

## COVID-19: Potential Further Temporary ECS Licensing

January 2021 update and next steps in considering any further temporary licensing framework

**Information Notice** 

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### **1: Introduction**

- The purpose of this Information Notice is to provide an update on the current COVID-19<sup>1</sup> temporary licensing framework (under which licences are due to expire on 1 April 2021) and information relevant to the consideration of any further COVID-19 temporary spectrum licensing framework beyond 1 April 2021, including next steps and envisaged consultation timelines regarding same.
- 2. There continues to be uncertainties around the future prevalence of COVID-19 and with this the duration and extent to which the Irish Government will need adapt to and continue to take measures to address same. On 15 September 2020, the Irish Government published *"Resilience and Recovery 2020-2021: Plan for Living with COVID-19"*, a risk management strategy for the following half year or so to guide its interventions.
- 3. While it always remains preferable to assign radio spectrum on a long-term basis through a competitive award process as appropriate, the temporary assignment of spectrum, which has been for similar six month periods, can continue to assist licensees in providing additional network capacity/performance to meet the increased traffic demands arising from the lifetime of the Government's necessary COVID-19 measures.

# 1.1 COVID-19: Temporary Spectrum Rights in the 700 MHz, 2.1 GHz and 2.6 GHz bands

4. Given the extraordinary situation presented by COVID-19 and the significant increased traffic demands placed on wireless networks (see Section 1.4 below) arising from the Government measures to address same (see Section 1.3 below), and pursuant to requests from affected operators, the Commission for Communications Regulation ("ComReg") has consulted upon and (with the consent of the Minister) put in place two consecutive licensing frameworks for the temporary assignment of spectrum rights of use. These are:

<sup>&</sup>lt;sup>1</sup> COVID-19 is a new illness that can affect your lungs and airways and is caused by a virus called SARS-CoV-2 (2019-nCoV) coronavirus.

<sup>&</sup>lt;sup>2</sup> See https://www.gov.ie/en/campaigns/resilience-recovery-2020-2021-plan-for-living-with-covid-19/

- the Temporary ECS licensing framework (from 8 April 2020 to 7 October 2020)<sup>3</sup>; and
- the Further Temporary ECS licensing framework (from 8 October 2020 to 1 April 2020)<sup>4</sup>.
- 5. Each of these licensing frameworks has provided for the temporary assignment of spectrum rights in the 700 MHz, 2.1 GHz and 2.6 GHz bands for an overall period of up to 6 calendar months from the date of the coming into operation of the relevant regulations.
- 6. Such temporary licensing frameworks are intended solely to address the exceptional and extraordinary situation presented by the Government measures to address COVID-19 and are entirely without prejudice to the award of spectrum in the upcoming Multi-Band Spectrum Award (see Section 1.2 below).
- 7. All respondents to ComReg's consultations on the COVID-19 temporary spectrum licensing frameworks have agreed with this key principle<sup>5</sup> and applicants for a temporary licence have accepted same in the Application Declaration Form<sup>6</sup> when applying for a licence.
- 8. To date temporary spectrum rights in the 700 MHz and 2.1 GHz bands have been issued to all three mobile network operators (MNOs), Meteor, Three and Vodafone, as detailed in Table 1 below.

<sup>&</sup>lt;sup>3</sup> The Wireless Telegraphy (Temporary Electronic Communications Services Licences (<u>S.I. No. 122 of</u> <u>2020</u>,) Regulations 2020 were made on 8 April 2020 with the consent of the Minister for Communications, Climate Action and Environment.

<sup>&</sup>lt;sup>4</sup> The Wireless Telegraphy (Further Temporary Electronic Communications Services Licences) Regulations 2020 (<u>S.I. No. 407 of 2020</u>) were made on 2 October 2020, with the consent of the Minister for the Environment, Climate and Communications.

<sup>&</sup>lt;sup>5</sup> See paragraphs 3.3 to 3.6 of ComReg Document 20/27, and paragraph 3.31 of Document 20/86. Documents available at <u>https://www.comreg.ie/industry/radio-spectrum/spectrum-awards/covid-19-temporary-spectrum-management-measures/</u>.

<sup>&</sup>lt;sup>6</sup> See paragraph 4 of Part 6 of the Application Form (Document <u>20/88a</u>).

		Temporary ECS Licensing Framework		Further Temporary ECS Licensing Framework	
Licensee	Spectrum Bands	Initial Licence	Renewal Licence	Initial Licence	Renewal Licence
Meteor	700 MHz, 2.1 GHz Band	9 April 2020 to 8 July 2020	9 July 2020 to 7 October 2020	8 October 2020 to 7 January 2021	8 January 2021 to 1 April 2021
Three	700 MHz, 2.1 GHz Band	9 April 2020 to 8 July 2020	9 July 2020 to 7 October 2020	8 October 2020 to 7 January 2021	8 January 2021 to 1 April 2021
Vodafone	700 MHz, 2.1 GHz Band	22 April 2020 to 21 July 2020	22 July 2020 to 7 October 2020	8 October 2020 to 7 January 2021	8 January 2021 to 1 April 2021

#### Table 1: Details of the COVID-19 Temporary spectrum licences issued

9. As demonstrated by the MNOs' submissions to ComReg's consultations<sup>7</sup>, the temporary spectrum rights have been used to provide additional network capacity which supports the provision of voice and data services to consumers, with the increased traffic demands arising from the COVID-19 measures. The extent of this deployment varies per MNO.

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

 In parallel with COVID-19 temporary spectrum rights, ComReg has progressed its Multi-Band Spectrum Award (referred to herein as "MBSA2") project for the longterm assignment of spectrum rights of use in the 700 MHz, 2.1 GHz, 2.3 GHz and 2.6 GHz bands (the "Award Bands") and, on 18 December 2020, ComReg published its Decision D11/20<sup>8</sup> ("the MBSA2 Decision") on same.

 <sup>&</sup>lt;sup>7</sup> For example, see section 3.2.2 of ComReg Document 20/86 which summarises the MNOs' submissions in support of a further temporary spectrum licensing framework.
 <sup>8</sup> See:

ComReg Document No. 20/122, 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. Available at: <u>https://www.comreg.ie/publication/multi-band-</u> <u>spectrum-award-response-to-consultation-and-decision-the-700-mhz-duplex-2-1-ghz-2-3-ghz-</u> <u>and-2-6-ghz-bands</u>;

- 11. As noted in ComReg Document 20/122, spectrum awards, and particularly those suitable for the deployment of mobile and wireless broadband services, are very important events which occur only every few years and which have economy-wide impact. ComReg's previous spectrum awards<sup>9</sup> have, among other things, promoted effective competition including new market entry, and facilitated the rollout of existing and new services, including 4G and 5G, to the benefit of Irish users.
- 12. The MBSA2 award is every bit as important as ComReg's previous spectrum awards and its progress will enable licensees to make long-term capital expenditure decisions and is an important aspect of general economic and social development in Ireland for the foreseeable future for reasons including that:
  - it will lead to improved network coverage and capacity, with significant economic benefits;
  - it will likely result in significant cost savings for existing network operators that secure spectrum in the award; and
  - it is central to meeting the European Commission's ("EC") 5G for Europe Action Plan, a strategic initiative which concerns all stakeholders, private and public, small and large, in all Member States, to meet the challenge of making 5G a reality<sup>10</sup>.
- 13. In addition, pursuant to Article 1 of Decision (EU) 2017/899<sup>11</sup>, Ireland is obliged to "allow the use" of the 700 MHz Band by 30 June 2020, and Ireland's national

- 3.6 GHz band award webpage <u>https://www.comreg.ie/industry/radio-spectrum/spectrum-awards/3-6ghz-band-spectrum-award/;</u> and
- 2012 MBSA webpage <u>https://www.comreg.ie/industry/radio-spectrum/spectrum-awards/multi-band-spectrum-award-2012/</u>.

ComReg Document No. 20/122a; Multi Band Spectrum Award - DotEcon Report Assessment of responses to consultation on Draft Decision, published 18 December 2020. Available at: <u>https://www.comreg.ie/publication/multi-band-spectrum-award-dotecon-report-assessment-of-responses-to-consultation-on-draft-decision;</u>

ComReg Document No. 20/122b; Multi Band Spectrum Award - A Report by Plum Consulting London LLP, published 18 December 2020. Available at: <u>https://www.comreg.ie/publication/multiband-spectrum-award-a-report-prepared-by-plum-consulting-llp-updated-co-existence-modellingof-rurtel-and-aeronautical-radar-with-wireless-broadband-wbb-in-the-2-3-and-2-6-ghz-bands; and
</u>

ComReg Document No. 20/122s; 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>https://www.comreg.ie/publication/multi-band-spectrum-award-updated-versions-of-</u> non-confidential-submissions-to-document-19-124-20-32-and-20-56.

<sup>&</sup>lt;sup>9</sup> The last major award was in 2017 for the 3.6 GHz band, a 5G candidate band, and before that in 2012 for the 800 MHz, 900 MHz and 1800 MHz bands. See:

<sup>&</sup>lt;sup>10</sup> See <u>https://ec.europa.eu/digital-single-market/en/5g-europe-action-plan</u>

<sup>&</sup>lt;sup>11</sup> <u>Decision (EU) 2017/899</u> of the European Parliament and of the Council of 17 May 2017 on the use of the 470-790 MHz frequency band in the Union.

roadmap for the 700 MHz band<sup>12</sup> envisages an award process starting shortly in Q1 2021.

- 14. On 14 January 2021, Three Ireland (Hutchison) Limited and Three Ireland Services (Hutchison) Limited (collectively "Three") lodged an appeal of the MBSA2 Decision.
- 15. As set out in Document 21/04, Three's appeal does not of itself affect the taking effect of the MBSA2 Decision or prevent action being taken to implement it. ComReg will oppose the appeal in full.

#### **1.3 Government measures to address COVID-19 in Ireland**

- 16. Since March 2020 the Irish Government has taken a suite of measures to tackle COVID-19 and, as referenced earlier, in September 2020, the Government published its *"Resilience and Recovery 2020-2021: Plan for Living with COVID-19"* which set out 5 levels of restrictions for controlling the spread of COVID-19 over the following 6 to 9 months.
- 17. Currently, Level 5 restrictions apply to all counties in Ireland until 31 January 2021<sup>13</sup> and, among other things, require that:
  - people stay at home, except for work, education or other essential reasons, or to exercise within 5 kilometres of your home;
  - people work from home, unless your work is an essential service that cannot be done from home;
  - people do not visit other households except for essential purposes; and
  - schools are closed until 1 February 2021. During this time, schools will move to a programme of remote learning.
- 18. On 21 December 2020, the European Commission authorised the first vaccine to prevent COVID-19 in the EU, following evaluation by the European Medicines Agency ("EMA"), and the rollout of such vaccines has begun across Europe, including in Ireland<sup>14</sup>. More recently, on 6 January 2021, the European Commission authorised the second vaccine to prevent COVID-19 in the EU, COVID-19 Vaccine

<sup>&</sup>lt;sup>12</sup> "Ireland's National Roadmap on the Use of the 700 MHz Frequency Band, Update to Roadmap published in March 2019", published May 2020.

<sup>&</sup>lt;sup>13</sup> S.I. No. 701/2020 - Health Act 1947 (Section 31A - Temporary Restrictions) (Covid-19) (No. 10) Regulations 2020.

<sup>&</sup>lt;sup>14</sup> <u>https://www.gov.ie/en/publication/27546-vaccine-availability/#benefits-of-comirnaty-pfizerbiontech-covid-19-vaccine-as-shown-in-clinical-trials</u>.

Moderna, following evaluation by the EMA. On 12 January 2021, the EMA began evaluating an application for conditional marketing authorisation for the COVID-19 vaccine ChAdOx1-SARS-CoV-2 developed by AstraZeneca and University of Oxford<sup>15</sup>.

- 19. The Irish Government has established a high-level taskforce on COVID-19 vaccination, which has since developed a national vaccination plan for the COVID-19 vaccine in Ireland. This taskforce is working with the HSE and the Department of Health on the rollout of the national COVID-19 vaccination programme<sup>16</sup> which commenced with the vaccination of front-line healthcare workers and people over 65 years of age and living in Long Term Residential Care facilities.
- 20. The COVID-19 Vaccine Allocation Strategy provisionally lists the groups of people who will be the first to access a COVID-19 vaccine in Ireland<sup>17</sup>. The COVID-19 vaccine will be available free of charge. The Irish Government expects that at least four million people in the State will be vaccinated against COVID-19 by the end of September 2021<sup>18</sup>. Therefore, ComReg expects that the need for Government measures and, in turn, the justification for temporary licences will begin to dissipate over the coming months.

#### **1.4 Network traffic since the adoption of COVID-19 measures**

- 21. The adoption of COVID-19 measures has resulted in increased voice and data traffic on electronic communications networks given the greater dependence on these networks for work, personal, social and educational activities.
- 22. To better understand the changing demands being placed on network operators in light of COVID-19, and their ability to meet these demands, weekly network performance reports are provided by network operators to ComReg's Network Industry Forum.

<sup>&</sup>lt;sup>15</sup> See <u>COVID-19: latest updates | European Medicines Agency (europa.eu)</u>

<sup>&</sup>lt;sup>16</sup> gov.ie - COVID-19 Vaccine (www.gov.ie)

<sup>&</sup>lt;sup>17</sup> https://www.gov.ie/en/publication/39038-provisional-vaccine-allocation-groups/#your-quick-guide-tothe-provisional-vaccine-allocation-groups

<sup>&</sup>lt;sup>18</sup> See <u>https://www.irishtimes.com/news/politics/covid-19-donnelly-says-4m-to-be-inoculated-by-end-of-september-as-mass-vaccination-centres-planned-1.4457749</u>.

#### Mobile Networks Aggregate Traffic Volume Increase

- 23. Figure 1 below presents updated aggregate monthly change in voice and data traffic volume on the mobile networks from April 2020 to January 2021.
- 24. From this ComReg observes that aggregate MNO voice<sup>19</sup> and data traffic volume in January 2021 remains significantly greater than the pre-COVID-19 base levels.

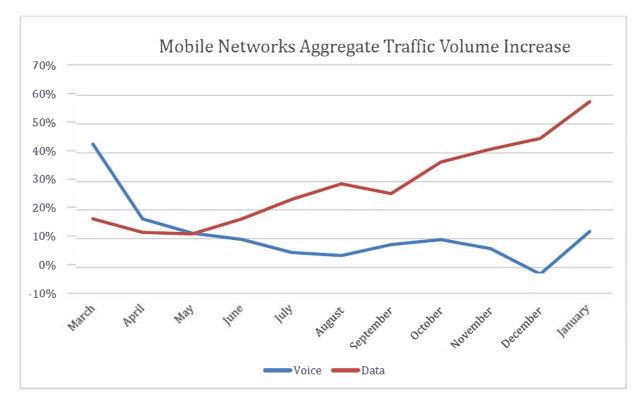


Figure 1: Mobile Networks Aggregate Traffic Volume Increase<sup>20</sup>

#### Weekly network operator performance report

- 25. From the most recent weekly network operator performance report, compiled on 11 January 2021, ComReg observes that for the mobile networks:
  - the weekly aggregate voice and data traffic volume is circa 11% and 60% greater than the base pre-COVID-19 level, respectively; and

<sup>&</sup>lt;sup>19</sup> Aggregate MNO voice traffic volumes decreased in December 2020 in line with historical trends at Christmas.

<sup>&</sup>lt;sup>20</sup> Note that these are total traffic volume increases above a base level before the COVID-19 government restrictions were put in place and include changes due to typical seasonal or annual variations in traffic.

 the weekly data traffic volume increases on individual mobile networks compared to pre-COVID-19 levels, as set out in Table 2 below, has recently increased. This is likely due to a number of reasons including the introduction of level 5 restrictions and the historical trend of increased data usage due to new devices in particular mobile handsets which are gifted at Christmas.

### Table 2: Individual Mobile Network Operator traffic volume increases (datacompiled on 18 January 2021) [SREDACTED S]

MNO	Voice traffic increase	Data traffic increase
Meteor	[× <mark> </mark> ×]	[× × × ]
Three	[×	[× × ×]
Vodafone	[×    × ]	[× × × ]

26. Weekly network information is also collected from Imagine in relation to its fixed wireless network. Based on its network operator performance report compiled on 18 January 2021, Imagine's network experienced a data traffic volume increase of [ ≫ January 2021, Imagine's network experienced a data traffic volume increase of [ ≫ ] compared to pre COVID-19 levels. ComReg observes that this percentage level increase is higher than that of the mobile networks and also reflects recent increases due to the imposition of Level 5 restrictions.

<sup>&</sup>lt;sup>21</sup> Note that these are total traffic volume increases above a base level before the COVID-19 government restrictions were put in place and include changes due to typical seasonal or annual variations in traffic.

## 2: Next steps in considering any further Temporary ECS Licensing framework

27. ComReg recognises that a further Temporary ECS Licensing framework may be justified beyond expiry of the current temporary licences on 1 April 2021, in light of the prospect of continued Government measures to address COVID-19. Therefore, in this section, ComReg sets out the anticipated process for putting in place such a framework, should one be needed.

#### 2.1 Submission of a joint/common request from the MNOs

- 28. In addition to the continued provision of network performance data outlined above, ComReg observes that the next formal step in considering any further Temporary ECS Licensing framework would be for the MNOs to submit a joint or common request to ComReg which would:
  - set out the specific details of the joint/common request indicating any elements of the existing Temporary ECS Licensing framework that ought to be changed (if any) and the reasons for same; and
  - (ii) provide sufficiently detailed information based on the updated and prevailing COVID-19 considerations **at that time** to support a request for any further Temporary ECS Licensing framework.
- 29. ComReg requests that such a joint/common request be submitted by **17 February 2021**<sup>22</sup>.
- 30. To assist the MNOs in making such a submission, the following is a non-exhaustive list of information that ComReg would expect each MNO to include in support of any joint/common request.
- 31. Noting that the MNOs have previously submitted information in support of the current Further Temporary ECS licensing framework, ComReg expects that the information submitted by the MNOs will **include an update to the datasets previously provided, highlighting the relevant changes** since the data was last submitted in December 2020.

<sup>&</sup>lt;sup>22</sup> ComReg notes that this timing would give ComReg sufficient time (circa 6 weeks) to complete an accelerated consultation process, while also being sufficiently close to the end of the existing licensing framework on 1 April 2021, to allow the MNOs to submit updated information based on the prevailing COVID-19 considerations at that time, and for ComReg to consider same.

32. ComReg understands that some of the information outlined below may be considered commercially sensitive by the individual MNOs and that, in such circumstances, ComReg would expect each MNO to separately submit any such material to ComReg on a confidential basis alongside the submission of the joint/common request (see further details under Section 2.2 below).

A. Network traffic / capacity / performance information

- available information regarding the traffic (voice and data), capacity and performance of the network considering the temporary and extraordinary situation arising from COVID-19. In particular, the changes in network traffic (voice and data), capacity and performance from pre-COVID-19 until now.
- (ii) information on the expected traffic demand and network capacity beyond 1 April 2021.
- (iii) observations on how much of the changes in traffic and capacity is due to forecasted annual changes that would be expected on a network in the normal course (accounting for seasonal changes and projected market developments in the absence of COVID-19) and those that can reasonably be considered to be directly related to Government COVID-19 measures.
- B. Ability to make use of existing temporary spectrum assignments in any further Temporary ECS Licensing framework
  - (i) information regarding the number, locations and deployment dates of sites/transmitters and technology (e.g. UMTS, LTE etc...) for each spectrum band that have been used to date using an existing Further Temporary ECS Licence.
  - (ii) the number of sites/transmitters for each spectrum band that an MNO would expect to use over the duration of any further Temporary ECS Licensing framework.
- C. How temporary rights have assisted with the provision of ECS in the State
  - (i) how existing temporary rights have assisted in alleviating the network capacity/performance constraints to-date. Please provide available information highlighting trends where the network capacity/network performance improvements are correlated to use of temporary ECS rights of use. For example, when temporary ECS rights of use were brought into use the network / capacity improvements observed at these times.

- (ii) how temporary rights may materially assist over the duration of any further Temporary ECS Licensing framework.
- D. Managing the risks to the provision and quality of existing ECS given the use of the temporary spectrum rights
  - (i) information regarding the management of risks to the provision and quality of existing ECS and the measures taken to date by the MNO. For example, the key measures taken on foot of Annex 4 of Document 20/27 - 700 MHz Coordination procedures.
- E. The risk of congestion and other disruption to consumer services and the locations where it would most likely arise in the event of no further Temporary ECS Licensing framework, identifying if such congestion or disruption would reasonably be considered to be due to COVID-19 matters or mobile market developments / commercial strategy matters.
- F. Details of the preparations and actions that the MNOs has taken and would need to take in the event of no further Temporary ECS Licensing framework
- G. Any other factors that the MNOs deem relevant to the consideration of any further Temporary ECS Licensing framework

### **2.2 Confidentiality of submissions to this Information Notice**

- 33. In submitting the above information (which may include separate individual MNO information), ComReg requests that electronic submissions be submitted in an unprotected format so that a non-confidential version (see below) of each submission can be readily included in any public consultation that ComReg might issue.
- 34. As outlined above, ComReg appreciates that some of the information submitted may be considered confidential. In order to promote openness and transparency, ComReg will publish all submissions received, as well as all substantive correspondence on matters relating to any further Temporary ECS Licensing framework, subject to the provisions of ComReg's guidelines on the treatment of confidential information (Document 05/24).
- 35. In this regard, the MNOs and any other respondents should make their submissions (i.e. joint/common letter and supporting information, other views etc) in accordance with the instructions set out below. When making a submission which contains confidential information, respondents must choose one of the following options:

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

OR

B. Submit only a confidential version and the reasons as to why the respondent considers any particular material to be confidential, and ComReg will perform the required redaction to create a non-confidential version for publication. With this option, respondents must ensure that confidential information has been marked and highlighted in accordance with the instructions set out below. Where confidential information has not been marked as per our instructions below, then ComReg will not create the non-confidential redacted version and the respondent will have to provide the redacted non-confidential version in accordance with option A above.

- 36. For ComReg to perform the redactions under Option B above, respondents must mark and highlight all confidential information in their submission as follows:
  - a. Confidential information contained within a paragraph must be highlighted with a chosen colour,
  - b. Square brackets must be included around the confidential text (one at the start and one at the end of the relevant highlighted confidential information); and
  - c. A Scissors symbol (Symbol code: Wingdings 2:38) must be included inside each of the square brackets.
- 37. For example, "Redtelecom has a market share of [ $\approx 25\% \approx$ ]."

#### 2.3 Envisaged timeframes for a consultation

38. Assuming that a satisfactory request is received by ComReg in accordance with Sections 2.1 and 2.2 above by **17 February 2021**, ComReg envisages that it would complete its consultation process on a potential new Further Temporary ECS licensing framework in March 2021, in advance of the expiry date of licences under the current framework on 1 April 2021. 39. ComReg notes that any further temporary licensing framework would be intended solely to address the impact on wireless networks of Government measures aimed at addressing the exceptional and extraordinary situation presented by COVID-19 and would be entirely without prejudice to the award of long-term rights of use in these spectrum bands under MBSA2.

# 2.4 Importance of supporting ComReg's network industry forum

40. Finally, ComReg would stress the importance of the MNOs' continued attendance and contribution to ComReg's ongoing network industry forum, including the submission of the weekly network reports referenced earlier. This information is critical to informing ComReg's and other relevant stakeholders' understanding of any continuing need for support, in particular through any further Temporary ECS Licensing framework.