

COVID-19: Temporary spectrum management measures

Response to Consultation and Decision on further temporary spectrum rights (No.4) in the 700 MHz Duplex and 2.1 GHz Bands

Response to Consultation, Decision and final Draft Regulations

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An Coimisiún um Rialáil Cumarsáide Commission for Communications Regulation 1 Lárcheantar na nDugaí, Sráid na nGildeanna, BÁC 1, Éire, D01 E4X0. One Dockland Central, Guild Street, Dublin 1, Ireland, D01 E4X0. Teil | Tel +353 1 804 9600 Suíomh | Web www.comreg.ie

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Content

Se	ectio	on Pa	ige
Cł	napte	er 1 7	
1	Intr	roduction	7
	1.1	Structure of document	8
Cł	napte	er 2 10	
2	Ba	ckground Information	.10
	2.1	COVID19: Government's measures and vaccination plan	. 10
	2.2	Network traffic since the adoption of COVID-19 measures	. 11
	2.3 2.3 (MBSA2: Long-term assignment of spectrum rights in the 700 MHz, 2.1 G GHz, and 2.6 GHz bands	
	2.4	Other supporting actions: spectrum leasing	. 15
Cł	napte	er 3 16	
3 fra		propriateness of a further temporary spectrum licensing (No.4) vork 16	
	3.1	Summary of Chapter 3 in Document 22/17	. 16
	3.2	Views of respondents to Document 22/17	. 19
	3.3	ComReg's assessment of respondent's views	. 22
	3.4	ComReg's final position	. 23
Cł	napte	er 4 24	
4	Lic	ence Conditions	.24
	4.1	Summary of Chapter 4 in Document 22/17	. 24
	4.2	Views of respondents	. 24
	4.3	ComReg assessment of respondents' views	. 25
	4.4	ComReg's final position	. 25
Cł	napte	er 5 26	
5	De	cision	.26
	1.	DEFINITIONS AND INTERPRETATION	. 26
	2.	DECISION-MAKING CONSIDERATIONS	. 27
	3.	DECISIONS	. 29
	4.	STATUTORY POWERS NOT AFFECTED	. 30

Cł	napter 6 31	
6	Next steps	31

Annex

Section		Page
Annex: 1	Glossary	32
Annex: 2	Legal Framework and Statutory Objectives	35
Annex: 3	Non-confidential submissions to Document 22/17	51
	Draft Wireless Telegraphy (Further Temporary Electronic ations Services Licences) (No. 4) Regulations	52

Table of Figures and Tables

Section

Page

Figure	1: Mobile Network	ks Monthly Aggre	egate Traffic V	Volume Increase	12
Figure	2:Mobile data volu	umes and annua	I percentage	growth	13
Figure	3:Mobile voice mi	nutes and annua	al percentage	growth	14

Chapter 1

1 Introduction

ComReg Document 22/17

- 1.1 On 4 March 2022, the Commission for Communications Regulation ("ComReg") published Document 22/17¹, in which it set out its proposals for a further temporary electronic communications service ("ECS") licensing framework beyond 1 April 2022 (the "Proposed Approach"), given:
 - the temporary and extraordinary situation currently presented by COVID-19 and the increased traffic demands placed on wireless networks arising from the Government measures to address same, (hereinafter termed the "Temporary Situation"); and
 - the need to provide the current licensees (i.e., the three mobile network operators ("MNOs")²) a reasonable period of time to manage an orderly transition (i.e., a reconfiguration of their networks) away from the use of COVID-19 temporary spectrum rights.
- 1.2 ComReg also indicated that, based on current information, it:
 - expects that this will be its final proposal to put in place a further temporary licensing framework on the basis of the Temporary Situation; and
 - emphasises that the MNOs should now begin to make transition plans and take actions in advance of the end of the proposed temporary spectrum licences.
- 1.3 ComReg received submissions from the following interested parties in response to Document 22/17:
 - Eircom Limited and Meteor Mobile Communication Limited (trading as 'eir' and 'open eir') ("Eir");
 - Three Ireland (Hutchison) Limited ("Three");
 - Virgin Media Ireland Limited ("Virgin Media"); and

¹ Document 22/17 "Covid-19: Temporary Spectrum Management Measures –Further temporary spectrum rights (No.4) in the 700 MHz Duplex and 2.1 GHz Bands", published 4 March 2022.

² Namely, Meteor Mobile Communications Limited ("Meteor"), Three Ireland (Hutchison) Limited ("Three") and Vodafone Ireland Limited ("Vodafone").

- Vodafone Ireland Limited ("Vodafone").
- 1.4 The non-confidential versions of these submissions are contained in Annex 3 of this document.
- 1.5 This document sets out ComReg's response to consultation and final decision in respect of the Proposed Approach.
- 1.6 Having considered the submissions from interested parties and all other relevant information before it, ComReg is of the view that it is appropriate to implement a further temporary licensing framework beyond 1 April 2022 for a period of up to 6-months.
- 1.7 It is important to note that the background to, and context of, the Proposed Approach is exceptional. While, in this document, ComReg has decided to introduce a further temporary spectrum licensing framework of up to 6 months, ComReg reminds interested parties that the further temporary ECS licensing framework is entirely without prejudice to ComReg's Multi Band Spectrum Award (MBSA2) process for the long-term assignment of spectrum rights of use in the 700 MHz Duplex, 2.1 GHz, 2.3 GHz and 2.6 GHz bands (see Section 2.5 of Document 22/17) as provided for in the MBSA2 decision³.

1.1 Structure of document

- 1.8 The remainder of this document is structured as follows:
 - Chapter 2: sets out some background information relevant to this response to consultation, including updated information on the Government measures adopted to address COVID-19 and some updated network traffic information;
 - Chapter 3: summarises ComReg's consideration in Document 22/17 on whether it would be appropriate in principle to provide for a further temporary spectrum licensing framework in light of the Temporary Situation, the views of respondents and ComReg's assessment of same;
 - **Chapter 4:** summarises ComReg's licence conditions proposals set out in Document 22/17 with respect to a further temporary spectrum licensing (No. 4) framework, the views of respondents and ComReg's assessment of same;

³ ComReg Document No. <u>20/122</u>, ComReg Decision D11/20; *Multi Band Spectrum Award - Response to Consultation and Decision - The 700 MHz Duplex, 2.1 GHz, 2.3 GHz and 2.6 GHz Bands, published 18 December 2020.*

- **Chapter 5:** sets out ComReg's Decision based on the views expressed by ComReg in the preceding chapters;
- Chapter 6: outlines the next steps;
- Annex 1: includes a glossary of terms;
- Annex 2: summarises ComReg's statutory functions, objectives, and duties relevant to the management of Ireland's radio frequency spectrum;
- **Annex 3**: sets out the non-confidential submissions by interested parties to Document 22/17; and
- Annex 4: sets out the finalised regulations to be made by ComReg, subject to the consent of the Minister, in order to facilitate the assignment of further temporary spectrum rights of use.

Chapter 2

2 Background Information

- 2.1 In Chapter 2 of Document 22/17, ComReg set out some background information relevant to its proposals including:
 - the COVID-19 Temporary Spectrum Licensing Frameworks implemented to date;
 - the Government measures to address COVID-19 and associated vaccination plan;
 - network traffic information since the adoption of the Government measures;
 - consumer information: mobile voice and mobile data services;
 - ComReg's MBSA2 project; and
 - other supporting actions such as spectrum leasing.
- 2.2 In this chapter, ComReg sets out some updated information relevant to this material.

2.1 COVID19: Government's measures and vaccination plan

2.3 In relation to COVID-19 Government measures, ComReg notes that the background information presented in Section 2.2 of Document 22/17 remains valid, with the exception that, from 6 March 2022, the COVID-19 restrictions for travelling to Ireland were removed⁴.

COVID-19 Vaccination Programme

2.4 Since Document 22/17 was published, there has been some further progress in the vaccination rollout in Ireland. As of 14 March 2022, and based on figures provided by the Health Service Executive⁵:

⁴ See Citizens Information, "Public Health Measures for COVID-19", accessed on 9 March 2022, available at <u>https://www.citizensinformation.ie/en/covid19/living_with_covid19_plan.html</u>

⁵ Gov.ie, "Vaccinations", available at

https://covid19ireland-geohive.hub.arcgis.com/pages/vaccinations.

- the cumulative vaccine uptake for people 5 years and older in Ireland of one dose is 86.27% and for full vaccination is 84.80%, giving Ireland one of the highest rates of COVID-19 vaccination doses administered in Europe⁶; and
- the cumulative booster vaccine uptake for people 5 years and older is 60.9%.

2.2 Network traffic since the adoption of COVID-19 measures

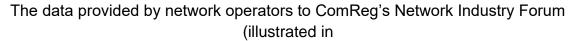
- 2.5 This section presents updated information on the network traffic demands being placed on MNOs in light of the Temporary Situation which is informed by:
 - I. The weekly network performance reports provided by network operators to ComReg's Network Industry Forum⁷; and
 - II. ComReg's Quarterly Key Data Reports and the Data Portal where ComReg informs stakeholders of the key trends and developments in the Irish electronic communications market.
- 2.6 Since Document 22/17 was published, one additional weekly network performance report was compiled and, on 9 March 2022, ComReg published the Quarterly Key Data Report for Q4 2021 (ComReg Document 22/19⁸).

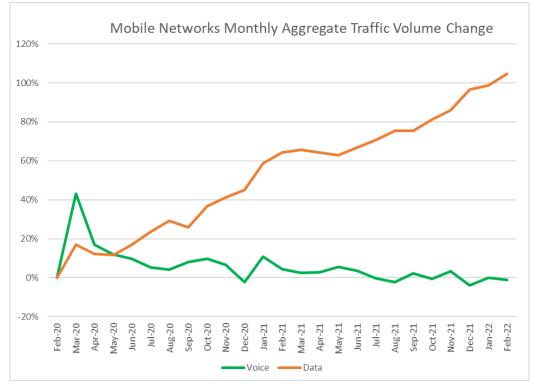
⁶ Statista, "Number of Covid-19 Vaccination doses administered in Europe by country", available at <u>www.statista.com</u>

⁷ In ComReg's Network Industry Forum, network operators submit network traffic information to ComReg to allow ComReg, and other Government stakeholders, better understand the changing demands being placed on network operators and their ability to meet these demands. Network performance reports refers to the reports compiled by ComReg based on the network traffic information submitted by operators.

⁸ ComReg <u>Document 22/19</u>, "Quarterly Key Data Report – Q4 2021", published 9 March 2022, available at <u>https://www.comreg.ie/</u>

I. Network Performance Reports





2.7 Figure 1) presents the aggregate monthly change in voice and data traffic volumes on the mobile networks from February 2020 to February 2022, compared to a pre-COVID-19 base level (i.e., February 2020)

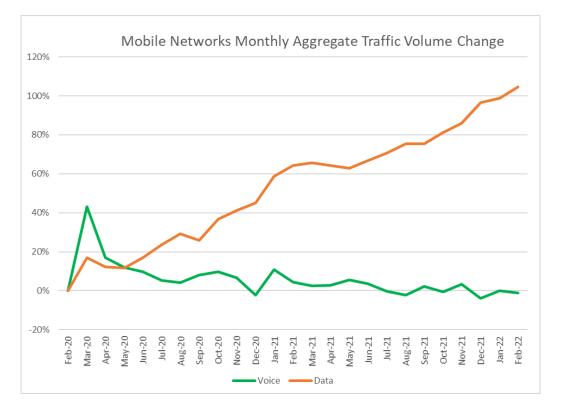


Figure 1: Mobile Networks Monthly Aggregate Traffic Volume Increase⁹

- 2.8 From this information, ComReg observes:
 - For **mobile voice traffic volumes**, in March 2020 this increased sharply by 43% compared to the pre-COVID-19 base level, but since then, it has declined to pre-COVID-19 levels; and
 - For mobile data traffic volumes, in March 2020 this increased by 17% compared to the pre-COVID-19 base level, and since then, this has generally increased at a stable rate with no sharp increases or decreases.

II. ComReg Quarterly Key Data

- 2.9 Information from the data sets¹⁰ informing ComReg's Quarterly Key Data Reports, including its most recent data for Q4 2022¹¹, is presented as follows:
 - Figure 2 provides information on mobile data expressed in terms of volumes and annual % growth; and

⁹ Note that these are total traffic volume changes against a base level before the COVID-19 government restrictions were put in place.

¹⁰ See <u>https://www.comreg.ie/industry/electronic-communications/data-portal/tabular-information/</u>

¹¹ ComReg <u>Document 22/19</u>, "Quarterly Key Data Report – Q4 2021", published 9 March 2022, available at <u>https://www.comreg.ie/</u>

• Figure 3 provides information on mobile voice expressed in terms of volume and annual % growth.

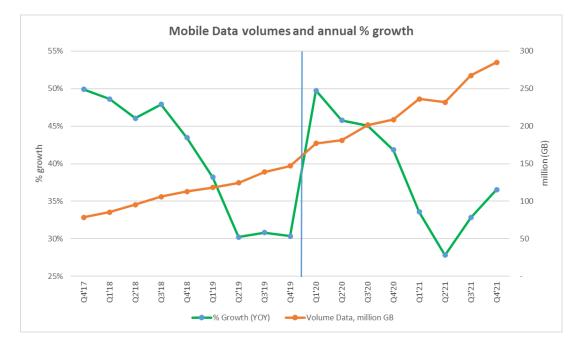


Figure 2: Mobile data volumes and annual percentage growth

- 2.10 Figure 2 shows the growth in mobile data for each quarter in terms of volume and the rate of growth over the past four years and allows for comparison of mobile data growth evolution before and after the introduction of COVID-19 measures. In summary:
 - prior to the introduction of COVID-19 measures at the beginning of 2020:
 - mobile data volumes (i.e., each GB uploaded or downloaded) were already increasing significantly; and
 - annual percentage growth rates had stabilised around 30 35% for the previous three quarters;
 - each of the four quarters in 2020 show growth rates above pre-COVID-19 levels, with a peak growth rate during COVID-19 of 50% in Q1 2020; and
 - rates of growth since that peak have been lower in subsequent quarters such that annual percentage data growth rates now are comparable to the 30-35% growth levels experienced pre-COVID-19.

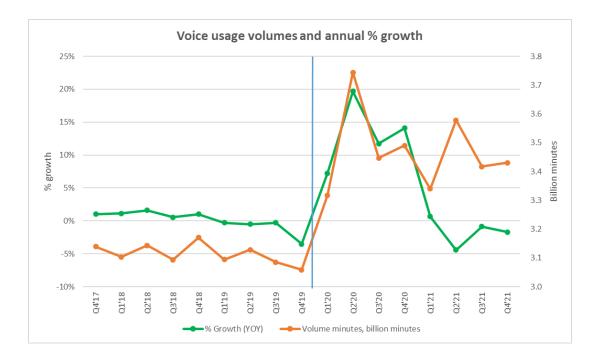


Figure 3: Mobile voice minutes and annual percentage growth

- 2.11 Figure 3 shows the growth in voice minutes for each quarter in terms of volume and rate of growth over the last four years and allows for comparison of mobile voice growth evolution before and after the introduction of COVID-19 measures. In summary:
 - prior to the introduction of COVID-19 measures at the beginning of 2020:
 - the volume of minutes on a quarterly basis was around 3.1 billion (aside from some seasonable variability); and
 - there was close to a zero rate of growth for the period in the lead up to COVID-19 (indeed it has been close to zero for the previous 5 years);
 - each of the four quarters in 2020 show growth rates and volume of minutes above pre-COVID-19 levels, with peak increases during COVID-19 of around 20% or 3.7 billion minutes in Q2 2020; and
 - since that peak in Q2 2020, the rate of annualised growth has steadily declined and has been negative for the last three quarters, although mobile voice volumes have remained above the pre-COVID-19 levels of circa 3.1 billion minutes.

2.3 MBSA2: Long-term assignment of spectrum rights in the 700 MHz, 2.1 GHz, 2.3 GHz, and 2.6 GHz bands

- 2.12 As set out in Section 2.5 of Document 21/87, ComReg is continuing to progress its MBSA2 project for the long-term assignment of spectrum rights of use in the 700 MHz, 2.1 GHz, 2.3 GHz, and 2.6 GHz bands, noting that certain parts of the MBSA2 Decision (Decision D11/20¹²) are under appeal¹³.
- 2.13 As outlined by ComReg in Document 21/04R¹⁴, Three's appeal does not of itself affect the taking effect of the MBSA2 Decision or prevent action being taken to implement it and ComReg is opposing the appeal in full.
- 2.14 The Appeal hearing was held in June 2021, following which two separate sets of Court directions were issued. Parties are awaiting a judgment to be issued on the matter.

2.4 Other supporting actions: spectrum leasing

2.15 In relation to spectrum leasing, and since Document 22/17 was published, ComReg has received notification that both Eir and Vodafone have agreed with Imagine to extend their existing licence lease agreements in the 3.6 GHz band for another three months, and ComReg has therefore issued a spectrum lease licence to Imagine for the period 16 March 2022 to 15 June 2022.

¹² See:

 <u>ComReg Document No. 20/122, ComReg Decision D11/20</u>; Multi Band Spectrum Award -Response to Consultation and Decision - The 700 MHz Duplex, 2.1 GHz, 2.3 GHz and 2.6 GHz Bands, published 18 December 2020. Available at: <u>https://www.comreg.ie/publication/</u>;

- <u>ComReg Document No. 20/122b</u>; *Multi Band Spectrum Award A Report by Plum Consulting London LLP*, published 18 December 2020. Available at: <u>www.comreg.ie/publication/;</u> and
- <u>ComReg Document No. 20/122s</u>; Multi Band Spectrum Award Updated Versions of Nonconfidential Submissions to Document 19/124, 20/32 and 20/56, published 18 December 2020. Available at: <u>www.comreg.ie/publication/</u>.

^{• &}lt;u>ComReg Document No. 20/122a</u>; *Multi Band Spectrum Award - DotEcon Report* Assessment of responses to consultation on Draft Decision, published 18 December 2020. Available at: <u>www.comreg.ie/publication/;</u>

¹³ On 14 January 2021, Three Ireland (Hutchison) Limited and Three Ireland Services (Hutchison) Limited (collectively "Three") lodged an appeal against the MBSA2 Decision to the High Court.

¹⁴ ComReg Document <u>21/04R</u>, "Appeal by Three in relation to Multi Band Spectrum Award – The 700 MHz Duplex, 2.1 GHz, 2.3 GHz and 2.6 GHz Bands" published 20 January 2021 and revised on 29 January 2021, available at <u>www.comreg.ie</u>.

Chapter 3

3 Appropriateness of a further COVID-19 temporary spectrum licensing framework

3.1 This chapter sets out ComReg's final position on the appropriateness of implementing a further COVID-19 temporary spectrum licensing framework given the Temporary Situation.

3.1 Summary of Chapter 3 in Document 22/17

- 3.2 In Chapter 3 of Document 22/17, ComReg set out its preliminary assessment on whether it would be appropriate to implement a further COVID-19 temporary spectrum licensing framework given the Temporary Situation.
- 3.3 Section 3.1 outlined the key points from Document 22/02¹⁵ wherein ComReg set out:
 - guidance regarding the information requirements and next steps in considering any further temporary licensing framework beyond 1 April 2022; and
 - a number of observations on various factors to assess in considering whether it would be appropriate to implement a further COVID-19 temporary spectrum licensing framework.
- 3.4 In summary, ComReg had recommended in Document 22/02 that the MNOs submit a joint or common request for any further temporary licensing framework to ComReg by 10 February 2022 which should:
 - set out the specific details of any such joint/common request; and
 - provide sufficiently detailed supporting information based on the updated and prevailing COVID-19 considerations at that time.
- 3.5 Section 3.2 set out the information submitted by the MNOs in support of their request for a further temporary spectrum licensing framework and noted that:

¹⁵ ComReg Document 22/02 - COVID-19 Potential Further Temporary ECS Licensing – January 2022 update and next steps in considering any further temporary licensing framework – Published 19 January 2022.

- the three MNOs each submitted a common letter to ComReg dated 4 February 2022 wherein the MNOs "*jointly request that the terms of the current Temporary Spectrum Management Measures detailed in ComReg* 20/88 (D08/20) are extended unchanged"; and
- each of the MNOs separately submitted the requested information (identified at paragraph 31 of Document 22/02) in support of their common request.
- 3.6 In section 3.3 of Document 22/17, ComReg set out its observations on the common request. While ComReg noted that, based on current information, the Temporary Situation would appear to have ended with the removal of most COVID-19 measures from 28 February 2022, it also observed that there remain various other factors to assess in considering any further licensing framework arising from the Temporary Situation, including:
 - the possibility that the Government may have to amend specific aspects of its approach to managing COVID-19 and re-introduce significant COVID-19 measures. This could be required given uncertainties in the COVID-19 trajectory;
 - (ii) the lag effect between the withdrawal of COVID-19 measures and the emergence of stable traffic patterns, noting, among other things, that the return to work in offices is proceeding on a phased basis depending on the circumstances of individual workplaces; and
 - (iii) the need to provide the MNOs a reasonable time period to undertake transition activities in advance of the cessation of any temporary spectrum rights.
- 3.7 In relation to (i) above, ComReg observed that a temporary licensing framework for up to six months would provide a lengthy "safeguard" period to cater for the impact of any potential amendments to the Government approach to managing COVID-19, including the possible re-introduction of COVID-19 measures, noting though that ComReg had no evidence before it at that point in time to suggest that COVID-19 restrictions might be re-introduced in the future in any meaningful way.
- 3.8 In relation to factors (ii) and (iii) above, ComReg observed that there were a number of considerations (see paragraph 3.33 of Document 22/02) that would support a further temporary spectrum licensing framework, including that:
 - the MNOs had submitted that their networks are still carrying traffic directly attributable to the COVID-19 measures;

- the MNOs anticipated further uncertain changes in traffic patterns over the coming months given the lag effect following the removal of COVID-19 measures;
- with the deployment of temporary spectrum rights, the MNOs have been able to rapidly add capacity to support the provision of mobile voice and data services given the increased traffic demands caused by the Temporary Situation;
- the MNOs submitted that the removal of temporary spectrum rights would cause congestion and service degradation throughout Ireland; and
- in the MNOs' view, building new sites to address any short-term demand in advance of MBSA2 would be inefficient.
- 3.9 Noting the above context, and that temporary spectrum licences have always been justified on the basis of prevailing Government COVID-19 measures¹⁶, ComReg observed that a further temporary licensing framework for up to six months should provide a reasonable time period to account for:
 - the lag effect between the withdrawal of COVID-19 measures and the emergence of stable traffic patterns (factor (ii) in paragraph 3.6 above); and
 - any transition activities in advance of the cessation of any temporary spectrum rights (factor (iii) in paragraph 3.6 above). Noting that temporary spectrum licences have always been justified on the basis of prevailing Government COVID-19 measures, ComReg observed that the MNOs should now begin to make transition plans and take actions in advance of the end of the presently proposed new temporary spectrum licences.
- 3.10 Section 3.4 outlined ComReg's preliminary assessment of whether a further temporary spectrum licensing framework would be appropriate in principle. ComReg then set out its preliminary view that the Proposed Approach would be in the best interests of consumers and unlikely to distort competition whilst being appropriate in the context of ComReg's functions, objectives, and duties, including being objectively justified and proportionate.

¹⁶ For example, in the application declaration form, (See Part 6 of the application form Document 20/24a) Applicants confirm the following in applying for a temporary spectrum licence.

[&]quot;I confirm that <u>the Applicant is fully aware that the Licences are being made available solely to</u> <u>accommodate the claimed unanticipated spike in demand arising from the extraordinary situation</u> <u>relating to COVID-19</u>, that all Licences granted or renewed under the Regulations will expire 3 months after." (Emphasis Added)

3.2 Views of respondents to Document 22/17

Further temporary licensing framework to 1 October 2022

- 3.11 All four respondents to Document 22/17 are supportive of ComReg's proposals for a further temporary spectrum licensing framework, as outlined below.
- 3.12 Eir "agrees with ComReg's proposal to make available temporary spectrum rights for a further 6 months".
- 3.13 Virgin Media "is happy to support the continued temporary licensing of this spectrum as set out in ComReg Document No 22/17 and subject to the current coordination procedure with Virgin Media remaining in place."
- 3.14 Three "supports the Draft Decision to provide for a further extension of the temporary spectrum measures as described in document 22/17", and submits that:
 - "the temporary spectrum measures have been extremely important in allowing mobile networks to respond to the changed patterns of behaviour that occurred as a result of Covid-19" with the main benefit being that customers "received increased service quality in unusual times"; and
 - "[w]hile we have seen almost all restrictions lifted now and some return to normal work patterns has occurred, this is not complete yet. There might still be some unexpected or localised events that would again place unusual demands on the networks, so it would be unwise right at this time to remove the apparatus that we have put in place which would help us to respond to such events".
- 3.15 Vodafone submits that ComReg is "fully justified in extending these Temporary Spectrum measures for the further period proposed" and states that it "will apply for permission to use these measures and continue to add to their network to maintain excellent service for customers".

Further temporary licensing framework(s) beyond 1 October 2022

3.16 Two respondents, Eir and Vodafone, provided submissions on ComReg's expectation (as set out in paragraph 1.2 of Document 22/17) that "*this will be its final proposal to put in place a further temporary licensing framework on the basis of the Temporary Situation*".

- 3.17 Eir submits that it is too early to conclude that no further temporary licensing frameworks may be required beyond September 2022, and:
 - "Covid 19 is still a global concern and a cautious approach should be maintained";
 - it has experienced "significant and sustained data growth" and it is important that "availability of spectrum is maximised for mobile operators to support continued demand";
 - the full impact of changed consumer practices across the network will need to be understood. Eir submits that given the need to provide connectivity at home, at places of work and on commuter routes, there will be a more widespread and continued demand for mobile services, and a demand for availability of spectrum to support same. In this regard, Eir notes that:
 - the phased return to the office that is ongoing;
 - there is a shift towards hybrid working models by many organisations; and
 - o there is a need to support for online learning; and
 - the availability of temporary spectrum rights is essential while awaiting progress on long-term spectrum rights in the MBSA2 (see below for Eir's submissions on MBSA2).
- 3.18 Vodafone submits that ComReg should keep this position under review, and:
 - despite the relaxation of COVID-19 measures, it will be some time before a stable post-COVID-19 demand pattern is clear. In this regard, Vodafone further submits that:
 - "future growth remains very difficult to predict as there is considerable uncertainty about the effect of re-opening of society, and return to work plans which are going to be gradual and mixed between fully remote, hybrid and return to office. These changes will naturally effect both the volume of traffic and the locations where traffic demand will vary."
 - "The dispersed usage of spectrum is important to note and this supports remote working behaviours for our public and private sector citizens. As more organisations adapt to new ways of working over the next year the stable demand pattern will become clearer.";

- it is continuing "to invest heavily in network coverage and capacity", and its needs to ensure that investment is efficient and directed to locations where long-term requirements are justified; and
- its primary concern is that the 700 MHz layer provides enhanced accessibility and data services to its customers who, Vodafone claim, "...would be seriously challenged in terms of data services in hard to reach rural locations without access to this spectrum."

MBSA2 – long term spectrum rights

- 3.19 In relation to the issue of long-term spectrum rights and the MBSA2, Eir, Virgin Media and Vodafone provided comments.
- 3.20 Eir submits that:
 - the availability of temporary spectrum rights is essential while awaiting progress on spectrum rights in the MBSA2 which, unfortunately, has seen delay and uncertainty through no action by Eir; and
 - consideration should be given to ensuring there is no gap between temporary spectrum rights and MBSA2 spectrum rights in the interest of minimising end user disruption and promoting a smooth transition.
- 3.21 In support of this view, Eir submits that:
 - "it would be very inefficient for eir to invest in additional network infrastructure supporting future spectrum with the continued uncertainty". Eir further submits that during the COVID-19 pandemic it has continued to make "very significant investment" in its mobile network through the deployment of new sites and upgrades of existing sites, and that it will continue to make such investments despite the uncertainty of the availability of spectrum from the MBSA2; and
 - a failure to continue with a temporary spectrum licensing framework during a time of continued elevated demand would only benefit operators with existing significant spectrum holdings.
- 3.22 Virgin Media submits that *"a more permanent arrangement must be put in place going forward"* for this spectrum, and that it is supportive of ComReg's observations in Document 22/17 that, based on current information, ComReg would expect this to be the final proposal for a further temporary licensing framework on the basis of the Temporary Situation, and that MNOs should now begin to make transition plans.

- 3.23 Vodafone states that it continues to agree with ComReg's position that the proposed Temporary ECS Licensing Framework is entirely without prejudice to the MBSA2. It submits that completing the MBSA2 is vital for support of long-term investment in telecommunications in Ireland, as it:
 - "will enable Vodafone to make long-term capital expenditure decisions, building additional coverage and bring new services to our customers"; and
 - will facilitate 5G, "an important aspect of general economic and social development in Ireland for the foreseeable future".
- 3.24 In addition, Vodafone notes that, in the longer term, all operators will need to know the outcome of MBSA2 in order to plan and implement efficient investment and to effectively decide on the locations of new sites needed to replace the capacity provided by these Temporary Measures. Vodafone submits that this should be part of the consideration when deciding on any further measures post 1 October 2022.

3.3 ComReg's assessment of respondent's views

Further temporary licensing framework to 1 October 2022

3.25 ComReg notes that all respondents support the proposal to put in place a further temporary spectrum licensing framework in respect of the Temporary Situation for the reasons set out in Document 22/17, as well as on the basis of the additional information submitted as summarised above. ComReg also notes that no respondent raised concerns that the Proposed Approach would materially distort competition.

Further temporary licensing framework(s) beyond 1 October 2022 / MBSA2

3.26 In relation to Eir's and Vodafone's comments that further temporary licensing framework(s) may be needed beyond 1 October 2022 for various reasons including due to the timing of the MBSA2, ComReg notes that temporary licensing frameworks on the basis of the Temporary Situation are justified on the basis of prevailing Government COVID-19 measures. Further, in any event this matter is beyond the scope of the current decision. Instead, ComReg will consider at the appropriate time all relevant material before it, including the views of interested parties, in determining whether some form of future temporary licensing regime may be appropriate.

3.27 Notwithstanding, and based on all information currently available, it is reasonable to expect that this will be the final temporary licensing framework on the basis of the Temporary Situation. ComReg observes that this is a factor that the MNOs will need to consider in relation to their transition planning.

3.4 ComReg's final position

3.28 In light of the above, and including the reasons outlined in Chapter 3 of Document 22/17, ComReg's final position is that the Proposed Approach would be appropriate in the context of ComReg's functions, objectives, and duties, including being objectively justified and proportionate.

Chapter 4

4 Licence Conditions

4.1 This chapter sets out ComReg's final position on licence conditions for a further temporary spectrum licensing framework given the Temporary Situation.

4.1 Summary of Chapter 4 in Document 22/17

- 4.2 In Chapter 4 of Document 22/17, ComReg:
 - provided a summary of the key licensing elements in the previous and current Temporary ECS Licensing Frameworks including: the spectrum bands, assignments and compatibility considerations; applicant eligibility and the supporting information requirements¹⁷; licence duration; fees; and coverage obligations;
 - noted the MNOs' joint request "that the terms of the current Temporary Spectrum Management Measures detailed in ComReg 20/88 (D08/20) are extended unchanged.";
 - set out information on the views of other stakeholders (Virgin Media and 2RN) which, in summary, supported the maintenance of the existing licence conditions in any further framework; and
 - outlined its preliminary assessment of the material received interested parties and its preliminary view that any further Temporary ECS Licencing framework should employ the same licensing conditions as currently used, with the exception that the 2.6 GHz band, and the licence conditions associated with the 2.6 GHz band, would not be included.

4.2 Views of respondents

4.3 As noted in Chapter 3 above, all four respondents supported ComReg's licence condition proposals and no specific comments were raised in relation to those proposals.

¹⁷ See Section 4.1.2 of Document 22/17

4.3 ComReg assessment of respondents' views

4.4 ComReg observes that there was broad support for its licence condition proposals as set out in Document 22/17 and notes that no specific comments were raised in relation to ComReg's licensing proposals.

4.4 ComReg's final position

- 4.5 In light of the above and including ComReg's reasoning as set out in Chapter 4 of Document 22/17, ComReg's final position is that the further temporary ECS licencing framework should have the same licensing conditions as currently used in the current temporary ECS licensing framework, with the exception that the 2.6 GHz band, and the licence conditions associated with the 2.6 GHz band, are not included.
- 4.6 Details of this licensing framework are outlined in the draft Wireless Telegraphy (Further Temporary Electronic Communications Services Licences) (No. 4) Regulations set out in Annex 4.

Chapter 5

5 Decision

This chapter sets out ComReg's 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:

"2.1 GHz Band" means radio frequency spectrum in the range 1920 to 1980 MHz paired with radio frequency spectrum in the range 2110 to 2170 MHz;

"2.1 GHz Band Block" means a 5 MHz paired block of radio frequency spectrum in the 2.1 GHz Band;

"2.1 GHz Band EC Decision" means European Commission Decision 2012/688/EC¹⁸ as amended by European Commission Decision 2020/667¹⁹;

"700 MHz Duplex" means radio frequency spectrum in the range 703 – 733 MHz paired with 758 – 788 MHz;

"700 MHz Duplex Block" means a right of use in respect of a 2×5 MHz block of spectrum in the 700 MHz Duplex;

"700 MHz EC Decision" means Decision (EU) 2016/687²⁰;

"Authorisation Regulations" means the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations, 2011 (S.I. No. 335 of 2011);

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

¹⁸ Commission Implementing Decision of 5 November 2012 on the harmonisation of the frequency bands 1920 - 1980 MHz and 2110 - 2170 MHz for terrestrial systems capable of providing electronic communications services in the Union.

¹⁹ Commission Implementing Decision (EU) 2020/667 of 6 May 2020 amending Decision 2012/688/EU as regards an update of relevant technical conditions applicable to the frequency bands 1920 – 1980 MHz and 2110 – 2170 MHz.

²⁰ Commission Implementing Decision of 28 April 2016 on the harmonisation of the 694-790 MHz frequency band for terrestrial systems capable of providing wireless broadband electronic communications services and for flexible national use in the Union.

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

"Framework Regulations" means the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011, (S.I. No. 333 of 2011);

"Further Temporary ECS Licence (No. 4)" means a licence of the type set out in draft form in Schedule 1 to the Further Temporary ECS Licence Regulations (No.4);

"Further Temporary ECS Licence Regulations (No. 4)" means the Wireless Telegraphy (FURTHER TEMPORARY ELECTRONIC COMMUNICATIONS SERVICES LICENCES) (No. 4) Regulations, 2022, as set out in draft form in Annex 4 to this document ComReg Document 21/17;

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

"MNO" means a mobile network operator with an existing network in Ireland;

"Relevant Spectrum" means 700 MHz Duplex Blocks and 2.1 GHz Band Blocks;

"Undertaking" has the same meaning set out in the Framework Regulations; and

"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:
 - a) 18/60, 19/59R, 19/124, 20/122 and 21/40 (insofar as they are relevant to the present decisions and, in particular, concerning the technical licence conditions for the Relevant Spectrum);
 - b) 20/21;
 - c) 20/23;
 - d) 20/27;
 - e) 20/64;
 - f) 20/86R;
 - g) 20/88;
 - h) 21/05;

i) 21/16;

j) 21/24;

- k) 21/74;
- l) 21/87; and
- m) 21/96;
- n) 22/02;
- o) 22/17; and
- p) 22/22
- ii. the consultants' reports commissioned, and the advice obtained by ComReg, in relation to the subject-matter of the documents and materials listed above (insofar as they are relevant to the present decisions and, in particular, concerning the technical licence conditions for the Relevant Spectrum);
- iii. the powers, functions, objectives, and duties of ComReg, including, without limitation those under and by virtue of:
 - a) the Communications Regulation Act 2002, and, in particular, sections 10, 12 and 13 thereof;
 - b) the Framework Regulations, and, in particular, Regulations 13, 16 and 17 thereof;
 - c) the Authorisation Regulations, and, in particular, Regulations 9, 10, 11, 12, 15, 16, 17, 18(1)(c) and 19 thereof;
 - d) the 2.1 GHz Band EC Decision;
 - e) the 700 MHz EC Decision;
 - f) Sections 5 and 6 of the Wireless Telegraphy Act, 1926; and
 - g) the applicable Policy Directions made by the Minister under section
 13 of the Communications Regulation Act 2002,

and, noting that it has:

 h) given all interested parties the opportunity to express their views and make their submissions in accordance with Regulation 11 of the Authorisation Regulations and Regulation 12 of the Framework Regulations.

as set out in the various chapters of Document 22/22 and their supporting annexes.

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 Further Temporary ECS Licence Regulations (No. 4), to make those regulations under section 6 of the Wireless Telegraphy Act 1926, prescribing relevant matters in relation to Further Temporary ECS Licences (No. 4), including prescribing the form of the licences concerned, their duration and the conditions and restrictions subject to which they are granted;

700MHz Duplex and 2.1GHz Bands

- upon application properly being made to it by MNOs for Further Temporary ECS Licences (No. 4) with rights of use in the 700 MHz Duplex and 2.1 GHz Bands;
 - a) to select which MNOs will be granted Further Temporary ECS Licences (No. 4) in the 700 MHz Duplex and 2.1 GHz bands having regard to the principles generally described in Chapter 4 of Document 22/17 and further particularised in the Further Temporary ECS Licence Regulations (No. 4), as made, and the material provided by applicants in support of their respective application, including the ability of the applicant to deliver services expeditiously using those rights of use;
 - b) to assign 2 × 10 MHz of 700 MHz Duplex to each MNO²¹ selected in accordance with paragraph (a) above, but where ComReg reserves the right to make alternative assignments in line with its statutory objectives and duties;
 - c) for the purposes of giving effect to any assignment under paragraph (b) above, to grant Further Temporary ECS Licences (No. 4), under section 5 of the Wireless Telegraphy Act 1926 to such MNOs for the periods, and subject to the conditions and restrictions (including conditions as to suspension and withdrawal), prescribed in the Further Temporary ECS Licence Regulations

- Eir: 703 to 713 MHz paired with 758 to 768 MHz;
- Three: 713 to 723 paired with 768 to 778 MHz; and
- Vodafone: 723 to 733 paired with 778 to 788 MHz.

²¹ Specifically:

(No.4), including Schedule 1 of same, as currently set out in draft form in Annex 4 of Document 21/22;

Licence Duration

- iii. to make the duration of a Further Temporary ECS Licence (No. 4) up to but no longer than 3 calendar months;
- iv. upon application properly being made to it, having regard to the principles generally described in Chapter 4 of Document 22/17 and further particularised in the Further Temporary ECS Licence Regulations (No. 4), and the material provided by applicants in support of their renewal, to renew a Further Temporary ECS Licence (No. 4) for a further period of up to but no longer than 3 calendar months; and
- v. that any Further Temporary ECS Licence (No.4) granted or renewed shall in any event expire no later than 1 October 2022.

4. STATUTORY POWERS NOT AFFECTED

4. 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.

Chapter 6

6 Next steps

- 6.1 Document 22/22a published alongside this document contains an Application Form for a Further Temporary ECS Licence (No.4). This will be published on ComReg's website as an editable PDF file.
- 6.2 ComReg intends, in the coming days, to seek the consent of the Minister for Environment, Climate and Communications to make the Further Temporary ECS Licence Regulations (No.4).
- 6.3 Applicants can submit a completed Application Form to ComReg (together with supporting information and payment of the applicable fee) to the email address below as soon as ready. ComReg will process applications once the Further Temporary ECS Licence Regulations (No.4) are made.
- 6.4 Applicants should send their completed Application Form to:

licensing@comreg.ie

with the subject line: Further Temporary ECS Licence (No.4)

6.5 If ComReg receives correspondence on matters relating to this document and the consultation process generally, ComReg hereby gives notice that it will publish all material correspondence received in this regard subject to the provisions of ComReg's guidelines on the treatment of confidential information²².

²² ComReg Document 05/24 - Response to Consultation - Guidelines on the treatment of confidential information – Published 22 March 2005.

Annex: 1 Glossary

Т

A1.1 Definitions

- A 1.1 The definitions in this glossary shall apply to this document as a whole.
- A 1.2 Where a term in this glossary is defined by reference to a definition in a section or paragraph and an explanation of that term is provided in this glossary, the latter explanation is for convenience only and reference should be made to the appropriate part of the document for the definitive meaning of that term in its appropriate context.
- A 1.3 Any reference to any provision of any legislation shall include any modification re-enactment or extension thereof.
- A 1.4 Terms defined in this consultation paper shall, unless the context otherwise requires or admits, have the meaning set out below:

3.6 GHz Band	The radio frequency spectrum in the range 3400 MHz to 3800 MHz.	
700 MHz Duplex	ex The frequency range 703-733 MHz paired with 758-788 MHz.	
2.1 GHz Band	The frequency ranges 1920-1980 MHz paired with 2110-2170 MHz	
2.6 GHz Band	The frequency range 2500 – 2690 MHz.	
Application Form	ComReg Document 22/22a	
COVID-19	COVID-19 is an illness that can affect your lungs and airways and is caused by a virus called SARS-CoV-2 (2019- nCoV) coronavirus.	
Framework Regulations	Means the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011, (S.I. No. 333 of 2011)	

Further Temporary ECS Licence Regulations (No.4)	Means the draft regulations as set out in Annex 4 of this document
MBSA2	ComReg's Multi-Band Spectrum Award project for the long-term assignment of spectrum rights of use in the 700 MHz Duplex, 2.1 GHz, 2.3 GHz, and 2.6 GHz bands Further information is available on ComReg's Spectrum Awards webpage at <u>www.comreg.ie</u>
MBSA2 Decision	Decision D11/20 as published in Document 20/122.
Proposed Approach	ComReg's consideration of the approach as set out in Document 22/17.
Temporary Situation	Means the temporary impact upon electronic communications networks and services from the extraordinary situation arising from the spread of the disease known as COVID-19.

A1.2 European and Governmental Bodies, Regulatory and Standardisation Organisations

ComReg	Commission for Communications Regulation		
DECC	Department of the Environment, Climate and Communications		
EC	European Commission		
EU	European Union		

A1.4 Glossary of Technical Terms

ECS	Electronic Communications Service as defined under the Framework Regulations
GHz	Gigahertz (1 000 000 000 Hertz)
Hertz	Unit of Frequency
MHz	Megahertz (1 000 000 Hertz)
MNO	Mobile Network Operator

Annex: 2 Legal Framework and Statutory Objectives

- A 2.1 The Communications Regulation Act 2002 (as amended by the Communications Regulation (Amendment) Act 2007) (the "2002 Act"), the EU Common Regulatory Framework (including the Framework and Authorisation Directives²³ as transposed into Irish law by the corresponding Framework and Authorisation Regulations²⁴), and the Wireless Telegraphy Acts1926 to 2009²⁵ set out, amongst other things, powers, functions, duties and objectives of ComReg that are relevant to the management of the radio frequency spectrum in Ireland and to this consultation document.
- A 2.2 Apart 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, Regulation 16 of the Framework Regulations, and the provisions of Article 8a of the Framework Directive. ComReg is to carry out its functions effectively, and in a manner serving to ensure that the allocation and assignment of radio frequencies is based on objective, transparent, non-discriminatory, and proportionate criteria.
- A 2.3 This 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 powers, functions, duties and objectives 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

²³ Directive No. 2002/21/EC of the European Parliament and of the Council of 7 March 2002 (as amended by Regulation (EC) No. 717/2007 of 27 June 2007, Regulation (EC) No. 544/2009 of 18 June 2009 and Directive 2009/140/EC of the European Parliament and Council of 25 November 2009) (the "Framework Directive") and Directive No. 2002/20/EC of the European Parliament and of the Council of 7 March 2002 (as amended by Directive 2009/140/EC) (the "Authorisation Directive").

²⁴ The European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011) and the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations 2011 (S.I. No. 335 of 2011) respectively.

²⁵ The Wireless Telegraphy Acts 1926 to 1988 and Sections 181 (1) to (7) and (9) and Section 182 of the Broadcasting Act 2009.

the matters at hand.

A 2.4 All references in this annex to enactments are to the enactment as amended at the date hereof, unless the context otherwise requires.

New European Electronic Communications Code

- A 2.5 On 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. The EECC replaces the EU Common Regulatory Framework adopted in 2002 (and amended in 2009) under which ComReg has regulated electronic communications since 2003. It is important to note that further to Article 125 ("Repeal") of the EECC, with effect from 21 December 2020, the EECC has replaced the EU Common Regulatory Framework.
- A 2.6 With some limited exceptions (see Article 124 of the EECC), Member States had until 21 December 2020 to transpose the EECC into national law²⁶. The DECC is responsible for the transposition of the EECC and ComReg has assisted the DECC in that regard as appropriate.
- A 2.7 ComReg understands that the EECC is unlikely to be transposed into national law until mid-2022. However, for the avoidance of doubt, electronic communications providers must continue to comply with their obligations, ComReg will continue to regulate the electronic communications sector under its existing powers, and redress mechanisms for customers will continue unchanged until new legislation is introduced.
- A 2.8 Notwithstanding, and for the avoidance of doubt, ComReg is satisfied that, to the best of its knowledge, the granting of Temporary ECS Licences for the purposes of the Temporary Situation, and under the conditions described in this document, would not conflict with the objectives of the EECC or the obligations likely to be imposed on ComReg under national legislation implementing same.

A2.1 Primary Objectives and Regulatory Principles under the 2002 Act and Common Regulatory Framework

A 2.9 ComReg's primary objectives in carrying out its statutory functions in the context of electronic communications are to:

²⁶ With the exception of Articles 53(2), (3) and (4), and Article 54 (See Article 124).

- promote competition²⁷;
- contribute to the development of the internal market²⁸;
- promote the interests of users within the Community²⁹;
- ensure the efficient management and use of the radio frequency spectrum in Ireland in accordance with a direction under section 13 of the 2002 Act³⁰; and
- unless otherwise provided for in Regulation 17 of the Framework Regulations, take the utmost account of the desirability of technological neutrality in complying with the requirements of the Specific Regulations³¹ in particular those designed to ensure effective competition³².

A2.1.1 Promotion of Competition

- A 2.10 Section 12(2)(a) of the 2002 Act requires ComReg to take all reasonable measures which are aimed at the promotion of competition, including:
 - ensuring that users, including disabled users, derive maximum benefit in terms of choice, price and quality;
 - ensuring that there is no distortion or restriction of competition in the electronic communications sector; and

²⁹ Section 12(1)(a)(iii) of the 2002 Act.

²⁷ Section 12 (1)(a)(i) of the 2002 Act.

²⁸ Section 12 (1)(a)(ii) of the 2002 Act.

³⁰ Section 12(1)(b) of the 2002 Act. Whilst this objective would appear to be a separate and distinct objective in the 2002 Act, it is noted that, for the purposes of ComReg's activities in relation to electronic communications networks and services ("ECN" and "ECS"), Article 8 of the Framework Directive identifies "*encouraging efficient use and ensuring the effective management of radio frequencies (and numbering resources*)" as a sub-objective of the broader objective of the promotion of competition.

³¹ The 'Specific Regulations' comprise collectively the Framework Regulations, the Authorisation Regulations, the European Communities (Electronic Communications Networks and Services) (Access) Regulations 2011 (S.I. No. 334 of 2011), the European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011 (S.I. 337 of 2011) and the European Communities (Electronic Communications Networks and Services) (Privacy and Electronic Communications) Regulations 2011 (S.I. No. 336 of 2011).

³² Regulation 16(1)(a) of the Framework Regulations.

- encouraging efficient use and ensuring the effective management of radio frequencies and numbering resources.
- A 2.11 In so far as the promotion of competition is concerned, Regulation 16(1)(b) of the Framework Regulations also requires ComReg to:
 - ensure that elderly users and users with special social needs derive maximum benefit in terms of choice, price and quality, and
 - ensure that, in the transmission of content, there is no distortion or restriction of competition in the electronic communications sector.
- A 2.12 Regulation 9(11) of the Authorisation Regulations also provides that ComReg must ensure that radio frequencies are efficiently and effectively used having regard to section 12(2)(a) of the 2002 Act and Regulations 16(1) and 17(1) of the Framework Regulations. Regulation 9(11) further provides that ComReg must ensure that competition is not distorted by any transfer or accumulation of rights of use for radio frequencies and, for this purpose, ComReg may take appropriate measures such as mandating the sale or the lease of rights of use for radio frequencies.

A2.1.2 Contributing to the Development of the Internal Market

- A 2.13 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:
 - 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-toend connectivity; and
 - 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 2.14 In so far as contributing to the development of the internal market is concerned, Regulation 16(1)(c) of the Framework Regulations also requires ComReg to cooperate with the Body of European Regulators for Electronic Communications ("BEREC") in a transparent manner to ensure the development of consistent regulatory practice and the consistent application of EU law in the field of

electronic communications.

A2.1.3 Promotion of Interests of Users

- A 2.15 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.
- A 2.16 In so far as promotion of the interests of users within the EU is concerned, Regulation 16(1)(d) of the Framework Regulations also requires ComReg to:
 - address the needs of specific social groups, in particular, elderly users and users with special social needs, and
 - promote the ability of end-users to access and distribute information or use applications and services of their choice.

A2.1.4 Regulatory Principles

A 2.17 In pursuit of its objectives under Regulation 16(1) of the Framework Regulations and section 12 of the 2002 Act, ComReg must apply objective, transparent, non-discriminatory and proportionate regulatory principles by, amongst other things:

- promoting regulatory predictability by ensuring a consistent regulatory approach over appropriate review periods;
- ensuring that, in similar circumstances, there is no discrimination in the treatment of undertakings providing ECN and ECS;
- safeguarding competition to the benefit of consumers and promoting, where appropriate, infrastructure-based competition;
- 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 nondiscrimination are preserved;
- taking due account of the variety of conditions relating to competition and consumers that exist in the various geographic areas within the State; and
- imposing ex-ante regulatory obligations only where there is no effective and sustainable competition and relaxing or lifting such obligations as soon as that condition is fulfilled.

A2.1.5 Other Obligations under the 2002 ActA2.1.6 Other Obligations under the 2002 Act

- A 2.18 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;³³
 - have regard to international developments with regard to the radio frequency spectrum³⁴; and
 - take the utmost account of the desirability that the exercise of its functions aimed at achieving its radio frequency management

³³ Section 12(3) of the 2002 Act.

³⁴ Section 12(5) of the 2002 Act.

objectives does not result in discrimination in favour of or against particular types of technology for the provision of ECS.³⁵

A2.1.6 Policy Directions³⁶

- A 2.19 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 2.20 The Policy Directions which are most relevant in this regard include the following:

Policy Direction No.3 on Broadband Electronic Communication Networks

A 2.21 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 2.22 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

³⁵ Section 12(6) of the 2002 Act.

³⁶ 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.

such decisions on the sustainability of the business of undertakings affected.

Policy Direction No.5 on Regulation only where necessary

A 2.23 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 2.24 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 2.25 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 2.26 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 2.27 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

A2.2 Other Relevant Obligations under the Framework and Authorisation Regulations

A2.2.1 Framework Regulations

Regulation 17

- A 2.28 Regulation 17 of the Framework Regulations governs the management of radio frequencies for ECS. Regulation 17(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 and Regulation 16 of the Framework Regulations and the provisions of Article 8a of the Framework Directive, ensure:
 - the effective management of radio frequencies for ECS;
 - that spectrum allocation used for ECS and issuing of general authorisations or individual rights of use for such radio frequencies are based on objective, transparent, non-discriminatory and proportionate criteria; and
 - ensure that harmonisation of the use of radio frequency spectrum 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 economies of scale and interoperability of 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 the EU.
- A 2.29 Regulation 17(2) provides that, unless otherwise provided in Regulation 17(3), ComReg must ensure that all types of technology used for ECS may be used in the radio frequency bands that are declared available for ECS in the Radio Frequency Plan published under Section 35 of the 2002 Act in accordance with EU law.
- A 2.30 Regulation 17(3) provides that, notwithstanding Regulation 17(2), 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:

- avoid harmful interference;
- protect public health against electromagnetic fields;
- ensure technical quality of service;
- ensure maximisation of radio frequency sharing;
- safeguard the efficient use of spectrum; or
- ensure the fulfilment of a general interest objective as defined by or on behalf of the Government or a Minister of the Government in accordance with Regulation 17(6).
- A 2.31 Regulation 17(4) requires that, unless otherwise provided in Regulation 17(5), ComReg must ensure that all types of ECS may be provided in the radio frequency bands, declared available for ECS in the Radio Frequency Plan published under Section 35 of the Act of 2002 in accordance with EU law.
- A 2.32 Regulation 17(5) 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 2.33 Regulation 17(6) requires that measures that require an ECS to be provided in a specific band available for ECS must be justified in order to ensure the fulfilment of a general interest objective as defined by or on behalf of the Government or a Minister of the Government in conformity with EU law such as, but not limited to:
 - safety of life;
 - the promotion of social, regional or territorial cohesion;
 - the avoidance of inefficient use of radio frequencies; or
 - the promotion of cultural and linguistic diversity and media pluralism, for example, by the provision of radio and television broadcasting services.
- A 2.34 Regulation 17(7) 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 defined by or on behalf of the Government or a Minister of the Government.

- A 2.35 Regulation 17(8) provides that ComReg must, in accordance with Regulation 18, regularly review the necessity of the restrictions referred to in Regulations 17(3) and 17(5) and must make the results of such reviews publicly available.
- A 2.36 Regulation 17(9) provides that Regulations 17(2) to (7) only apply to spectrum allocated to be used for ECS, general authorisations issued and individual rights of use for radio frequencies granted after 1 July 2011. Spectrum allocations, general authorisations and individual rights of use which already existed on 1 July 2011 are subject to Regulation 18 of the Framework Regulations.
- A 2.37 Regulation 17(10) provides that ComReg may, having regard to its objectives under Section 12 of the 2002 Act and Regulation 16 and its functions under the Specific Regulations, lay down rules in order to prevent spectrum hoarding, in particular by setting out strict deadlines for the effective exploitation of the rights of use by the holder of rights and by withdrawing the rights of use in cases of non-compliance with the deadlines. Any rules laid down under this Regulation must be applied in a proportionate, non-discriminatory and transparent manner.
- A 2.38 Regulation 17(11) requires ComReg to, in the fulfilment of its obligations under that Regulation, respect relevant international agreements, including the ITU-RR and any public policy considerations brought to its attention by the Minister.

A2.2.2 Authorisation Regulations

Decision to limit rights of use for radio frequencies

- A 2.39 Regulation 9(2) of the Authorisation Regulations provides that ComReg may grant individual rights of use for radio frequencies by way of a licence where it considers that one or more of the following criteria are applicable:
 - it is necessary to avoid harmful interference;
 - it is necessary to ensure technical quality of service;
 - it is necessary to safeguard the efficient use of spectrum; or
 - it is necessary to fulfil other objectives of general interest as defined by or on behalf of the Government or a Minister of the Government in conformity with EU law.

- A 2.40 Regulation 9(10) of the Authorisation Regulations provides that ComReg must not limit the number of rights of use for radio frequencies to be granted except where this is necessary to ensure the efficient use of radio frequencies in accordance with Regulation 11.
- A 2.41 Regulation 9(7) also provides that:
 - where individual rights of use for radio frequencies are granted for a period of 10 years or more and such rights may not be transferred or leased between undertakings in accordance with Regulation 19 of the Framework Regulations, ComReg must ensure that criteria set out in Regulation 9(2) apply for the duration of the rights of use, in particular upon a justified request from the holder of the right.
 - where ComReg determines that the criteria referred to in Regulation 9(2) are no longer applicable to a right of use for radio frequencies, ComReg must, after a reasonable period and having notified the holder of the individual rights of use, change the individual rights of use into a general authorisation or must ensure that the individual rights of use are made transferable or leasable between undertakings in accordance with Regulation 19 of the Framework Regulations.

Publication of procedures

A 2.42 Regulation 9(4)(a) of the Authorisation Regulations requires that ComReg, having regard to the provisions of Regulation 17 of the Framework Regulations, establish open, objective, transparent, non-discriminatory and proportionate procedures for the granting of rights of use for radio frequencies and cause any such procedures to be made publicly available.

Duration of rights of use for radio frequencies

A 2.43 Regulation 9(6) of the Authorisation Regulations provides that rights of use for radio frequencies must be in force for such period as ComReg considers appropriate having regard to the network or service concerned in view of the objective pursued taking due account of the need to allow for an appropriate period for investment amortisation.

Conditions attached to rights of use for radio frequencies

A 2.44 Regulation 9(5) of the Authorisation Regulations provides that, when granting rights of use for radio frequencies, ComReg must, having regard to the provisions of Regulations 17 and 19 of the Framework Regulations, specify whether such rights may be transferred by the holder of the rights and under what conditions such a transfer may take place.

- A 2.45 Regulation 10(1) of the Authorisation Regulations provides that, notwithstanding Section 5 of the Wireless Telegraphy Act,1926, but subject to any regulations under Section 6 of that Act, ComReg may only attach those conditions listed in Part B of the Schedule to the Authorisation Regulations. Part B lists the following conditions which may be attached to rights of use:
 - Obligation to provide a service or to use a type of technology for which the rights of use for the frequency has been granted including, where appropriate, coverage and quality requirements.
 - Effective and efficient use of frequencies in conformity with the Framework Directive and Framework Regulations.
 - Technical and operational conditions necessary for the avoidance of harmful interference and for the limitation of exposure of the general public to electromagnetic fields, where such conditions are different from those included in the general authorisation.
 - Maximum duration in conformity with Regulation 9, subject to any changes in the national frequency plan.
 - Transfer of rights at the initiative of the rights holder and conditions of such transfer in conformity with the Framework Directive.
 - Usage fees in accordance with Regulation 19.
 - Any commitments which the undertaking obtaining the usage right has made in the course of a competitive or comparative selection procedure.
 - Obligations under relevant international agreements relating to the use of frequencies.
 - Obligations specific to an experimental use of radio frequencies.
- A 2.46 Regulation 10(2) also requires that any attachment of conditions under Regulation 10(1) to rights of use for radio frequencies must be nondiscriminatory, proportionate and transparent and in accordance with Regulation 17 of the Framework Regulations.

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

A 2.47 Regulation 11(1) of the Authorisation Regulations provides that, where ComReg considers that the number of rights of use to be granted for radio

frequencies should be limited it must, without prejudice to Sections 13 and 37 of the 2002 Act:

- give due weight to the need to maximise benefits for users and to facilitate the development of competition, and
- give all interested parties, including users and consumers, the opportunity to express their views in accordance with Regulation 12 of the Framework Regulations.
- A 2.48 Regulation 11(2) of the Authorisation Regulations requires that, when granting the limited number of rights of use for radio frequencies it has decided upon, ComReg does so "…on the basis of selection criteria which are objective, transparent, non-discriminatory and proportionate and which give due weight to the achievement of the objectives set out in Section 12 of the 2002 Act and Regulations 16 and 17 of the Framework Regulations."
- A 2.49 Regulation 11(4) provides that where it decides to use competitive or comparative selection procedures, ComReg must, inter alia, ensure that such procedures are fair, reasonable, open and transparent to all interested parties.

Fees for spectrum rights of use

- A 2.50 Regulation 19 of the Authorisation Regulations permits ComReg to impose fees for rights of use which reflect the need to ensure the optimal use of the radio frequency spectrum.
- A 2.51 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 Regulation 16 of the Framework Regulations.

Amendment of rights and obligations

A 2.52 Regulation 15 of the Authorisation Regulations permits ComReg to amend rights and conditions concerning rights of use, provided that any such amendments may only be made in objectively justified cases and in a proportionate manner, following the process set down in Regulation 15(4).

A2.3 Other Relevant Provisions

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

A 2.53 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 2.54 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 revocation) as may be prescribed in regard to it by regulations made by ComReg under Section 6.
- A 2.55 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 2.56 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 2.57 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 2.58 Regulation 10(1) of the Authorisation Regulations provides that, notwithstanding section 5 of the Act of 1926 but subject to any regulations made under section 6 of that Act, where ComReg attaches conditions to rights of use for radio frequencies, it may only attach such conditions as are listed in Part B of the Schedule to the Authorisation Regulations.

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

A 2.59 Article 4 of the Competition Directive 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."

Annex: 3 Non-confidential submissions to Document 22/17

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

Response to ComReg Consultation:

COVID-19: Temporary spectrum management measures Further temporary spectrum rights (No.4) in the 700 MHz Duplex and 2.1 GHz Bands

ComReg Document 22/17



9 March 2022



eir response to 22/17

DOCUMENT CONTROL

Document name	eir response to ComReg 22/17	
Document Owner	eir	
Status	Non-Confidential	

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

eir response to 22/17

Response to consultation

eir welcomes ComReg's proposal to create a further licensing regime for temporary spectrum rights. eir agrees with ComReg's proposal to make available temporary spectrum rights for a further 6 monts. eir notes that "*ComReg expects that this will be its final proposal to put in place a further temporary licensing framework on the basis of the Temporary Situation*"¹. However we believe it is too early to conclude that no further temporary licensing frameworks may be required beyond September 2022.

eir is pleased to note the progress that Ireland has made in response to the pandemic and the recent easing of most restrictions. However Covid 19 is still a global concern and a cautious approach should be maintained.

A phased return to the office is ongoing in many organisations. Many organisations are supporting a shift towards hybrid models of working between office and home. This will likely be the new normal for many office based staff meaning that connectivity will be required both at homes and places of work in addition to commuter routes. This will result in more widespread continued demand for mobile services and availability of spectrum to support continued and growing data use and the full impact of this across the network will need to be understood. The flexibility to support online learning should also be retained in the near term.

eir has experienced significant and sustained data growth. It is important that availability of spectrum is maximised for mobile operators to support continued demand. eir notes ComReg's view² "that the MNOs should now begin to make transition plans and take actions in advance of the end of the presently proposed temporary spectrum licences in light of the Temporary Situation". As ComReg observes³ "in the normal course, network operators would be expected to address such developments through network investment and/or securing additional spectrum rights of use". eir has continued very significant investment in its Mobile Network through deployment of new sites and upgrades of existing sites throughout the Pandemic. This investment will continue despite the uncertainty of available spectrum related to MBSA2 which has unfortunately been delayed and continues to be delayed pending the resolution of outstanding legal uncertainty which will hopefully be resolved soon. In the interim it would be very inefficient for eir to invest in additional network

¹ Paragraph 1.2 of the consultation

² Paragraph 1.4 of the consultation

³ Paragraph 3.6 of the consultation

eir response to 22/17

infrastructure supporting future spectrum with the continued uncertainty. The continuance of Temporary Spectrum Rights are essential while awaiting progress on MBSA2.

eir also notes that the timeline for the MBSA2 has seen continued delay and uncertainty through no action by eir, a failure to continue with a temporary spectrum allocation during a time of continued elevated demand would only benefit operators with existing significant spectrum holdings.

eir notes ComReg's view⁴ "that once the MBSA2 award process is completed, any temporary rights in existence at that time would expire in advance of the commencement date of spectrum rights issued under the MBSA2, and MNOs should plan for same". In the interest of minimising end user disruption and promoting a smooth transition consideration should be given to ensuring there is no gap between the temporary and permanent licensing regimes.

Finally, eir would like to take this opportunity to once again thank the ComReg officials for progressing consideration of the further licensing framework expeditiously.

⁴ Paragraph 4.34 of the consultation

2 Three Ireland (Hutchison) Limited



11th September 2021

Joseph Coughlan Commission for Communications Regulation 1 Dockland Central Guild Street Dublin 1 D01 E4X0

Dear Joseph

Temporary Spectrum Measures – Document 22/17

Three notes that in document 22/17 ComReg responds to submissions from the three current mobile network operators requesting that the temporary spectrum measures are extended beyond 1st April 2022. ComReg's proposal is to provide for a further licensing process that is essentially similar to that currently in place and provides for possible extension of the temporary licences to the end of September 2022 in two three-month periods.

Three supports the Draft Decision to provide for a further extension of the temporary spectrum measures as described in document 22/17. As stated in our previous submission, we believe the temporary spectrum measures have been extremely important in allowing mobile networks to respond to the changed patterns of behaviour that occurred as a result of Covid-19. The main benefit has been to customers who received increased service quality in unusual times. While we have seen almost all restrictions lifted now and some return to normal work patterns has occurred, this is not complete yet. There might still be some unexpected or localised events that would again place unusual demands on the networks, so it would be unwise right at this time to remove the apparatus that we have put in place which would help us to respond to such events.

Yours Sincerely

Thean Oll

Tom Hickey

3 Virgin Media Ireland

From:	Blathin Harnett		
Sent:	09 March 2022 10:30		
То:	Market Framework Consult		
Subject:	Submissions to ComReg 22/17		

CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and believe the content is safe.

Dear Joseph

I am responding to Document Number 22/17 – Covid 19 Temporary Spectrum Management Measures on behalf of Virgin Media.

Virgin Media has been happy to support the temporary licensing measures to date and is happy to support a further temporary licensing arrangement as outlined in ComReg's consultation.

Virgin Media notes ComReg's expectation at paragraph 1.2 of that this will be the final extension and at paragraph 1.3 makes reference to the continued progression of the multiband spectrum award (MBSA2) for long term assignment of the 700Mhz and 2.1GHz bands. We also note that ComReg in paragraph 1.3 emphasises that MNO's should begin to make transition plans. Virgin Media believes it is important that a more permanent licensing arrangement is put in place for this spectrum and is therefore supportive of the comments ComReg makes in this regard.

In conclusion therefore it is Virgin Media's position that a more permanent arrangement must be put in place going forward. For now and based on the expectation that this is the final time a temporary arrangement will be put in place, Virgin Media is happy to support the continued temporary licensing of this spectrum as set out in ComReg Document No 22/17 and subject to the current coordination procedure with Virgin Media remaining in place.

Should you have any questions in respect of Virgin Media's response to Document Number 22/17 please do not hesitate to contact me.

Kind regards Blathin Harnett

Blathin Harnett | Head of Regulatory Virgin Media | Macken House, 39/40 Mayor Street Upper, Dublin 1, D01 C9W8

DPO@virginmedia.ie | www.virginmedia.ie

4 Vodafone Ireland Limited



Non - Confidential Version

COVID-19: Temporary spectrum management measures

Further temporary spectrum rights (No.4) in the 700 MHz Duplex and 2.1 GHz Bands

Response to Consultation ComReg 22/17

Introduction

Vodafone are grateful for the opportunity to respond to ComReg consultation 22/17 concerning further temporary spectrum rights (No.4) in the 700 MHz Duplex and 2.1 GHz and 2.6 GHz bands.

We continue to acknowledge the exceptional work ComReg have completed in working cooperatively with industry throughout this crisis and in implementing these Temporary Measures.

The temporary measures implemented by ComReg in March 2020 have enabled mobile operators to provide telecommunications support to all their customers in Ireland throughout the period of significant change to work and social patterns that we have seen over the last 18 months.

Using our Pre-Covid spectrum assignments, we could only add this additional capacity by building new radio sites; this cannot be done quickly enough to support the rapidly changing demand generated by changes in work practices, and other changes associated with COVID.

Current situation

We note the ComReg position that based on current information this will be the final proposal to extend. This position is informed by the government relaxation of measures, the view that an upward trend of data pre and post covid is to be expected.

We would urge that the position is kept under review. Despite the relaxation of Covid measures future growth remains very difficult to predict as there is considerable uncertainty about the effect of re-opening of society, and return to work plans which are going to be gradual and mixed between fully remote, hybrid and return to office. These changes will naturally effect both the volume of traffic and the locations where traffic demand will vary. It will be some time before a stable post-Covid demand pattern is clear.

The dispersed usage of spectrum is important to note and this supports remote working behaviours for our public and private sector citizens. As more organisations adapt to new ways of working over the next year the stable demand pattern will become clearer.

Transition Plans

ComReg advise that MNOs should now begin to make transition plans and take actions in advance of the end of the presently proposed temporary spectrum licences in light of the Temporary Situation, noting that, based on current information, ComReg expects this to be its final proposal for a further temporary licensing framework in relation to the Temporary Situation.

Vodafone would make it clear we are continuing to invest heavily in network coverage and capacity. However, we do need ensure, for the general good, that investment is efficient and directed to locations where long-term requirements are justified. Furthermore, other factors, which ComReg have noted in the consultation are influencing long term investment strategy.

Plan to use an Extension of the Temporary Measures.

We would ask that ComReg continues to keep this position under review over the coming six months. The primary concern is that the 700 layer is providing enhanced accessibility and data services to customers who would be seriously challenged in terms of data services in hard to reach rural locations without access to this spectrum.

The MBSA

ComReg reiterates in Section 2.5 that the proposed Temporary ECS Licensing Framework is entirely without prejudice to the MBSA2, ComReg's Multi-Band Spectrum Award

We continue to agree with the ComReg position. Completing the MBSA2 is vital for support of long-term investment in telecommunications in Ireland. It will enable Vodafone to make long-term capital expenditure decisions, building additional coverage and bring new services to our customers. We see the completion of the auction as a facilitator for 5G, an important aspect of general economic and social development in Ireland for the foreseeable future.

We do note that in the longer term all operators will need to know the outcome of MBSA2 in order to plan and implement efficient investment and to effectively decide on the locations of new sites needed to replace the capacity provided by these Temporary Measures. This should be part of the consideration when deciding on any further measures post 1 October 2022.

Conclusion

In conclusion we agree that ComReg are fully justified in extending these Temporary Spectrum measures for the further period proposed. Vodafone will apply for permission to use these measures and continue to add to their network to maintain excellent service for customers.

ENDS

Annex: 4 Draft Wireless Telegraphy (Further Temporary Electronic Communications Services Licences) (No. 4) Regulations



STATUTORY INSTRUMENTS.

S.I. No. of 2022

WIRELESS TELEGRAPHY (FURTHER TEMPORARY ELECTRONIC COMMUNICATIONS SERVICES LICENCES) (NO. 4)

REGULATIONS 2022

S.I. No. of 2022

WIRELESS TELEGRAPHY (FURTHER TEMPORARY ELECTRONIC COMMUNICATIONS SERVICES LICENCES) (NO. 4)

REGULATIONS 2022

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 in accordance with section 37 of the Communications Regulation Act 2002 (No. 20 of 2002), (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)) hereby makes the following Regulations:

Citation

1. These Regulations may be cited as the Wireless Telegraphy (Further Temporary Electronic Communications Services Licences) (No. 4) Regulations 2022.

Interpretation

2. (1) In these Regulations:

"2.1 GHz Band" means radio frequency spectrum in the range 1920 to 1980 MHz paired with radio frequency spectrum in the range 2110 to 2170 MHz;

"2.1 GHz Band Block" means a 5 MHz paired block of radio frequency spectrum in the 2.1 GHz Band;

"700 MHz Duplex" means radio frequency spectrum in the range 703 to 733 MHz paired with radio frequency spectrum in the range 758 to 788 MHz;

"700 MHz Duplex Block" means a 5 MHz paired block of radio frequency spectrum in the 700 MHz Duplex;

"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" in relation to Licences means apparatus for wireless telegraphy as defined in section 2 of the Act of 1926 for terrestrial systems capable of providing Electronic Communications Services;

"Authorisation Regulations" means the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations 2011 (S.I. No. 335 of 2011);

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

"Decision of 2012" means European Commission Implementing Decision (2012/688/EU) of 5 November 2012 on the harmonisation of the frequency bands 1920-1980 MHz and 2110-2170 MHz for terrestrial systems capable of providing electronic communications services in the Union, as amended by European Commission Implementing Decision (EU) 2020/667 of 6 May 2020;

"Decision of 2016" means European Commission Implementing Decision (EU) 2016/687 of 28 April 2016 on the harmonisation of the 694 -790 MHz frequency band for terrestrial systems capable of providing wireless broadband electronic communications services and for flexible national use in the Union;

"Electronic Communications Network" ("ECN") and "Electronic Communications Service" ("ECS") have the meanings assigned to them in the Framework Regulations;

"Equivalent Isotopically Radiated Power" ("EIRP") means the product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna;

"FDD" means Frequency Division Duplex;

"Framework Regulations" means the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011);

"Further Temporary Electronic Communications Services Licence (No. 4)" means a Licence in the form set out in Schedule 1 to keep and have possession of Apparatus, in accordance with and subject to the terms and conditions set out therein;

"Harmful Interference" has the meaning set out in the Framework Regulations;

"Lease" means the assignment by a Licensee ("the Lessor") of some or all of a right of use for radio frequencies granted under a Licence for a period less than the remaining duration of the right of use to another party ("the Lessee"), after which the right of use for radio frequencies reverts to the Lessor;

"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 a Further Temporary Electronic Communications Services Licence (No. 4);

"Licence Commencement Date" means the date, as specified in the Licence, upon which the Licence comes into effect;

"Licensee" means the holder of a Licence;

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

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

"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;

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

"Transfer Regulations" means the Wireless Telegraphy (Transfer of Spectrum Rights of Use) Regulations 2014 (S.I. No. 34 of 2014); and

"Undertaking" has the same meaning set out in the Framework Regulations.

(2) 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.

(3) 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.

(4) A word or expression that is used in these Regulations and that is also used in the Framework Regulations or in the Authorisation 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 Further Temporary Electronic Communications Services Licences (No. 4).

Application for the Grant and Form of Licences

4. (1) Application for the grant of a Licence shall be made by an Undertaking to the Commission in writing and in such form as may be determined by the Commission from time to time.

(2) The Commission may grant a Licence, following payment by the

applicant of the relevant fee prescribed in Regulation 8, in accordance with the Authorisation Regulations and having regard to, among other things:

- (a) available information regarding the extraordinary situation arising from COVID-19 and, in particular, as it may reasonably affect Electronic Communications Networks and the provision of relevant Electronic Communications Services in the State;
- (b) available information regarding the impact of the extraordinary situation arising from COVID-19 upon the capacity of the Electronic Communications Network operated by the Undertaking, including the locations in the State where any capacity constraints are occurring or are likely to occur;
- (c) available information regarding how the rights of use of radio frequencies applied for by the Undertaking would reasonably and materially assist in alleviating the capacity constraints identified in connection with sub-paragraph (b), including the lead time for the Undertaking to effectively make use of such rights of use of radio frequencies;
- (d) available information regarding the risks to the provision of existing Electronic Communications Services, and the quality of such existing provision, by the Undertaking in making changes to its Electronic Communications Network to effectively make use of the rights of use of radio frequencies applied for;
- (e) the need to encourage the efficient use and ensure the effective management of the radio frequency spectrum; and
- (f) the Commission's obligations and objectives in relation to competition for the provision of Electronic Communications Networks and Electronic Communications Services.

(3) An Undertaking that applies for the grant of a Licence shall furnish to the Commission such information as the Commission may reasonably require for the purposes of its functions under these Regulations, the Act of 1926, the Framework Regulations and/or the Authorisation Regulations, and if the Undertaking, without reasonable cause, fails to comply with this paragraph, the Commission may refuse to grant the Licence concerned to the Undertaking.

(4) A Licence to which these Regulations apply shall be in the form specified in Schedule 1, with such variation, if any, whether by addition, deletion or alteration as the Commission may determine from time to time or in any particular case in accordance with the Authorisation Regulations.

Duration of Licences

- 5. (1) The commencement date and expiry date of a Licence shall be set by the Commission and specified in the Licence.
- (2)The duration of any Licence granted under these Regulations shall be up to but no longer than three calendar months.
- (3)Upon application properly being made in accordance with Regulation 4, the Commission may renew a Licence granted under these Regulations for a

further period of up to but no longer than three calendar months.

(4) Any Licence granted or renewed under these Regulations shall expire no later than 1 October 2022.

Conditions of Licences

6. Any Licensee that is granted a Licence under these Regulations and to which these Regulations apply shall:

- (a) ensure that it complies with the conditions in its Licence and with these Regulations;
- (b) ensure that any Apparatus in the 700 MHz Duplex complies with the Decision of 2016, any Apparatus in the 2.1 GHz Band complies with the Decision of 2012.
- (c) ensure that all Apparatus installed, maintained, possessed or kept under the Licence is capable of operating within the radio frequency spectrum specified in the Licence;
- (d) ensure that all Apparatus worked or used under the Licence is worked or used only in the radio frequency spectrum specified in the Licence;
- (e) ensure that it makes payment of the fee set out in and in accordance with Regulation 8;
- (f) furnish such information in respect of the Licence as may be requested by the Commission from time to time;
- (g) ensure that all Apparatus, or any part thereof, is installed, maintained, worked and used so as not to cause Harmful Interference;
- (h) ensure that all Apparatus, or any part thereof, complies with the Radio Equipment Regulations;
- (i) comply with any special conditions imposed under section 8 of the Act of 1972;
- (j) upon becoming aware of any event likely to materially affect its ability to comply with these Regulations, or any conditions set out or referred to in any Licence, notify the Commission of that fact in writing no later than 5 Working Days upon becoming aware;
- (k) comply with all obligations under relevant international agreements relating to the use of Apparatus or the frequencies to which they are assigned under a Licence; and
- (1) not Transfer or Lease any rights of use for radio frequencies attaching to a Licence.

Enforcement, Amendment, Suspension and Withdrawal

7. (1) Enforcement by the Commission of compliance by a Licensee with conditions attached to its Licence shall be in accordance with the AuthorisationRegulations.

(2) The Commission may amend a Licence from time to time in accordance with the Authorisation Regulations having regard to, among other things, the factors set out in Regulation 4(2), and by giving the Licensee 5 days' notice in writing.

(3) The Commission may suspend or withdraw a Licence in accordance with the Authorisation Regulations.

Licence Fees

8. (1) The fee for a Licence, or renewal of a Licence, is $\notin 100$ and is non - refundable.

(2) Any payment to be paid by a Licensee under this Regulation shall be made by way of banker's draft or such other means and on such other terms, if any, as the Commission may decide.

Licensee to satisfy all legal requirements

9. Licences granted pursuant to these Regulations do not grant to the Licensee any right, interest or entitlement other than to keep, have possession of, install, maintain, work and use Apparatus at a specified location or locations in the State.

SCHEDULE 1

WIRELESS TELEGRAPHY ACT, 1926

WIRELESS TELEGRAPHY (FURTHER TEMPORARY ELECTRONIC COMMUNICATIONS SERVICES LICENCES) (NO. 4) REGULATIONS 2022

Further Temporary Licence (No. 4) for terrestrial systems capable of providing Electronic Communications Services

Licence under section 5 of the Act of 1926 to keep and have possession of apparatus for wireless telegraphy for terrestrial systems capable of providing Electronic Communications Services.

The Commission for Communications Regulation, in exercise of the powers conferred on it by section 5 of the Act of 1926 hereby grants the following licence to [LICENSEE NAME] of [LICENSEE ADDRESS] ("the

Licensee").

The Licensee is hereby authorised to keep and have possession of apparatus for wireless telegraphy for terrestrial systems capable of providing Electronic Communications Services as specified in Part 2 of this Licence, subject to such apparatus being installed, maintained, worked and used in accordance with the terms, conditions and restrictions set out in the Wireless Telegraphy (Further Temporary Electronic Communications Services Licences) (No. 4) Regulations 2022 (S.I. No. of 2022) ("the Regulations"), including but not limited to, the following:

1. The Licensee shall ensure that it complies with all of the conditions contained within the Regulations and within Parts 1 to 4 of this Licence; and

2. The Licensee shall ensure that it makes payment of the fee detailed in the Regulations.

For the purpose of this Licence, the definitions set out in the Wireless Telegraphy (Further Temporary Electronic Communications Services Licences) (No. 4) Regulations 2022 apply.

This Licence shall come in to effect on **DD/MM/YYYY** (the "Licence Commencement Date") and, subject to revocation, suspension or withdrawal, expires on **DD/MM/YYYY**.

Signed: ____

For and on behalf of the Commission for Communications Regulation

Date of Issue

Part 1

Authorised Band	Name of Spectrum Block	Frequency Assigned to Spectrum Block	Commencement Date per Spectrum Block	Expiry Date per Spectrum Block
700 MHz Duplex, 2.1GHz, as appropriate	Block A, B, C etc.	From — MHz to — MHz	DD Month YYYY	DD Month YYYY

Commencement and expiry dates of Spectrum Blocks

Part 2

The Apparatus to which this Licence applies

Authorised Band	Indov 🦱	Terrestrial System	Equipment Description	Manufacturer	Model
700 MHz Duplex, 2.1 GHz,as appropriate					

Part 3

Apparatus Location and Details

Authorised Band	Site Identity	Eastings	Northings	Equipment Index Reference	Maximum EIRP/ TRP (dBm/5 MHz)
700 MHz Duplex, 2.1 GHz, as appropriate					

Part 4

Licence Conditions

Section 1: General

Harmful Interference

1. In the event of Harmful Interference, the affected Licensees shall exchange information with a view to resolving the Harmful Interference by mutual consent. Where resolution cannot be agreed between the affected Licensees, the Commission may mediate in accordance with its statutory functions, objectives and duties.

Section 2: Technical Conditions

Definitions

1. The following additional definitions shall apply to this Licence:

"2RN" means RTÉ Transmission Network DAC (trading as 2rn);

"Active Antenna Systems" or "AAS" means a Base Station and an antenna system where the amplitude and/or phase between antenna elements is continually adjusted resulting in an antenna pattern that varies in response to short term changes in the radio environment. This excludes long-term beam shaping such as fixed electrical down tilt. In AAS Base Stations the antenna system is integrated as part of the Base Station system or product;

"Non-Active Antenna Systems" or "non-AAS" means a Base Station and an antenna system that provides one or more antenna connectors, which are connected to one or more separately designed passive antenna elements to radiate radio waves. The amplitude and phase of the signals to the antenna elements is not continually adjusted in response to short term changes in the radio environment;

"Base Station" means Apparatus connected to a backhaul network which provides a Radiocommunication Service to Terminal Stations using spectrum in the 700 MHz Duplex or 2.1 GHz Band;

"Block Edge Mask" or "BEM" is an emission mask that is defined as a function of frequency in relation to a 'block edge', the latter being the frequency boundary of a spectrum block for which rights of use are assigned to Licensee. The BEM consists of several elements which are defined for certain measurement bandwidths.

"dBm" means decibels of power referenced to one milliwatt;

"Downlink" means transmissions from a Base Station to a Terminal Station;

"MNO" means a mobile network operator with an existing network in Ireland;

"TRP" (total radiated power) is a measure of how much power the antenna actually radiates and is defined as the integral of the power transmitted in different directions over the entire radiation sphere;

"Terminal Station" means mobile user equipment and fixed customer premise equipment which communicates with a Base Station using spectrum in the 700 MHz Duplex or 2.1 GHz Band;

"Uplink" means transmissions from a Terminal Station to a Base Station; and "Virgin Media" means Virgin Media Ireland Limited.

Technical Conditions

- 2. The 700 MHz Duplex
 - (a) Only terrestrial systems compatible with the Decision of 2016 can be worked and used in the 700 MHz Duplex.
 - (b) The FDD mode of operation shall be used in the 700 MHz Duplex. The duplex spacing shall be 55 MHz with Terminal Station transmission (FDD uplink) located in the lower frequency band 703-733 MHz and Base Station transmission (FDD downlink) located in the upper frequency band 758 -788MHz.
 - (c) The Licensee shall comply with all Memoranda of Understanding ('MoU')¹ agreed between the Commission and its neighbouring national regulatory authorities responsible for communications matters, in particular the Office of Communications ("Ofcom") in the UK, or its successor, in relation to the 700 MHz Duplex.
 - (d) The Licensee shall comply with the 700 MHz Coordination Procedures as agreed to by the MNOs, 2RN and Virgin Media on 3 April 2020 and published by the Commission on 7 April 2020 as Annex 4 to Commission Document 20/27.

Base Stations

- (e) Within a 700 MHz Duplex Block assigned to the Licensee, the in-block power from a Base Station must not exceed a maximum mean EIRP of 64 dBm/5 MHz per antenna.
- (f) Outside of the 700 MHz Duplex Block(s) assigned to the Licensee, the Licensee shall comply with the out-of-block BEM as specified in Section B of the Annex of the Decision of 2016.

¹ <u>Memorandum of Understanding</u> on frequency coordination between Ireland and the United Kingdom concerning the spectrum coordination of Land Mobile Radio Communication Networks in the frequency range 703 MHz to 2690 MHz, available at <u>www.comreg.ie</u>

- (g) The maximum mean in-block power limit of 23 dBm for Terminal Stations shall apply².
- (h) The out-of-block technical conditions set out in Table 10 to Table 12 of the Annex to the Decision of 2016 shall apply.
- (i) Where a Licensee holds more than 2×10 MHz in the 700 MHz Duplex and if this assignment is deployed starting at 703 MHz, the licensee shall not deploy a bandwidth greater than 10 MHz for Terminal Stations in order to meet the conditions as set out in Table 12 of the Annex to the Decision of 2016 to provide protection to the frequency range 470 694 MHz.

3. The 2.1 GHz Band

- (a) Only terrestrial systems compatible with the Decision of 2012 can be worked and used in the 2.1 GHz Band.
- (b) The duplex mode of operation shall be FDD. The duplex spacing shall be 190 MHz with Terminal Station transmission (FDD uplink) located in the lower part of the band starting at 1920 MHz and finishing at 1980 MHz and Base Station transmission (FDD downlink) located in the upper part of the band starting at 2 110 MHz and finishing at 2 170 MHz.
- (c) The Licensee shall comply with all MoU³ between the Commission and its neighbouring national regulatory authorities responsible for communications matters, in particular the Office of Communications ("Ofcom") in the UK, or its successor, in relation to the spectrum in the 2.1 GHz Band.

Base Stations

- (d) Within a 2.1 GHz Band Block assigned to the Licensee, the in -block radiated power from a Base Station transmitter in the downlink direction must not exceed:
 - (i) an EIRP of 64 dBm/5 MHz per antenna for non-AAS; and

 $^{^{2}}$ This power limit is specified as EIRP for Terminal Stations designed to be fixed or installed and as total radiated power (TRP) for Terminal Stations designed to be mobile or nomadic. This value is subject to a tolerance of up to + 2 dB, to take account of operation under extreme environmental conditions and production spread.

³ Memorandum of Understanding on frequency coordination between Ireland and the United Kingdom concerning the spectrum coordination of Land Mobile Radio Communication Networks in the frequency range 703 MHz to 2690 MHz, available at <u>www.comreg.ie</u>.

- (ii) a TRP limit of 57 dBm/5MHz per cell for AAS.
- (e) Outside of the 2.1 GHz Band Block(s) assigned to the Licensee, the Licensee shall comply with the out-of-block BEM as specified in Section C of the Annex to the Decision of 2012.

Terminal Stations

(f) The maximum mean in-block power limit over frequencies of FDD Uplink of 24 dBm for Terminal Stations shall apply⁴.

⁴ This power limit is specified as EIRP for terminal stations designed to be fixed or installed and as TRP for terminal stations designed to be mobile or nomadic. EIRP and TRP are equivalent for isotropic antennas. It is recognised that this value may be subject to a tolerance defined in the harmonised standards to take account of operation under extreme environmental conditions and production spread

Section 3: Coverage Requirements

1. Coverage at specific locations in the State

Coverage	Location	Obligation
Outdoors	Specific locations in relation to the extraordinary situation arising from COVID- 19 as may be determined from time to time by the Government and communicated to the Commission by the Department of the Environment, Climate and Communications	Best efforts using all rights of use available to the Licensee

Table 1: Outdoor coverage obligations at specific locations in
relation to the extraordinary situation arising from
COVID-19

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

day of 2022

For and on behalf of the Commission for Communications Regulation

The Minister for the Environment, Climate and Communications, in accordance with section 37 of the Communications Regulation Act, 2002, (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)) consents to the making of the foregoing Regulations.

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

day of 2022

Minister for the Environment, Climate and Communications

EXPLANATORY NOTE

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

These Regulations prescribe matters in relation to the further temporary licences (No. 4) for apparatus for wireless telegraphy for terrestrial systems capable of providing Electronic Communications Services in the 700 MHz Duplex and the 2.1 GHz Bands to address the temporary impact upon Electronic Communications Networks and Electronic Communications Services from the extraordinary situation arising from COVID-19.