



Commission for  
**Communications Regulation**

# **Liberalisation of the paired terrestrial 2 GHz spectrum band**

## **Implementation of European Commission Decision 2012/688/EU**

### **Preliminary Consultation**

**Reference:** ComReg 14/65

**Date:** 27 June 2014

**An Coimisiún um Rialáil Cumarsáide  
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# 1 Liberalisation of the paired terrestrial 2 GHz band

## 1.1 European Commission Decision 2012/688/EU

1. In November 2012, the European Commission (**EC**) adopted a decision on the harmonisation of the frequency bands 1,920-1,980 MHz and 2,110-2,170 MHz (the “**paired terrestrial 2 GHz band**”) for terrestrial systems capable of providing electronic communications services in the Union (**Decision 2012/688/EU**).<sup>1</sup>
2. Among other things, Decision 2012/688/EU requires Member States to “*designate and make available, on a non-exclusive basis, the paired terrestrial 2 GHz band for terrestrial systems capable of providing electronic communications services, in compliance with the parameters set out in the Annex*” of same decision. This requirement is to be carried out by 30 June 2014 at the latest.
3. The technical conditions set out in the Annex to Decision 2012/688/EU are derived from the European Conference of Postal and Telecommunications Administrations (**CEPT**) Report 39<sup>2</sup> and are presented in the form of frequency arrangements<sup>3</sup> for the band and Block-Edge Masks (**BEMs**)<sup>4</sup> for base stations and terminal stations<sup>5</sup>.
4. These technical conditions are technology-neutral and allow technologies other than the Universal Mobile Telecommunications System (**UMTS**) technology to be deployed in the paired terrestrial 2 GHz band. As noted in CEPT Report 39, the Long Term Evolution (**LTE**) technology is one such technology that could be deployed in the paired terrestrial 2 GHz band under the technical conditions set out in Decision 2012/688/EC.

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<sup>1</sup> Decision 2012/688/EU: “*Commission implementing decision of 5 November 2012 on the harmonisation of the frequency bands 1 920-1 980 MHz and 2 110-2 170 MHz for terrestrial systems capable of providing electronic communications services in the Union*”  
<http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32012D0688>

<sup>2</sup> <http://www.erodocdb.dk/Docs/doc98/official/pdf/CEPTREP039.PDF>

<sup>3</sup> Frequency arrangements refer to the band plan and duplex mode of operation.

<sup>4</sup> A Block-Edge Mask (BEM) “*is an emission mask that is defined, as a function of frequency, relative to the edge of a block of spectrum for which rights of use are granted to an operator. It consists of in-block and out-of-block components which specify the permitted emission levels over frequencies inside and outside the licensed block of spectrum, respectively.*” (Source Decision 2012/688/EU)

<sup>5</sup> In Decision 2012/688/EU the BEM for the terminal station consists only of an in-block component.

## 1.2 The paired terrestrial 2 GHz band in Ireland

5. Following the 3G licensing competitions of 2002 and 2007<sup>6</sup>, all radio spectrum in the paired terrestrial 2 GHz band has been assigned to the market by way of licences granted under the Wireless Telegraphy (Third Generation and GSM Mobile Telephony Licence) (Amendment) Regulations, 2003 (Statutory Instrument No. 340 of 2003)<sup>7</sup> (the “**3G and GSM Regulations**”), for the provision of third generation (**3G**) and GSM mobile telephony services. Four 3G licences have been issued in this spectrum band, details of which are set out in Table 1 below (“**3G Licences**”).

**Table 1: Details of the 3G Licences in Ireland**

3G Licensee	Spectrum Licensed	3G Licence Commencement date	3G Licence Expiry Date	3G Licence
Vodafone Ireland Limited	1950–1965 MHz / 2140–2155 MHz (2 x 15 MHz)	16/10/2002	15/10/2022	<a href="#">M3G1008</a>
Telefónica O2 Communications (Ireland) Ltd <sup>8</sup>	1965–1980 MHz / 2155–2170 MHz (2 x 15 MHz) & 1910–1915 MHz (1 x 5 MHz) <sup>9</sup>	02/10/2002	01/10/2022	<a href="#">M3G1007</a>
Hutchison 3G Ireland Ltd	1920–1935 MHz / 2110–2125 MHz (2 x 15 MHz)	25/06/2002	24/06/2022	<a href="#">M3G1006</a>
Meteor Mobile Communications Ltd	1935–1950 MHz / 2125–2140 MHz (2 x 15 MHz)	12/03/2007	11/03/2027	<a href="#">M3G1005</a>

<sup>6</sup> See ComReg Press Releases [PR250602](#), [PR150802](#), [PR090902](#), and [PR120307b](#).

<sup>7</sup> <http://www.irishstatutebook.ie/2003/en/si/0340.html>

<sup>8</sup> On 28 May 2014 the EC approved under the EU Merger Regulations the proposed acquisition of Telefonica Ireland Limited by Hutchison 3G UK Holdings Limited (of which Hutchison 3G Ireland Limited is a wholly-owned indirect subsidiary). This approval is conditional upon a commitments package submitted by Hutchison 3G UK Holdings Limited. Further details can be obtained from the EC's web-site:

- Under EC Competition case number M.6992 [http://ec.europa.eu/competition/elojade/isef/case\\_details.cfm?proc\\_code=2\\_M\\_6992](http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=2_M_6992); and
- EC Press Release: IP/14/607 [http://europa.eu/rapid/press-release\\_IP-14-607\\_en.htm](http://europa.eu/rapid/press-release_IP-14-607_en.htm)

<sup>9</sup> Decision 2012/688/EU does not affect the unpaired 2 GHz spectrum band (1900 – 1920 MHz). In Ireland, one 5 MHz block of this unpaired spectrum is assigned to Telefonica, while the remaining three 5 MHz blocks are unassigned.

6. In relation to the scope of technologies which can be deployed under the existing 3G Licences, ComReg observes that the 3G and GSM Regulations relevantly provide:
- *“Licence” means a Licence .... authorising the provision of a mobile telephony service...”;*
  - *“Mobile telephony service” means a GSM and Third Generation mobile telephony service;*
  - *“Third Generation mobile telephony service” means a mobile and wireless communications system based on a standard within the IMT-2000 system capable of supporting innovative multimedia services beyond the capability of second generation systems such as GSM, and capable of supporting the characteristics referred to in Annex 1 of the UMTS Decision”;* and
  - *“UMTS Decision” means Decision No. 128/1999/EC of the European Parliament and of the Council of 14 December 1998 on the coordinated introduction of a third generation mobile and wireless communications system in the Community.*
7. The text of the 3G Licences reflects the above provisions, and Schedule 3 (the “Radio frequency bands”) and Schedule 5 Part 2 (the “Licensed Mobile Services”) to the 3G Licences reference ERC Decision ERC/DEC/(99)25<sup>10</sup> by providing:
- *“Use of the bands shall be in compliance with ERC Decision ERC/DEC/(99)25, in particular Annex 1 of that Decision with respect to channel rasters and guard bands.”;* and
  - *“The Licensed Mobile Service is a Third Generation Mobile and wireless communications Service based on a standard within the IMT-2000 system capable of supporting innovative multimedia services beyond the capability of second generation systems such as GSM, and capable of supporting the characteristics referred to in Annex 1 of the CEPT ECC Decision ERC/DEC/(99)25 on UMTS”.*
8. ComReg has not received requests from any 3G Licensee to vary the terms of its 3G Licence in light of Decision 2012/688/EU.

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<sup>10</sup> <http://www.ecodocdb.dk/Docs/doc98/official/pdf/Dec9925.pdf> .

ComReg notes that this ERC Decision has been withdrawn and that it has been replaced by ECC Decision (06)01 (Last amended 02 Nov 2012)

## 1.3 Implementation of Decision 2012/688/EU by other Member States

9. According to Cullen International<sup>11</sup>, the ability of spectrum rights holders to deploy and use other technologies compatible with the technical conditions in Decision 2012/688/EU (such as LTE) in the paired terrestrial 2 GHz band varies across Europe. For example:
- some Member States (e.g. the UK<sup>12</sup>, Sweden<sup>13</sup>) have taken actions to liberalise the rights of use to allow the use of both 3G and 4G (e.g. LTE) technologies;
  - other Member States (e.g. Germany<sup>14</sup>) have indicated their intention to make rights of use technology-neutral upon request;
  - other Member States (e.g. Spain<sup>15</sup>) plan to make rights of use technology-neutral in the future; and
  - some Member States have made no statement to-date in relation to the implementation of Decision 2012/688/EU.

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<sup>11</sup> See <http://www.cullen-international.com/product/documents/CTTEEU20140168> (a subscription website)

<sup>12</sup> <http://stakeholders.ofcom.org.uk/binaries/consultations/variation-900-1800-2100/statement/statement.pdf>

<sup>13</sup> <http://www.pts.se/sv/Nyheter/Radio/2011/Nya-tillstandsvillkor-i-21-GHz-bandet-utan-krav-pa-viss-teknik-eller-tjanst/>

<sup>14</sup>

[http://www.bundesnetzagentur.de/cln\\_1412/EN/Areas/Telecommunications/Companies/FrequencyManagement/ElectronicCommunicationsServices/FlexibilisationFrequencyUsageRights\\_Basepage.html?nn=324044](http://www.bundesnetzagentur.de/cln_1412/EN/Areas/Telecommunications/Companies/FrequencyManagement/ElectronicCommunicationsServices/FlexibilisationFrequencyUsageRights_Basepage.html?nn=324044)

<sup>15</sup> [http://www.agendadigital.gob.es/planes-actuaciones/Bibliotecatelecomunicaciones/1.Plan/Plan-ADpE-1\\_Redes-Ultrarrapidas.pdf](http://www.agendadigital.gob.es/planes-actuaciones/Bibliotecatelecomunicaciones/1.Plan/Plan-ADpE-1_Redes-Ultrarrapidas.pdf)

## 1.4 Call for Inputs

10. ComReg now seeks views from interested parties on the implementation of Decision 2012/688/EU in Ireland (i.e. the “liberalisation” of the existing rights of use in the paired terrestrial 2 GHz band to enable the deployment of technologies compatible with the technical conditions set out in Decision 2012/688/EC) in the context of ComReg’s statutory functions, objectives and duties in relation to the radio frequency spectrum.<sup>16</sup>
11. In present circumstances, ComReg would welcome views on the potential impact of such liberalisation particularly in terms of:
- the benefits to consumers in terms of furthering their interests by, for example, encouraging innovation, investment, and the availability and use of mobile services in Ireland; and result in better choice, price, quality of service and value for money; and/or
  - whether liberalisation may give rise to a material risk of a distortion of competition to the detriment of consumers such that any benefits resulting from liberalisation would be outweighed by the detriment to consumers resulting from any such a distortion of competition.
12. In addition, noting the current legislative provisions for the paired terrestrial 2 GHz band as highlighted in section 1.2 above, ComReg would welcome views on the suitability (or otherwise) of the existing provisions in the 3G and GSM Regulations and the 3G Licences to facilitate the deployment of the full suite of liberalised technologies as provided for under Decision 2012/688/EC.<sup>17</sup>

## 1.5 Submitting comments and next steps

### Submitting comments

13. All input and comments to this preliminary consultation are welcome.
14. Please also set out your reasoning and all supporting information for any views expressed.

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<sup>16</sup> The most recent iteration of a summary of this legal framework is set out in Annex 1 of ComReg document 14/13 which is available at <http://www.comreg.ie/fileupload/publications/ComReg1413.pdf>

<sup>17</sup> In that regard, ComReg observes from information on the International Telecommunications Union (ITU) website (see for example [ITU-R Resolution 56-1\\*](#), [Recommendation ITU R M.1224](#), [Recommendation ITU R M.1457](#), and [Recommendation ITU R M.2012](#)) that it is unclear whether the IMT-2000 system specifications would properly cover the full suite of liberalised technologies (e.g. LTE and LTE-Advanced) as provided for under Decision 2012/688/EC or a sub-set of these technologies (e.g. just LTE).



15. The period for comment will run until **4pm pm on 25 July 2014**, during which time ComReg welcomes written comments on any of the issues raised.
16. Responses must be submitted in written form (post or email) to the following recipient, clearly marked "Submissions to ComReg 14/65":

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17. In order to promote further openness and transparency ComReg will publish all respondents' submissions received and all substantive correspondence on matters relating to this document, subject to the provisions of ComReg's guidelines on the treatment of confidential information<sup>18</sup>.
18. We would request that electronic submissions be submitted in an unprotected format so that they can be included in the ComReg submissions document for electronic publication.
19. ComReg appreciates that respondents may wish to provide confidential information if their comments are to be meaningful. As it is ComReg's policy to make all responses available on its website and for inspection generally, respondents are again requested clearly to identify confidential material, and to place confidential material in a separate annex to their response, also providing supporting reasoning as to why such material is confidential in that annex.

### **Next Steps**

20. Insofar as it might receive correspondence on matters relating to this document, ComReg hereby gives notice that it will publish all material correspondence received in this regard. Such information will be subject to the provisions of ComReg's guidelines on the treatment of confidential information<sup>18</sup>.

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<sup>18</sup> Document 05/24 - Response to Consultation - Guidelines on the treatment of confidential information - March 2005.

21. Following consideration of submissions received, it is ComReg's intention to issue a further consultation on this matter whereby proposals for the implementation of EC Decision 2012/688/EU in Ireland would be set out by ComReg.