for all categories of telemetry licences. Licences would be issued on a first-come, first-served basis and all such licences, upon reaching the 10-year anniversary of the signing of the Regulations would expire immediately and in full and would not be renewed or extended while all associated spectrum rights of use would likewise expire. This would enable licensees to make strategic decisions regarding their future networks. ComReg notes that the current telemetry licensing regime was introduced in 2014, and notes that internationally, utility companies have commenced migration from legacy narrowband SCADA technology to wideband LTE technology to facilitate the roll out of smart grids¹⁸. Therefore, ComReg is of the preliminary view that a 10-year licence duration could assist in the migration to future technologies.

3.5 Licence Fees

- 65 Regulation 24 of the European Union (Electronic Communications Code) Regulations 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 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.
- 66 There are currently no scarcity issues with regard to the Telemetry Bands and rights of use can be assigned to interested parties on application. However, given that licences are provided for a duration of up to ten years, fees have an important role in ensuring that any unused spectrum rights of use are returned promptly to ComReg. This is vital because demand for telemetry licences may increase over the ten-year period and existing licensees need to have sufficient incentives to return spectrum that is not being used and/or potentially be used by others that have a requirement for those frequencies.

¹⁸ "Smart Grid" means advanced delivery systems for utility services (electricity, gas and water) from sources of generation and production to key elements in the grid networks and includes all supervisory and control necessary for their effective management. For the avoidance of doubt, this definition does not include the use of smart metering, which consists of devices located at premises that record energy, water and gas usage and provide two-way electronic communication between consumers and the grid.

67 If fees are set too low then licensees might have little incentive to return those rights of use to ComReg, thereby denying its use to others. An effectively functioning fees framework should ensure that licensees are incentivised to use assigned rights of use as efficiently as possible, avoiding excessive spectrum use and return spectrum rights that are not going to be used over the remainder of the licence. In that regard, it is useful to assess the existing fees to determine whether those fees are in line with ComReg's statutory objectives and duties.

68 As detailed in Chapter 2, there are four licence types available under the current framework and the associated fees are set out in the table **Error! Reference source not found.** below.

Telemetry Licence Type	Number of 2 x 12.5 kHz channels assigned in a licence	Base Fee (to be adjusted for CPI)
On-site	1	€109
Local-area	1	€436
Wide-area	1	€872
National	12	€39,240 (per 12 channel block)

Table 2: Fees for telemetry licences

- 69 The existing fee schedule provides ComReg with some information about the level at which fees would not choke off efficient demand. For example, there is no evidence that existing fees have choked off efficient demand for spectrum rights of use. ComReg understands that both Uisce Éireann and ESBN make widespread use of their national licences and the existing fees do not appear to have curtailed that use in any way.
- 70 Further, it would appear that fees have also been set appropriately to encourage licensees to return spectrum rights of use that are not required. For example, of the eleven licenses issued since 2014 two have been returned to ComReg¹⁹. This shows that those licensees had sufficient incentives to return rights of use that were not being use or efficiently used. Therefore, ComReg is of the preliminary view that the current fee schedule remains appropriate.
- 71 However, in order to reflect the real value of these fees in today's terms and, as such, maintain proper incentives for firms to assess whether they should continue

¹⁹ These licences were returned because one licensee could make more efficient use of existing rights of use already assigned within the band, while the other had completed a project that required telemetry systems for a fixed period.

to hold particular spectrum usage rights, ComReg proposes to update the base fees currently set out in the existing Regulations to reflect the rate of inflation since those fees were set in 2014.²⁰²¹ Absent the CPI update, existing licensees would experience a fee reduction when applying for a new licence potentially undermining the role those fees have in encouraging the optimal use of the spectrum. Table 3 below sets out the updated fees.

72 These fees would be updated annually for CPI.²²).

Telemetry Licence Type	Number of 2 x 12.5 kHz channels assigned in a licence	Base Fee (to be adjusted for CPI annually)
On-site	1	€133
Local-area	1	€531
Wide-area	1	€1062
National	12	€47,794 (per 12 channel block)

Table 3: Proposed updated fees for telemetry licences

²⁰ The percentage change in the CPI in the period since January 2014 is 21.8%.

²¹ When applying for a licence, a licensee pays the fee set out in the 2014 Regulations plus the CPI Adjustment over the relevant period.

²² Consistent with our approach in the recent Fixed Links and Satellite Reviews, ComReg proposes that the CPI update to fees would be made on the same date every year and apply to all licensees.

4 Draft Regulatory Impact Assessment ("RIA")

4.1 Introduction

73 ComReg licenses telemetry systems under the 2014 Telemetry Systems Licensing Framework and readers are referred to Chapter 2 for more information on that framework. This chapter sets out ComReg's draft Regulatory Impact Assessment ("RIA") on the licensing framework for Telemetry licences in Ireland and provides ComReg's preferred option having regard to the impact on stakeholders, competition, and consumers.

4.2 RIA Framework

- 74 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.
- 75 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 draft Decision and draft RIA should be read in conjunction with the overall Consultations.
- 76 In conducting the RIA, ComReg has regard to the RIA Guidelines²³, 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.
- 77 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.

²³ ComReg Document 07/56a, "Guidelines on ComReg's Approach to Regulatory Impact Assessment", published 10 August 2007, available at www.comreg.ie

4.3 Structure for the RIA

78 In assessing the available regulatory options, ComReg's approach to the RIA is based on the following five steps:

- Step 1: describe the policy issue 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.
- 79 In the following sections, ComReg identifies the specific policy issues to be addressed and relevant objectives. (i.e., Step 1 of the RIA process). Before moving on to Step 1 of the RIA, ComReg first makes some relevant observations below on the stakeholders involved and on ComReg's approach to Steps 3 and 4.

4.4 Identification of stakeholders and approach to Steps 3 and 4

- 80 Step 3 assesses the likely impact of the proposed regulatory measures on stakeholders. Hence a necessary precursor is to identify such stakeholders. In this draft RIA, stakeholders fall into two main groups:
 - I. Consumers; and
 - II. Industry stakeholders.
- 81 Step 4 assesses 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.
- 82 Of themselves, the RIA Guidelines and the Ministerial Policy Direction on Regulatory Impact Assessment²⁴ 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 competition²⁵;

²⁴ Ministerial Direction dated 21st February 2003

²⁵ Section 12 (1)(a)(i) of the Communications Regulation Act, 2002

- contribute to the development of the internal market²⁶;
- promote the interests of users within the Community²⁷; and
- 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.
- 83 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, (the "ECC Regulations"). Such principles and obligations are outlined further at Annex 1 and include:
 - Regulation 24 of the ECC Regulations 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
 - Regulation 27(4) of the ECC Regulations 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,
 - o protect public health against electromagnetic fields,
 - o ensure technical quality of service,
 - o ensure maximisation of radio spectrum sharing,
 - o safeguard the efficient use of radio 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).
- 84 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

²⁶ Section 12 (1)(a)(ii) of the Communications Regulation Act, 2002

²⁷ Section 12(1)(a)(iii) of the Communications Regulation Act, 2002

carried out in respect of the impact on competition.

4.5 Step 1: Identify the policy issues & the objectives

Policy Issues

- 85 Telemetry systems gather data from a limited number of sensors located at main transmission and distribution points. Telemetry systems are important for monitoring and controlling operating systems and enables licensees to gather data from their networks typically using a limited number of sensors located at various transmission and distribution points (e.g., control signals and fault detections).
- 86 There are four licence types available under the current framework (set out in Chapter 2) which reflects the fact that telemetry services are required across geographic areas of various sizes. In summary, ComReg has issued two national licences to ESBN and one to Uisce Éireann who use telemetry systems to support the management of national electricity and water supply in Ireland. Eleven Regional Licences have been issues since 2014 and are typically used to support energy generation, waste management, water treatment meteorological and water quality data at various locations throughout the country.
- 87 Each of the national licences will expire on 09 July 2024 while the regional licences have different expiry dates ranging from 2027 to 2033. However, under the 2014 Regulations an existing licensee is unable to renew a new licence, either before, or on expiry of its existing 10-year licence. As stated in Regulation 8:
 - "a licence granted under these Regulations shall expire in full at midnight on the tenth anniversary of the date on which it was granted and it shall not be renewed nor shall it remain in effect following its expiry date and all rights and entitlements under that licence, including all spectrum rights of use, shall cease altogether as and from its expiry date."
- 88 Therefore, the main policy issue to consider in this draft RIA is whether an updated licensing framework which facilitates the continued provision of telemetry services for existing licensees in Ireland in the context of ComReg's statutory objectives is required.

Objectives

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

90 In addition, the focus of this RIA is to assess the impact 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 spectrum fees for the telemetry 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.
- 91 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.

4.6 Step 2: Identify and describe the regulatory options

- 92 ComReg will evaluate the existing framework as an option, given its utility to date, and to fully understand the impact of any change to an alternative option. Therefore, ComReg notes that **Option 1 is to maintain the status quo** and allow existing licences for telemetry systems to expire at the end of the licence with no option for renewal.
- 93 An alternative option would be to update the existing framework to allow all existing licensees the opportunity to apply for a new licence on expiry. Under such an Option, ComReg would continue to make available for assignment all rights of use to the Telemetry Bands, including existing licensees, with fees updated to reflect the change in the Consumer Price Index ("CPI") since 2014. (See Chapter 3).
- 94 Another possible option would be to develop an entirely new telemetry framework (including fees) which considers the future use of telemetry systems. However, ComReg is of the preliminary view that such an approach is not appropriate at this juncture for the following reasons.
 - The use cases for the Telemetry Bands has not changed significantly and the current framework has been effective in supporting those use cases and ComReg's objective to ensure the effective management and efficient use of the radio spectrum resource.

 The existing licences have multiple different expiry dates, and the introduction of a new methodology could result in an outcome where licensees are subjected to different frameworks and associated fees for providing the same telemetry services.

- 3. The consideration of a new telemetry framework would be more informative closer to the expiry of the 400 MHz Band when the use of smart grids will have evolved significantly and there will be greater information available about future use cases and how the Telemetry Bands can be used given the development of a national Smart Grid by ESBN.
- 4. A new fees regime which would necessarily form part of such a review could potentially result in a different fees approach depending on whether one is a new or existing licensee. (i.e., fees for existing licensees would continue to fall under the old regime because those licences have a fixed expiry date).
- 95 Therefore, ComReg is of the preliminary view that developing a new framework is not appropriate at this time and does not consider this further as a regulatory Option.
- 96 In light of the above, ComReg considers that are two regulatory options available to it are as follows.
 - **Option 1:** Maintain the status quo and allow existing licences for telemetry systems to expire at the end of the licence with no option for renewal.
 - Option 2: Make available for assignment all rights of use to the Telemetry Bands on the same basis as the 2014 Regulations with fees updated to reflect the change in the Consumer Price Index ("CPI") since 2014.

4.7 Step 3: Impact on Stakeholders

- 97 There are a number of key industry stakeholders in relation to the matters considered in this chapter. Stakeholders who are existing licensees are those listed in Table 1 and include:
 - National telemetry licence holders including ESBN and Uisce Éireann who use of telemetry systems extend across the entire state.
 - Regional telemetry licence holders including Dublin City Council, Bord Na Mona Powergen Plc, and Jan De Nul N.V whose licences range from onsite to a range of 25 km.
- 98 Other stakeholders include new licensees who may wish to be assigned rights of use for telemetry systems in the future.

Existing licensees

99 Under Option 1 existing licensees would be unable to renew licences on expiry. Only new licensees would be permitted to be assigned rights of use in the Telemetry Bands. This would have significant impact on all existing licence holders who would be unable to continue supporting telemetry systems through the use of the radio spectrum despite a continuing need for doing so. In particular, there are no alternative spectrum frequencies available that could be used to support existing equipment and telemetry systems. This is of particular concern for holders of national licences whose rights of use are due to expire in July 2024. Furthermore. licensees with expiry dates beyond this would also experience the same problem should they wish to apply for a new licence.

- 100 In relation to the national licences there is increasing telemetry coverage across utility networks that support water and electricity. Under Option 1, existing licensees would be unable to apply for a new licence upon the expiry of their current licence. For example, under Option 1 the ability of Uisce Éireann to ensure that all customers receive a safe and reliable supply of drinking water and have their wastewater collected and safely returned to the environment would be impinged. Among other things, Uisce Éireann uses telemetry to monitor disinfection systems treatment plants and storage facilities and to measure water quality²⁸.
- 101 Uisce Éireann recently noted the importance of telemetry monitoring of critical operating parameters and safety programmes in improving their water quality programmes²⁹. Similarly, having greater control over assets in their network allows Uisce Éireann to efficiently identify and react to adverse events as they occur. Minimising network leakage is a key objective for Uisce Éireann and the ability to remotely measure and monitor flows plays a critical role in helping Uisce Éireann manage leakage and the distribution of water across the country.
- 102 Similarly, ESBN requires telemetry licences to operate the electricity network with necessary real time information for operational purposes (i.e. to control and monitor the distribution and transmission networks). A significant proportion of ESB Networks' telecommunications network relies solely on wireless for several reasons, including situations where it is technically difficult to use cables to connect devices to the network, or where it is not economically feasible³⁰. Radio spectrum is therefore a fundamental component of ESB Networks' existing safe and resilient narrowband network.
- 103It is noteworthy that ESBN has been transitioning to a Smart Grid following the assignment to it of 2 x 3 MHz and a further 1 MHz on service and technology neutral

²⁸ https://smartcitiesireland.org/wp-content/uploads/2019/07/SmartWaterManagement_Irish-Water.pdf

²⁹ Uisce-Eireann-AR-YE22.pdf (water.ie)

 $^{{\}color{red}^{30}} \, \underline{\text{smart-network---ational-radio-access-communications-network---close-out-report.pdf} \\ \underline{\text{(esbnetworks.ie)}}$

basis. However, ESBN will continue to require telemetry licences to facilitate the transition from existing narrowband technology to newer technologies provided under its 400 MHz Licence. Therefore, ESBN is likely to have a continued need for one or more national telemetry licences.

104 Alternatively, under Option 2 existing licensees would have the ability to apply for a new licence and continue to operate telemetry systems using the Telemetry Bands. Given the above, ComReg is of the preliminary view that stakeholders would prefer Option 2 as this would allow for licensees to apply for a new licence to continue providing telemetry services and avoid any potential disruption to monitoring and controlling their respective networks.

New licensees

105 New licensees could be indifferent between Option 1 and Option 2 because rights of use would be made available to those licensees under both Options. However, it is more likely that potential new licensees would prefer Option 2 because that Option provides certainty that new licensees would be able to apply for new licences in the future when those rights of use expire. Such licensees are likely to favour options which provide regulatory certainty and that promote efficient investment in telemetry systems.

106 Given the above ComReg is of the preliminary view that stakeholders would likely prefer Option 1 over Option 2.

4.8 Step 4: Impact on Competition and consumers

Impact on Competition

- 107There are different elements to competition that are relevant in determining the impact on 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 obligations, particularly that of promoting competition, in accordance with Section 12 of the 2002 Act, the most relevant of which for this consultation includes:
 - Encouraging efficient use and ensuring the effective management of radio frequencies and numbering resources.³¹
 - Promoting efficient investment and innovation in new and enhanced infrastructures³².

108Option 1 is unlikely to encourage the efficient use of the radio spectrum because existing licensees which have a clear use for the radio spectrum would be unable

³¹ Section 12(2)(a) of the 2002 Act

³² Section 12(2)(a) of the 2002 Act

to utilise same when their license expires. Furthermore, Option 1 would not constitute the effective management of the radio spectrum because there are no good spectrum management reasons for effectively restricting rights of use to new licensees only. Such a situation would create outcomes where spectrum goes unused despite efficient demand existing for that spectrum. Importantly, such unused demand would relate to key telemetry systems that manage a range of utilities across the State.

- 109 Option 1 is also unlikely to promote efficient investment and innovation because any investments made by existing licensees would likely become inefficient on the expiry of its licenses. Further, Option 1 would not support new and enhanced infrastructure because ESBN would likely be delayed in its rollout of a Smart Grid network because it would likely need to reprioritise rights of use assigned in the 400 MHz Award to support narrowband telemetry systems that would go unsupported under Option 1.
- 110 Alternatively, under Option 2 existing licensees would have the ability to apply for a new licence and continue to operate telemetry systems using the Telemetry Bands.
- 111 Therefore, Option 2 would better promote competition compared to Option 1.

Impact on Consumers

- 112 Although consumers are not direct users of telemetry systems they would likely be impacted indirectly through the use of such systems, for example by utility providers that provide power or water which are used by consumers. Therefore, ComReg is of the preliminary view that consumers are likely to prefer the option that would allow for the continued, effective use of telemetry systems in Ireland.
- 113Given the assessment already undertaken in this draft RIA, ComReg is of the preliminary view that consumers would prefer Option 2.

4.9 ComReg's preferred Option

114In light of the above, ComReg is of the preliminary view that Option 2 is preferred in terms of the impact on stakeholders, competition and consumers because it is the option that best provides for the continued effective use of telemetry systems in Ireland.

5 Draft Decision Instrument

115This 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.DEFINITIONS AND INTERPRETATION

- 1. In this 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 Non-exclusive Licence granted under section 5 of the Act of 1926 in accordance with and subject to the matters prescribed in these Regulations to keep and have possession of Apparatus in a specified place in the State, being one of:
 - (a) a Regional on-site Licence;
 - (b) a Regional local area Licence;
 - (c) a Regional wide are Licence; or
 - (d) a National Licence.
- "Duration of Licence" means the duration of time from the grant date of a Licence to 7 July 2034;
- "Licence Fee" means the fee for telemetry systems as set out in draft form in Schedule 2 to the Telemetry Licence Regulations;
- "National 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 to operate a national Telemetry System.

"Regional On-site 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 to operate a low power Telemetry Systems where the transmitter and receiver are within a geographic area less than 1 km radius;

"Regional Local-area 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 to operate a local area Telemetry System within a geographic area greater than 1 km radius but less than 12.5 km radius from the base station:

"Regional Wide-area 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 to operate a Wide-area Telemetry System within a geographic area greater than 12 km radius but less than 25 km radius from the base station:

"telemetry apparatus" means apparatus for wireless telegraphy used for telemetry systems;

"telemetry system" means a wireless telegraphy system by which automated measurements are made and other data collected at remote or inaccessible locations, and transmitted to receiving stations for monitoring, recording or remote control purposes;

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

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 Draft Decision):
 - a) ComReg Document 23/118 [document to which this draft Decision including draft Regulations is attached]; and
 - b) ComReg Document XX/YY [document to which any future Decision including draft Regulations may be attached].
 - II. 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, 14, 15, 16, 17 and 27 of the EECC Regulations;

- c) Regulations 9, 14, 20, 24, 28, 30, 31, 34, 36, 99(1)(c), 105 and 110 of the EECC Regulations;
- 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.
- III. and, noting that it has 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.

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 Telemetry Licence Regulations, to make those regulations under section 6 of the Wireless Telegraphy Act 1926, prescribing relevant matters in relation to telemetry systems, including prescribing the form of the Licences concerned, their duration, fees, and the conditions and restrictions subject to which they are granted.
 - II. to grant Telemetry System Licences, under section 5 of the Wireless Telegraphy Act 1926 to relevant applicants subject to the conditions and restrictions (including conditions as to suspension and withdrawal), prescribed in the Telemetry Licence Regulations as currently set out in Annex 3 of Document 23/118 [this document]

Duration and Renewal of Licence

III. that a Licence shall, unless it has been revoked, withdrawn or surrendered, remain in force from the date of grant until the tenth anniversary of the Telemetry Licence Regulations.

Licence Fees

- IV. that the Licence Fee shall be calculated in accordance with Schedule 2 as set out in the Telemetry Licence Regulations.
- V. that if a 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.

VI. that if a 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.

VII. that if the amount of radio frequency spectrum specified in a 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.

4. EFFECTIVE DATE

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

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.

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.

6 Submitting Comments and Next Steps

6.1 Submitting Comments

- 116 All input and comments are welcome. It would make the task of analysing responses easier if comments were referenced to the relevant section / paragraph number in each chapter and annex in this document or the relevant accompanying consultant's report.
- 117 Please also set out your reasoning and all supporting information for any views expressed.
- 118The consultation period will run over the next six weeks until 17:00 on 30 January 2024. Recognising that the consultation will run over the Christmas period, ComReg has given an additional two weeks over the normal four weeks identified in ComReg's Consultation Procedures.³³ ComReg welcomes written comments on any issues raised in this paper.
- 119 Submissions must be provided in written form (e-mail) to <u>marketframeworkconsult@comreg.ie</u>, clearly marked – "Submissions to ComReg Document 23/118".
- 120 Electronic submissions should be submitted in an unprotected format so that they may be readily included in the ComReg submissions document for electronic publication.
- 121 ComReg appreciates that respondents may wish to provide confidential information if their comments are to be meaningful. To promote openness and transparency, ComReg will publish all respondents' submissions to this notice, as well as all substantive correspondence on matters relating to this document, subject to the provisions of ComReg's guidelines on the treatment of confidential information (Document 05/24³⁴).
- 122In this regard, respondents should submit views in accordance with the instructions set out below. When submitting a response to this notification that contains confidential information, respondents must choose one of the following options:

³³ See ComReg Document 11/34

³⁴ ComReg Document 05/24, "Guidelines on the treatment of confidential information", published 22 March 2005, available at www.comreg.ie

123 Preferably, submit both a non-confidential version and a confidential version of the response. The confidential version must have all confidential information clearly marked and highlighted in accordance with the instruction set out below and include the reasons as to why they consider any particular material to be confidential. The separate non-confidential version must have actually redacted all items that were marked and highlighted in the confidential version.

OR

- 124Submit only a confidential version including the reasons as to why they consider any particular material to be confidential and ComReg will perform the required redaction to create a non-confidential version for publication. With this option, respondents must ensure that confidential information has been marked and highlighted in accordance with the instructions set out below. Where confidential information has not been marked as per our instructions below, then ComReg will not create the nonconfidential redacted version and the respondent will have to provide the redacted non-confidential version in accordance with option A above.
- 125 For ComReg to perform the redactions under Option B above, respondents must mark and highlight all confidential information in their submission as follows:
 - (a) Confidential information contained within a paragraph must be highlighted with a chosen particular colour,
 - (b) Square brackets must be included around the confidential text (one at the start and one at the end of the relevant highlighted confidential information),
 - (c) A Scissors symbol (Symbol code: Wingdings 2:38) must be included after the first square bracket.

For example, "Redtelecom has a market share of [\times 25% \times]."

6.2 Next Steps

126 Following receipt and consideration of submissions in response to this draft Decision, and other relevant material, ComReg intends to publish a response to this draft Decision together with its final Decision including Regulations.

Annex: 1 Relevant Legal Framework

A 1.1The Communications Regulation Act 2002 (as amended) (the "2002 Act"), the European Electronic Communications Code (which has repealed the EU Common Regulatory Framework, namely the Framework and Authorisation Directives)³⁵, as transposed by S.I. No. 444 of 2022, the European Union (Electronic Communications Code) Regulations 2022 (the "ECC Regulations") and the Communications Regulation and Digital Hub Development Agency (Amendment) Act 2023 (the "2023 Act"), and the Wireless Telegraphy Acts 1926 to 2009³⁶ set out, amongst other things, ComReg's functions and objectives that are relevant to the management of the radio frequency spectrum in Ireland and to this Response to Consultation and Decision document including Regulations.

- A 1.2Apart from licensing and making regulations in relation to licences, ComReg's functions include the management of Ireland's radio frequency spectrum in accordance with ministerial Policy Directions under Section 13 of the 2002 Act, having regard to its objectives under Section 12 of the 2002 Act, and Regulation 4 of S.I. No. 444 of 2022.
- A 1.3This annex is intended as a general guide as to ComReg's role in this area, and not as a definitive or exhaustive legal exposition of that role. Further, this annex restricts itself to consideration of those functions, objectives powers, and duties of ComReg that appear most relevant to the matters at hand and generally excludes those not considered relevant (for example, in relation to postal services, premium rate services or market analysis). For the avoidance of doubt, however, the inclusion of particular material in this annex does not necessarily mean that ComReg considers same to be of specific relevance to the matters at hand. All references in this annex to enactments are to the enactment as amended at the date hereof, unless the context otherwise requires.

The European Electronic Communications Code

A 1.4On 20 December 2018, Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code ("EECC") entered into force.

³⁵ Directive 2018/1972 of the European Parliament and of the Council of 11 December 20181 establishing the European Electronic Communications Code.

³⁶ The Wireless Telegraphy Acts 1926 to 1988 and Sections 181 (1) to (7) and (9) and Section 182 of the Broadcasting Act 2009.

A 1.5It is important to note that further to Article 125 ("Repeal") of the EECC, with effect from 21 December 2020, the EECC replaced the EU Common Regulatory Framework adopted in 2002 (and amended in 2009) under which ComReg has regulated electronic communications since 2003³⁷.

- A 1.6With some limited exceptions (see Article 124 of the EECC), Member States had until 21 December 2020 to transpose the EECC into national law³⁸. The statutory instrument transposing key provisions of the EECC has been published as S.I. No. 444 of 2022³⁹ and has been commenced by the Minister⁴⁰. Other provisions of the EECC have been transposed in the Communications Regulation and Digital Hub Agency (Amendment) Act 2023, which has also been commenced⁴¹.
- A 1.7All references in this annex to enactments are to the enactment as amended at the date hereof unless the context otherwise requires.

Primary Functions and Objectives and Regulatory Principles under the 2002 Act and EECC as transposed.

- A 1.8ComReg's relevant functions pursuant to Section 10 of the Communications Regulation Act 2002, as amended, include the management of the radio frequency spectrum and the national numbering resource. ComReg's primary objectives in carrying out its statutory functions 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 competition⁴²:
 - Contribute to the development of the internal market⁴³; and
 - Promote the interests of users within the Community⁴⁴.

³⁷ For the correlation table between relevant articles of the repealed Directives and the EECC, please see Annex XIII of the EECC available here- <u>EUR-Lex - 02018L1972-20181217 - EN - EUR-Lex (europa.eu)</u>

³⁸ With the exception of Articles 53(2), (3) and (4), and Article 54 (See Article 124).

³⁹ S.I. No. 444 of 2022, The European Union (Electronic Communications Code) Regulations 2022.

⁴⁰ By virtue of S.I. No. 300 of 2023, the European Union (Electronic Communications Code) (Amendment) Regulations 2023.

⁴¹ By virtue of S.I. No. 299 of 2023, the Communications Regulation and Digital Hub Development Agency (Amendment) Act 2023 (Commencement) (No.2) Order 2023.

⁴² Section 12 (1)(a)(i) of the 2002 Act.

⁴³ Section 12 (1)(a)(ii) of the 2002 Act.

⁴⁴ Section 12(1)(a)(iii) of the 2002 Act.

A 1.9ComReg, in carrying out its regulatory tasks specified in S.I. No. 444, shall take all reasonable measures which are necessary and proportionate for achieving the objectives set out in Regulation 4(3), including the objective to promote connectivity and access to, and take-up of, very high-capacity networks, including fixed, mobile and wireless networks, by all consumers and businesses in the State⁴⁵.

Management of radio spectrum

- A 1.10 Regulation 27 of S.I. No. 444 of 2022 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 S.I. No. 444 of 2022, and Article 4 of the Directive, ensure:
 - (d) the effective management of radio frequencies for ECN and ECS;
 - (e) that the allocation of, the issuing of general authorisations in respect 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
 - (f) 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).
- A 1.11 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 1.12 Regulation 27(4) provides that, notwithstanding Regulation 17(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 ECS where this is necessary to:

⁴⁵ Regulation 4(3)(a) of S.I. No. 444 of 2022.

- (a) avoid harmful interference;
- (b) protect public health against electromagnetic fields;
 - (c) ensure technical quality of service;
 - (d) ensure maximisation of radio frequency sharing
 - (e) safeguard the efficient use of spectrum; or
 - (f) 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).
- A 1.13 Regulation 27(5) provides that without prejudice to Regulation 27(7), ComReg must ensure that all types of ECS may be provided in the radio spectrum, declared available for ECS in the Radio Frequency Plan published under Section 35 of the Act of 2002 in accordance with EU law.
- A 1.14 Regulation 27(6) provides that, notwithstanding Regulation 17(4), ComReg may provide for proportionate and non-discriminatory restrictions to the types of ECS to be provided, including where necessary, to fulfil a requirement under the International Telecommunication Union Radio Regulations ("ITU-RR").
- A 1.15 Regulation 27(7) requires that measures that require an ECS to be provided in a specific band available for ECS shall be justified in order to ensure the fulfilment of a general interest objective as laid down by or on behalf of the Government or a Minister of the Government in accordance with EU law including, but not limited to:
 - (a) safety of life;
 - (b) the promotion of social, regional or territorial cohesion;
 - (c) the avoidance of inefficient use of radio frequencies; or
 - (d) the promotion of cultural and linguistic diversity and media pluralism, for example, by the provision of radio and television broadcasting services.
- A 1.16 Regulation 27(8) provides that ComReg may only prohibit the provision of any other ECS in a specific radio spectrum frequency band where such a prohibition is justified by the need to protect safety of life services. ComReg may, on an exceptional basis, extend such a measure in order to fulfil other general interest objectives as laid down by or on behalf of the Government or a Minister of the Government in accordance with European law.

A 1.17 Regulation 27(9) provides that ComReg shall regularly review the necessity of any restrictions imposed under Regulation 27 and shall make the results of such reviews publicly available.

A 1.18 Regulation 27(10) requires ComReg to, in the fulfilment of its obligations under Regulation 27, respect relevant international agreements, including the ITU-RR and other agreements adopted in the framework of the ITU applicable to radio spectrum, any public policy considerations brought to its attention by the Minister.

Authorisation of use of radio spectrum

- A 1.19 Regulation 28(1) of S.I. No. 444 of 2022 provides that ComReg shall facilitate the use of radio spectrum, including shared use, under a general authorisation under Regulation S.I. No. 444 of 2022 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 1.20 Regulation 28(2) of S.I. No. 444 of 2022 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;
 - 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 1.21 Regulation 28(3) provides that when considering whether to issue general authorisations or 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 1.22 Regulation 29(1) of S.I. No. 444 of 2022 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.

Publication of procedures

A 1.23 Regulation 30(2)(a) of S.I. No. 444 of 2022 requires that ComReg shall, having regard to the provisions of Regulation 27 of the S.I. No. 444 of 2022, establish open, objective, transparent, non-discriminatory and proportionate procedures for the granting of individual rights of use for radio spectrum and cause any such procedures to be made publicly available.

Duration of rights

- A 1.24 Regulation 31(1) of S.I. No. 444 of 2022 provides that rights of use for radio spectrum shall be in force for such period as ComReg considers appropriate in light of the objectives pursued in accordance with Regulation 36(2) and (3), taking due account of the need to ensure competition, as well, as in particular, effective and efficient use of radio spectrum, and to promote innovation and efficient investments, including by allowing for an appropriate period for investment amortisation.
- A 1.25 Regulation 31(2) provides that where ComReg decides to grant individual rights of use for radio spectrum for which harmonised conditions have been set by technical implementing measures in accordance with the Radio Spectrum Decision in order to enable its use for wireless broadband electronic communications services for a limited period, it shall ensure regulatory predictability for the holders of the rights over a period of at least 20 years regarding conditions for investment in infrastructure which relies on the use of such radio spectrum, taking account of the requirements referred to in Regulation 31(1).

Conditions attached to rights of use for radio spectrum

A 1.26 Regulation 9(1) of S.I. No. 444 of 2022 provides that, notwithstanding Section 5 of the Wireless Telegraphy Act,1926, but subject to any regulations under Section 6 of that Act, where ComReg specifies conditions to be attached to rights of use for radio spectrum, it may only attach such conditions as are listed in Part D of the Schedule 1. Part D lists the following conditions which may be attached to rights of use:

 Obligation to provide a service or to use a type of technology within the limits of Regulation 27, including, where appropriate, coverage and quality of service requirements.

- Effective and efficient use of radio spectrum in conformity with the Regulations.
- Technical and operational conditions necessary for the avoidance of harmful interference and for the protection of public health against electromagnetic fields, taking utmost account of Recommendation 1999/519/EC where such conditions are different from those included in the general authorisation.
- Maximum duration in conformity with Regulation 31, subject to any changes in the National Frequency Allocation Plan.
- Transfer or leasing of rights at the initiative of the holder of the rights and conditions of such transfer in conformity with these Regulations.
- Fees for rights of use in accordance with Regulation 24.
- Any commitments which the undertaking obtaining the rights of use has made in the framework of an authorisation or authorisation renewal process prior to the authorisation being granted or, where applicable, to the invitation for application of rights of use.
- Obligations to pool or share radio spectrum or allow access to radio spectrum for other uses in specific regions or at national level.
- Obligations under relevant international agreements relating to the use of radio spectrum bands.
- Obligations specific to an experimental use of radio frequencies.
- A 1.27 Regulation 9(2) provides that (a) any attachment of conditions under Regulation 1) or (b) non-application under paragraph (1) of conditions to undertakings of a class or type as may be determined by ComReg, to rights of use for radio spectrum shall be non-discriminatory, proportionate and transparent and in accordance with Regulation 27.
- A 1.28 Pursuant to Regulation 9(3) of S.I. No. 444 of 2022, an undertaking shall comply with the conditions attaching to rights of use for radio spectrum applicable to it.

Procedures for limiting the number of rights of use to be granted for radio spectrum

- A 1.29 Regulation 36(1) of S.I. No. 444 of 2022 provides that, without prejudice to Regulation 35, where ComReg concludes that a right to use radio spectrum cannot be subject to a general authorisation and where it considers whether to limit the number of rights of use to be granted for radio spectrum, it shall, inter alia, without prejudice to Sections 13 and 37 of the 2002 Act:
 - clearly state the reasons for limiting the rights of use, in particular by giving due weight to the need to maximise benefits for users and to facilitate the development of competition and review the limitation at intervals which it considers reasonable or at the reasonable request of any undertaking affected as appropriate;, and
 - give all interested parties, including users and consumers, the opportunity to express their views in accordance with Regulation 101.
- A 1.30 Regulation 36(2)(a) of S.I. No. 444 of 2022 provides that ComReg may decide , having taken into account the matters referred to in paragraph (1)(a) and (b), that the number of rights of use for radio spectrum referred to in that paragraph ought to be limited and, where the Regulator so decides, it shall clearly establish, and give reasons for, the objectives pursued by means of a competitive or comparative selection procedure under this Regulation, and where possible quantify them, giving due weight to the need to fulfil national and internal market objectives.
- A 1.31 Regulation 36(7) provides that where the granting of rights of use for radio spectrum needs to be limited, ComReg shall grant such rights on the basis of selection criteria and a selection procedure which are objective, transparent, non-discriminatory and proportionate. Any such selection criteria shall give due weight to the achievement of the objectives and requirements of section 12 of the Act of 2002 and Regulations 4, 16 and 27.

Fees for spectrum rights of use

A 1.32 Regulation 24(1) of S.I. No. 444 of 2022 permits ComReg, subject to sections 13 and 37 of the Act of 2002, to impose fees for rights of use for radio spectrum, which reflect the need to ensure the optimal use of the radio spectrum.

A 1.33 Pursuant to Regulation 24(2) of S.I. No. 444 of 2022, ComReg is required to ensure that any such fees are objectively justified, transparent, non-discriminatory and proportionate in relation to their intended purpose and take into account the objectives of ComReg as set out in Section 12 of the 2002 Act and the general objectives of the Directive and Regulation S.I. No. 444 of 2022. Regulation 23(3) provides that with respect to rights of use for radio spectrum, ComReg shall seek to ensure that applicable fees are set at a level which ensures efficient assignment and use of radio spectrum by: (a) setting reserve prices as minimum fees for rights of use for radio spectrum by having regard to the value of those rights in their possible alternative uses; (b) taking into account costs entailed by conditions attached to those rights; and (c) applying, to the extent possible, payment arrangements linked to the actual availability for use of the radio spectrum.

Amendment of rights and obligations

A 1.34 Regulation 14(1) of S.I. No. 444 of 2022 permits ComReg to amend rights, conditions and procedures concerning rights of use for radio spectrum, provided that any such amendment may only be made in objectively justified cases and in a proportionate manner, taking into consideration, where appropriate, the specific conditions applicable to transferable rights of use for radio spectrum or for numbering resources.

Other Relevant Legislation and Policy Instruments

Wireless Telegraphy Act, 1926 (the "1926 Act")

- A 1.35 Under Section 5(1) of the 1926 Act, ComReg may, subject to that Act, and on payment of the prescribed fees (if any), grant to any person a licence to keep and have possession of apparatus for wireless telegraphy in any specified place in the State.
- A 1.36 Section 5(2) provides that, such a licence shall be in such form, continue in force for such period and be subject to such conditions and restrictions (including conditions as to suspension and withdrawal) as may be prescribed in regard to it by regulations made by ComReg under Section 6.
- A 1.37 Section 5(3) also provides that, where it appears appropriate to ComReg, it may, in the interests of the efficient and orderly use of wireless telegraphy, limit the number of licences for any particular class or classes of apparatus for wireless telegraphy granted under Section 5.
- A 1.38 Section 6 provides that ComReg may make regulations prescribing in relation to all licences granted by it under Section 5, or any particular class or classes of such licences, all or any of the following matters:

- the form of such licences;
- the period during which such licences continue in force;
- the manner in which, the terms on which, and the period or periods for which such licences may be renewed;
- the circumstances in which or the terms under which such licences are granted;
- the circumstances and manner in which such licences may be suspended or revoked by ComReg;
- the terms and conditions to be observed by the holders of such licences and subject to which such licences are deemed to be granted;
- the fees to be paid on the application, grant or renewal of such licences or classes of such licences, subject to such exceptions as ComReg may prescribe, and the time and manner at and in which such fees are to be paid; and
- matters which such licences do not entitle or authorise the holder to do.
- A 1.39 Section 6(2) provides that Regulations made by ComReg under Regulation 6 may authorise and provide for the granting of a licence under Section 5 subject to special terms, conditions, and restrictions to persons who satisfy it that they require the licences solely for the purpose of conducting experiments in wireless telegraphy.
- A 1.40 Regulation 9(1) of S.I. No. 444 of 2022 provides that, notwithstanding section 5 of the Act of 1926 but subject to any regulations made under section 6 of that Act, where ComReg specifies conditions to be attached to rights of use for radio spectrum, it may only attach such conditions as are listed in Part D of Schedule 1 to S.I. No. 444 of 2022.
- A 1.41 Regulation 30(7) of S.I. No. 444 of 2022 provides that for the purpose of Regulation 30, a general authorisation for the use of radio spectrum shall be facilitated by way of an order made by ComReg under section 3(6) of the 1926 Act, declaring that a particular class or description of apparatus for wireless telegraphy is one to which the licence requirements of section 3 of the 1926 Act do not apply.

Broadcasting Act 2009 (the "2009 Act")

A 1.42 Section 132 of the 2009 Act relates to the duties of ComReg in respect of the licensing of spectrum for use in establishing digital terrestrial television multiplexes and places an obligation on ComReg to issue:

 two DTT multiplex licences to RTÉ by request (see Sections 132(1) and (2) of the 2009 Act; and

• a minimum of four DTT multiplex licences to the BAI by request (see Sections 132(3) and (4) of the 2009 Act) for the provision of commercial TV content.

Article 4 of Directive 2002/77/EC (Competition Directive)

A 1.43 Article 4 of the Competition Directive⁴⁶ provides that:

"Without prejudice to specific criteria and procedures adopted by Member States to grant rights of use of radio frequencies to providers of radio or television broadcast content services with a view to pursuing general interest objectives in conformity with Community law:

- Member States shall not grant exclusive or special rights of use of radio frequencies for the provision of electronic communications services.
- The assignment of radio frequencies for electronic communication services shall be based on objective, transparent, non-discriminatory and proportionate criteria."

Radio Spectrum Policy Programme

A 1.44 On 15 February 2012, the European Parliament adopted, via a Decision⁴⁷, the five-year Radio Spectrum Policy Programme ("RSPP") which establishes a multi-annual radio spectrum policy programme for the strategic planning and harmonisation of the use of spectrum. The objective is to ensure the functioning of the internal market in the Union policy areas involving the use of spectrum, such as electronic communications, research, technological development and space, transport, energy and audiovisual policies.

A 1.45 Among other things, Article 5 of the RSPP, entitled "Competition", provides:

"1. Member States shall promote effective competition and shall avoid distortions of competition in the internal market for electronic communications services in accordance with Directives 2002/20/EC and 2002/21/EC.

They shall also take into account competition issues when granting rights of use of spectrum to users of private electronic communication networks."

⁴⁶ Commission Directive 2002/77/EC of 16 September 2002 on competition in the markets for electronic communications networks and services.

⁴⁷ Decision No 243/2012/EU of the European Parliament and of the Council of 14 March 2012 establishing a multiannual radio spectrum policy programme.

Policy Directions⁴⁸

A 1.46 Section 12(4) of the 2002 Act provides that, in carrying out its functions, ComReg must have appropriate regard to policy statements, published by or on behalf of the Government or a Minister of the Government and notified to the Commission, in relation to the economic and social development of the State. Section 13(1) of the 2002 Act requires ComReg to comply with any policy direction given to ComReg by the Minister for Communications, Energy and Natural Resources ("the Minister") as he or she considers appropriate, in the interests of the proper and effective regulation of the electronic communications market, the management of the radio frequency spectrum in the State and the formulation of policy applicable to such proper and effective regulation and management, to be followed by ComReg in the exercise of its functions. Section 10(1)(b) of the 2002 Act also requires ComReg, in managing the radio frequency spectrum, to do so in accordance with a direction of the Minister under section 13 of the 2002 Act, while Section 12(1)(b) requires ComReg to ensure the efficient management and use of the radio frequency spectrum in accordance with a direction under Section 13.

A 1.47 The Policy Directions which are most relevant in this regard include the following:

Policy Direction No.3 on Broadband Electronic Communication Networks

A 1.48 ComReg shall in the exercise of its functions, take into account the national objective regarding broadband rollout, viz, the Government wishes to ensure the widespread availability of open-access, affordable, always-on broadband infrastructure and services for businesses and citizens on a balanced regional basis within three years, on the basis of utilisation of a range of existing and emerging technologies and broadband speeds appropriate to specific categories of service and customers.

Policy Direction No.4 on Industry Sustainability

A 1.49 ComReg shall ensure that in making regulatory decisions in relation to the electronic communications market, it takes account of the state of the industry and in particular the industry's position in the business cycle and the impact of such decisions on the sustainability of the business of undertakings affected.

⁴⁸ ComReg also notes, and takes due account of, the Spectrum Policy Statement issued by the Department of Communications Energy and Natural Resources in September 2010

Policy Direction No.5 on Regulation only where necessary

A 1.50 Where ComReg has discretion as to whether to impose regulatory obligations, it shall, before deciding to impose such regulatory obligations on undertakings, examine whether the objectives of such regulatory obligations would be better achieved by forbearance from imposition of such obligations and reliance instead on market forces.

Policy Direction No.6 on Regulatory Impact Assessment

A 1.51 ComReg, before deciding to impose regulatory obligations on undertakings in the market for electronic communications or for the purposes of the management and use of the radio frequency spectrum or for the purposes of the regulation of the postal sector, shall conduct a Regulatory Impact Assessment in accordance with European and International best practice and otherwise in accordance with measures that may be adopted under the Government's Better Regulation programme.

Policy Direction No.7 on Consistency with other Member States

A 1.52 ComReg shall ensure that, where market circumstances are equivalent, the regulatory obligations imposed on undertakings in the electronic communications market in Ireland should be equivalent to those imposed on undertakings in equivalent positions in other Member States of the European Community.

Policy Direction No.11 on the Management of the Radio Frequency Spectrum

A 1.53 ComReg shall ensure that, in its management of the radio frequency spectrum, it takes account of the interests of all users of the radio frequency spectrum.

General Policy Direction No.1 on Competition (2004)

- A 1.54 ComReg shall focus on the promotion of competition as a key objective. Where necessary, ComReg shall implement remedies which counteract or remove barriers to market entry and shall support entry by new players to the market and entry into new sectors by existing players. ComReg shall have a particular focus on:
 - market share of new entrants;
 - ensuring that the applicable margin attributable to a product at the wholesale level is sufficient to promote and sustain competition;
 - price level to the end user;

- competition in the fixed and mobile markets; and
- the potential of alternative technology delivery platforms to support competition.

Promotion of Competition

- A 1.55 Section 12(2)(a) of the 2002 Act requires ComReg to take all reasonable measures which are aimed at the promotion of competition, including:
 - encouraging efficient use and ensuring the effective management of radio frequencies and numbering resources;
 - ensuring that there is no distortion or restriction of competition in the electronic communications sector; and
 - ensuring that users, including disabled users, derive maximum benefit in terms of choice, price and quality.
- A 1.56 Regulation 34(1) of S.I. No. 444 of 2022 provides that ComReg 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.

Contributing to the Development of the Internal Market

- A 1.57 Section 12(2)(b) of the 2002 Act requires ComReg to take all reasonable measures which are aimed at contributing to the development of the internal market, including:
 - I. removing remaining obstacles to the provision of ECN, ECS and associated facilities at Community level;
 - encouraging the establishment and development of trans-European networks and the interoperability of transnational services and end-to-end connectivity; and
- III. co-operating with electronic communications national regulatory authorities in other Member States of the Community and with the Commission of the Community in a transparent manner to ensure the development of consistent regulatory practice and the consistent application of Community law in this field.

A 1.58 In so far as consolidating the development of the internal market is concerned, Regulation 17(2) of S.I. No. 444 of 2022 provides that in carrying out its tasks under these Regulations, ComReg shall, taking the utmost account of its objectives under section 12 of the Act of 2002 and Regulation 4, contribute to the development of the internal market by working with national regulatory authorities in other Member States, BEREC and the European Commission in a transparent manner to ensure the consistent application of the Directive.

Promotion of Interests of Users

- A 1.59 Section 12(2)(c) of the 2002 Act requires ComReg, when exercising its functions in relation to the provision of electronic communications networks and services, to take all reasonable measures which are aimed at the promotion of the interests of users within the Community, including:
 - ensuring that all users have access to a universal service;
 - ensuring a high level of protection for consumers in their dealings with suppliers, in particular by ensuring the availability of simple and inexpensive dispute resolution procedures carried out by a body that is independent of the parties involved;
 - contributing to ensuring a high level of protection of personal data and privacy;
 - promoting the provision of clear information, in particular requiring transparency of tariffs and conditions for using publicly available ECS;
 - encouraging access to the internet at reasonable cost to users;
 - addressing the needs of specific social groups, in particular disabled users;
 and
 - ensuring that the integrity and security of public communications networks are maintained.

Technological Neutrality

A 1.60 Further to Regulation 4(5) of S.I. No. 444 of 2022, ComReg, in pursuit of the policy objectives referred to in paragraph (3), shall apply impartial, objective, transparent, non-discriminatory and proportionate regulatory principles by, inter alia —(c) applying European Union law in a technologically neutral fashion, to the extent that this is consistent with the achievement of the objectives set out in paragraph (3).

Regulatory Principles

A 1.61 Further to Regulation 4(5) of S.I. No. 444 of 2022, ComReg, in pursuit of the policy objectives referred to in paragraph (3), shall apply impartial, objective, transparent, non-discriminatory and proportionate regulatory principles by, inter alia: promoting regulatory predictability by ensuring a consistent regulatory approach over appropriate review periods and through cooperation with each other, with BEREC, with the RSPG and with the European Commission:

- ensuring that, in similar circumstances, there is no discrimination in the treatment of undertakings providing ECN and ECS;
- promoting efficient investment and innovation in new and enhanced infrastructures, including by ensuring that any access obligation takes appropriate account of the risk incurred by the investing undertakings and by permitting various cooperative arrangements between investors and parties seeking access to diversify the risk of investment, while ensuring that competition in the market and the principle of non-discrimination are preserved,
- taking due account of the variety of conditions relating to infrastructure, competition, the circumstances of end-users and, in particular, consumers that exist in the various geographic areas within the State, including local infrastructure managed by individuals on a not-for-profit basis, and
- imposing ex-ante regulatory obligations only to the extent necessary to secure
 effective and sustainable competition in the interest of end-users where there
 is no effective and sustainable competition and relaxing or lifting such
 obligations as soon as that condition is fulfilled. BEREC

A 1.62 Under Regulation 4(4) of S.I. No. 444 of 2022, ComReg must:

- having regard to its objectives under section 12 of the 2002 Act and its tasks under these Regulations, actively support the goals of BEREC of promoting greater regulatory coordination and consistency; and
- take the utmost account of guidelines, opinions, recommendations, common positions, best practices and methodologies adopted by BEREC when adopting decisions for the markets in the State.

Other Obligations under the 2002 Act

A 1.63 In carrying out its functions, ComReg is required, amongst other things, to:

 seek to ensure that any measures taken by it are proportionate having regard to the objectives set out in section 12 of the 2002 Act;⁴⁹

- have regard to international developments with regard to the radio frequency spectrum⁵⁰; and
- take the utmost account of the desirability that the exercise of its functions aimed at achieving its radio frequency management objectives does not result in discrimination in favour of or against particular types of technology for the provision of ECS.⁵¹

⁴⁹ Section 12(3) of the 2002 Act.

⁵⁰ Section 12(5) of the 2002 Act.

⁵¹ Section 12(6) of the 2002 Act.

Annex: 2 Frequency Plan and List of Channels

A 2.1Table 1below shows the revised channels proposed for national telemetry users.

	Blo	ck 1	Blo	ck 2	Blo	ck 3	Blo	ck 4	Blo	ck 5	Blo	ck 6
	MHz	MHz										
Cell	Base	Outstation										
Α	457.64375	463.14375	458.20625	463.70625	458.23125	463.73125	456.99375	462.49375	457.24375	462.74375	458.40625	463.90625
В	457.75625	463.25625	457.00625	462.50625	457.25625	462.75625	457.46875	462.96875	458.31250	462.81250	458.35625	463.85625
С	457.85625	463.35625	457.99375	463.49375	458.11875	463.61875	457.01875	462.51875	457.26875	462.76875	458.44375	463.94375
D	457.65625	463.15625	457.69375	463.19375	458.10625	463.60625	458.13125	463.63125	457.03125	462.53125	457.39375	462.89375
E	457.83125	463.33125	457.86875	463.36875	457.95625	463.45625	457.04375	462.54375	458.29375	463.79375	458.31875	463.81875
F	458.00625	463.50625	458.24375	463.74375	457.05625	462.55625	457.40625	462.90625	457.48125	462.98125	458.26875	463.76875
G	457.61875	463.11875	457.63125	463.13125	457.73125	463.23125	458.39375	463.89375	457.09375	462.59375	458.36875	463.86875
Н	457.60625	463.10625	457.91875	463.41875	457.96875	463.46875	458.25625	463.75625	457.10625	462.60625	458.28125	463.78125
J	457.84375	463.34375	458.14375	463.64375	458.16875	463.66875	457.11875	462.61875	457.41875	462.91875	458.45625	463.95625
K	457.98125	463.48125	458.21875	463.71875	457.18125	462.68125	457.43125	462.93125	457.90625	463.40625	458.33750	463.83750
L	457.59375	463.09375	457.19375	462.69375	457.44375	462.94375	457.74375	463.24375	458.34375	463.84375	458.38125	463.88125
M	458.15625	463.65625	457.23125	462.73125	457.28125	462.78125	457.45625	462.95625	457.49375	462.99375	458.46875	463.96875

Reserve ⁵²					
MHz MHz					
Base	Outstation				
458.493750	463.993750				
458.48125	463.98125				

Table 1: Proposed UHF frequency allocations for national telemetry licences

⁵² Reserve channels may be made available in instances where co-ordination issues arise.

Irish Channels Not aligned with UK

List of Channels for Non-national Telemetry Licences

A 2.2Table 5 below shows the revised channels proposed for On-Site, Local Area and Wide Area telemetry users. Table 6 shows VHF On-Site, Local Area and Wide-Area Telemetry Channel Assignments.

A 2.3Table of VHF non-national frequencies

Channel number (VHF)	Sub-channel centre frequency (MHz)	Sub-channel centre frequency (MHz)	Channel type Duplex (kHz)
1	165.2563	170.0625	2 x 12.5
2	165.2688	170.0750	2 x 12.5
3	165.2813	170.0875	2 x 12.5
4	165.3188	170.1250	2 x 12.5
5	165.3313	170.1375	2 x 12.5

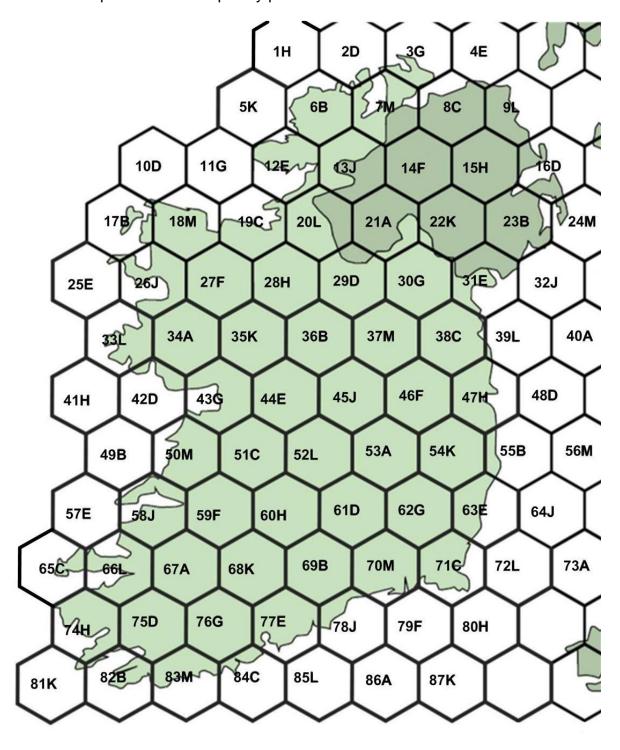
Table 2: Proposed VHF frequency allocations proposed on-site, local area and wide area telemetry licences

Channel Number (UHF)	Sub-channel Centre Frequency (MHz)	Sub-channel Centre Frequency (MHz)	Channel type Duplex (kHz)
1	455.6000	469.6000	2 x 12.5
2	455.6125	469.6125	2 x 12.5
3	455.6250	469.6250	2 x 12.5
4	455.6375	469.6375	2 x 12.5
5	455.6500	469.6500	2 x 12.5
6	455.6625	469.6625	2 x 12.5
7	455.6750	469.6750	2 x 12.5
8	455.6875	469.6875	2 x 12.5
9	455.7000	469.7000	2 x 12.5
10	455.7125	469.7125	2 x 12.5
11	455.7250	469.7250	2 x 12.5
12	455.7500	469.7500	2 x 12.5
13	455.8250	469.8250	2 x 12.5
14	455.8375	469.8375	2 x 12.5

Table 3: Proposed UHF frequency allocations proposed on-site, local area and wide area telemetry licences

Annex: 3 Adaptive Cellular Frequency Plan

A 3.1The adaptive cellular frequency plan is shown below.



Annex: 4 National telemetry cell-centre co-ordinates

Cell Centre Coordinates in National Irish Grid Reference (NIGR)

	Lattice Reference on the map	Coord	linates		Lattice Reference on the map	
Cell Number	(using 12 cell frequency reuse cluster)	Easting	Northing	Cell Number	(using 12 cell frequency reuse cluster)	
1	1H	167340	449594	45	45J	
2	2D	210618	452660	46	46F	
3	3G	253914	456158	47	47H	
4	4E	297242	459918	48	48D	
5	5K	147749	410692	49	49B	
6	6B	191587	413584	50	50M	
7	7M	235138	416550	51	51C	
8	8C	278612	420186	52	52L	
9	9L	322270	424273	53	53A	
10	10D	83461	369356	54	54K	
11	11G	127516	371360	55	55B	
12	12E	171841	373980	56	56M	
13	13J	215933	377099	57	57E	
14	14F	260047	380657	58	58J	
15	15H	304034	384383	59	59F	
16	16D	347845	388864	60	60H	
17	17B	62823	330576	61	61D	
18	18M	107520	332397	62	62G	
19	19C	151982	334895	63	63E	
20	20L	196559	337750	64	64J	
21	21A	241088	340866	65	65C	
22	22K	285368	344652	66	66L	
23	23B	329582	348866	67	67A	
24	24M	373915	353357	68	68K	
25	25E	41861	291717	69	69B	
26	26J	86940	293596	70	70M	Ĺ
27	27F	131794	295817	71	71C	
28	28H	176859	298315	72	72L	Ĺ
29	29D	221602	301399	73	73A	Ĺ
30	30G	266361	305005	74	74H	Ĺ
31	31E	310985	308863	75	75D	

	Lattice Reference on the map	Coord	dinates
Cell Number	(using 12 cell frequency reuse cluster)	Easting	Northing
45	45J	227348	225792
46	46F	272830	229448
47	47H	318357	233300
48	48D	363529	237894
49	49B	69128	178103
50	50M	115168	180510
51	51C	161330	183194
52	52L	207348	186232
53	53A	253481	189719
54	54K	299036	193519
55	55B	344695	197848
56	56M	390210	202521
57	57E	47439	139712
58	58J	94051	141591
59	59F	140262	143811
60	60H	186847	146661
61	61D	233096	150103
62	62G	279285	153898
63	63E	325681	158071
64	64J	371436	162290
65	65C	25539	100831
66	66L	72706	102686
67	67A	119643	104894
68	68K	166252	107616
69	69B	212731	110518
70	70M	259566	114224
71	71C	306184	118109
72	72L	352642	122507
73	73A	398877	127160
74	74H	50417	63762
75	75D	97995	66031

32	32J	355624	313246
33	33L	65869	254627
34	34A	111375	256578
35	35K	156824	259054
36	36B	202042	261951
37	37M	247059	265299
38	38C	292204	269127
39	39L	337143	273398
40	40A	382035	277936
41	41H	44397	215327
42	42D	90455	217422
43	43G	136112	219859
44	44E	181713	222645

76	76G	145162	68565
77	77E	192103	71359
78	78J	239166	74609
79	79F	286086	78210
80	80H	333386	82374
81	81K	28687	25381
82	82B	76472	27281
83	83M	123762	29350
84	84C	171506	32397
85	85L	218953	35369
86	86A	266367	38537
87	87K	313593	42554

Annex: 5 Draft Licensing Regulations

- A 5.1Any final version of these regulations, which would be made by ComReq under section 6 of the Wireless Telegraphy Act 1926, is expressly subject to the consent of the Minister for the Environment, Climate and Communications under section 37 of the Communications Regulation Act 2002, as amended.
- A 5.2ComReg 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 2024

WIRELESS TELEGRAPHY (TELEMETRY LICENCE) REGULATIONS 2024

WIRELESS TELEGRAPHY (TELEMETRY LICENCE) REGULATIONS 2024

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 the Environment, Climate and Communications (as adapted by the Communications, Climate Action and Environment (Alteration of Name of Department and Title of Minister) Order 2020 (S.I. No. 373 of 2020)) in accordance with section 37 of the Communications Regulation Act 2002 (No. 20 of 2002), hereby makes the following Regulations:

Citation

1. (1) These Regulations may be cited as the Wireless Telegraphy (Telemetry Licence) Regulations 2024.

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;
- "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;
- "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;
- "Harmful Interference" has the meaning set out in the EECC Regulations;
- "Licence Fee" means the annual fee as set out in Schedule 2 which applies to a Licence;
- "Licence" means a Non-exclusive Licence granted under section 5 of the Act of 1926 in accordance with and subject to the matters prescribed in these Regulations to keep and have possession of Apparatus in a specified place in the State, being one of:
 - (a) a Regional on-site Licence;
 - (b) a Regional local area Licence;
 - (c) a Regional wide are Licence; or
 - (d) a National Licence.

"Licensee" means the holder of a Licence;

"National 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 to operate a national Telemetry System.

"Network Utility Operator" means:

- (a) in the electricity sector the person, who is an electricity undertaking or who intends to carry out a function of an electricity undertaking, that has been granted a licence by the Commission for Regulation of Utilities under section 14 of the Electricity Regulation Act 1999, as amended:
 - to discharge the functions of the transmission system operator;
 - to discharge the functions of the transmission system owner;
 - to discharge the functions of the distribution system operator;
 - to discharge the functions of the public electricity supplier;
 - to transport electricity across and maintain an interconnector;
 - to act as the Single Electricity Market operator;
 - to discharge the functions of Distribution System;
 - to carry out the function of aggregation;
 - to carry out the function of demand response;
 - to carry out the function of energy storage; and
 - to discharge the functions of an electricity undertaking engaged in purchasing electricity, not for own use.
- (b) in the gas sector the company, or a subsidiary of the company, whose functions are laid out in section 8 of the Gas Act 1976 and in section 11 of the Gas (Interim) (Regulation) Act 2002, as amended; and
- (c) in the water sector the entity formed by virtue of section 4 of the Water Services Act 2013 as amended.
- "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 Equipment Regulations" means the European Union (Radio Equipment) Regulations 2017 (S.I. No. 248 of 2017);
- "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;

"Regional On-site 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 to operate a low power Telemetry Systems where the transmitter and receiver are within a geographic area less than 1 km radius;

"Regional Local-area 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 to operate a local area Telemetry System within a geographic area greater than 1 km radius but less than 12.5 km radius from the base station:

"Regional Wide-area 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 to operate a Wide-area Telemetry System within a geographic area greater than 12 km radius but less than 25 km radius from the base station;

"Telemetry System" means a Wireless Telegraphy system by which automated measurements are made and other data collected at remote or inaccessible locations, and transmitted to receiving stations for monitoring, recording or remote control purposes;

"Undertaking" means a person engaged or intending to engage in the provision of Electronic Communications Networks or Electronic Communications Services or associated facilities.

(3) 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 1926 has, unless the context otherwise requires, the same meaning in these Regulations that it has in that Act;
- (d) 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;
- (e) 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 Licences for Telemetry Systems.

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 a specified locations in the State, Apparatus to facilitate the operation of a Telemetry System.
- (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 Telemetry System and the Commission shall bear no responsibility for such costs, expenses or commitments.

(3) A national Licence shall only be granted to a Network Utility Operator for the provision of a national Telemetry System.

Application for Licences and Form of Licences

- 5. (1) An application for a Licence will be made to the Commission and shall be in writing 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 2 to these Regulations.

Duration of Licences

6. (1) A Licence shall, unless it has been withdrawn or had its duration reduced under Regulation 8, remain in force from the date of grant and shall expire in full at midnight on 7 July 2034.

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 the Apparatus is used only on such radio frequency spectrum 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 2 to these Regulations, and in accordance with Regulation 9 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 and 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 Parts 3 and 4 of the licence within 30 days of each anniversary of the commencement of the 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 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;
- (j) 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;
- (k) 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;
- (l) 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;
- (m) having notified and obtained the prior written consent of the Commission, the Licensee may lease or transfer the Licence to another Undertaking where the attached conditions are maintained:
- (n) the licensee shall use the spectrum rights of use granted exclusively for the operation and functioning of the licensee's Telemetry System;
- (o) the Licensee shall comply with all obligations under relevant international agreements relating to the use of Apparatus or the frequencies to which they are assigned; and
- (p) 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, 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 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.

Licence Fees

- 9. (1) Fees as set out and provided for in the fees table in Schedule 2 are hereby prescribed in relation to 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 on the date of first granting of a licence and thereafter annually on or before each anniversary of the date of first granting of a Licence.
- (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) If a 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 Licence of the relevant fee.
- (5) 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.
- (6) An amount payable by a Licensee may be recovered by the Commission as a simple contract debt in any court of competent jurisdiction.
 - (7) The fees will be implemented in accordance with Schedule 2.

Transitional Arrangements

- 10. (1) Subject to paragraph (2) of this Regulation, the Wireless Telegraphy (Licensing of Telemetry System) Regulations 2014 (S.I. No. 240 of 2014) are hereby revoked.
- (2) A licence granted under the Wireless Telegraphy (Licensing of Telemetry System) Regulations 2014 (S.I. No. 240 of 2014) in force immediately before the commencement of these Regulations will continue in force as if it had run continuously from the date of its grant until its expiry date.

SCHEDULE 1

WIRELESS TELEGRAPHY ACT, 1926

WIRELESS TELEGRAPHY (TELEMETRY LICENCE) REGULATIONS, 2024 LICENCE CERTIFICATE

Part 1

Licence Number:
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), grants to the Licensee specified, authorisation to keep, have possession of, install, maintain, work and use Apparatus as specified in Parts 3 and 4 of this Licence subject to the Licensee observing the conditions contained in Regulation 7 of the Wireless Telegraphy (Telemetry Licence) Regulations, 2024 (S.I. of 2024)
Licensee:
Address:
Licence Type:
Commencement and Termination Dates (if applicable):
The Licence comes into effect on <i>DD/MM/YY</i> and, subject to withdrawal or suspension, expires on 7 July 2034.
Signed:
on behalf of the Commission for Communications Regulation
Date:

Part 2
Frequency assignment, commencement and expiry dates of Licence

Frequency assignment	Commencement Date	Expiry Date

Part 3 Apparatus to which this Licence applies

Equipment Index Reference	Equipment Description	Manufacturer	Model

Part 4 Apparatus location and details

Frequency	Site Identity	Latitude (decimal degrees)	Longitude (decimal degrees)	Equipment Index Reference	ERP

SCHEDULE 2

FEES PAYABLE IN CONNECTION WITH LICENCES

The Licence Fee is equal to the fee for that Licence in the base year (the "Base Fee"), indexed to the annual rate of inflation since 2023 using the Consumer Price Index ("CPI"). The Base Fee for a Licence is set out in the following table.

Licence	Number of 2 x 12.5 kHz channels assigned in a licence	Base Fee (to be adjusted for CPI)	
Regional On- site	1	€133	
Regional Local-area	1	€531	
Regional Wide-area	1	€1,062	
National	12	€47,794 (per 12 channels)	

The CPI adjustment, is set out in the following formula as follows:

$$B = \frac{CPI_t}{CPI_{2024}} * 100$$

The fees are based on a duplex 12.5 kHz channel (2 x 12.5 kHz). If a 2 x 25 kHz channel is required then two adjacent 12.5 kHz channels may be aggregated. In such cases the fees payable will be as if two separate 12.5 kHz channels were assigned.

Where CPI_t represents the 12-month Consumer Price Index figures published by the Central Statistics Office, for year t, the year immediately preceding the indexation. CPI_{2024} represents the 12-month Consumer Price Index figures published by the Central Statistics Office for 2024. The first indexation shall take place on the 8 July 2025 and shall occur annually thereafter on that same date.

The Licence Fee indexed to the Consumer Price Index is equal to:

$$C = A \times B$$

Where:

- A is the Base Fee for a Licence; and
- B is the CPI adjustment for the relevant period

GIVEN under the Official Seal of	of the Commission for	or Communications	Regulation,
			2024

On behalf of the Commission of Communications Regulation

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

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

2024

Minister for the Environment, Climate and Communications.