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Communications Regulation

Spectrum Trading in the Radio Spectrum Policy Programme (RSPP) bands

A framework and guidelines for spectrum
transfers in the RSPP bands

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Chapter 1

1 Introduction

- 1.1 On the 29 June 2012, the Commission for Communications Regulation (“ComReg”) published its Strategy Statement (2012-2014) (Document 12/69) and indicated that it would consult on guidelines on spectrum trading shortly, having already noted in its recent Response to Consultation on Multi-band Spectrum Release (ComReg Document 12/25) that trading in the 800MHz, 900 MHz and 1800 MHz bands will be permitted.
- 1.2 In addition, on 22 November 2011, ComReg published its Spectrum Strategy Statement 2011-2013¹ in which ComReg set out its preliminary position with regard to trading of spectrum rights of use.² In particular, ComReg indicated that it would bring forward a consultation on the matter of spectrum trading which would be the first step in the implementation of spectrum trading in Ireland.
- 1.3 As evidenced by the current multi-band spectrum award process, there is considerable interest, particularly among mobile network operators (MNOs) in accessing rights to use radio frequency spectrum. Indeed, cross-country data in relation to monthly minutes of usage (MMOUs) and mobile average revenue per user (ARPU) highlight importance of spectrum in Ireland.³
- 1.4 On 14 March 2012, a Decision of The European Parliament and of the Council establishing a multiannual radio spectrum policy programme was published (“the RSPP Decision”).⁴ The RSPP Decision mandates, amongst other things, the introduction of spectrum trading in certain bands.⁵

¹ *Managing the Radio Spectrum: 2011 – 2013*, ComReg Document 11/89.

² These are summarised below at Section 2.6.

³ Cross-country data from the Worldwide Cellular Information Service shows that MMOUs and ARPU are on average higher in Ireland than in most Western European countries.

⁴ Decision No 243/2012/EU Of The European Parliament and of the Council of 14 March 2012 establishing a multiannual radio spectrum policy programme.

⁵ Article 6(8) of the RSPP Decision.

- 1.5 The radio frequency bands set out in Article 6.8 of the RSPB Decision, where trading procedures are mandated, are collectively referred to as the "*RSPB bands*", and they are as follows: 790-862 MHz, 880-915MHz, 925-960MHz, 1710-1785MHz, 1805-1880MHz, 1900-1980MHz, 2010-2025MHz, 2110-2170MHz, 2.5-2.69GHz and 3.4-3.8GHz.
- 1.6 ComReg has had regard to international developments and the procedures for spectrum transfers developed in other jurisdictions and sets out an overview of these at Annex 1. ComReg's proposed procedures will enable holders of spectrum rights of use in the RSPB bands to transfer some or all of those rights to third parties.
- 1.7 The RSPB includes an objective to "*promote innovation and investment through enhanced flexibility in the use of spectrum, through a consistent application across the Union of the principles of technology and service neutrality between the technological solutions that may be adopted and through adequate regulatory predictability as provided for, inter alia, in the regulatory framework for electronic communications through the freeing up of harmonised spectrum for new advanced technologies, and through the possibility of trading rights of use of spectrum, thereby creating opportunities for future Union-wide digital services to be developed*".⁶ [Emphasis added].
- 1.8 The RSPB Decision indicates an expectation that spectrum trading will provide benefits arising from *inter alia*:
- benefiting economic growth;⁷
 - allowing adaptation to market evolution;⁸ and
 - creating opportunities for future Union-wide digital services to be developed.⁹

⁶ Article 3(f) .

⁷ Recital 14.

⁸ Recital 19.

⁹ Article 3(f).

- 1.9 Regulation 19 of the European communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 requires ComReg to ensure that undertakings may transfer or lease to other undertakings in accordance with conditions attached to the right of use of radio frequencies and any procedures specified by ComReg, individual rights to use radio frequencies in the bands for which this is mandated by the European Commission. The RSPP Decision has mandated trading in the RSPP bands.
- 1.10 Moreover, ComReg recognises that operators will want a facility to transfer spectrum rights of use.
- 1.11 ComReg wishes, in this paper to consult on its proposals to address this requirement and, in particular, sets out draft Guidelines for Spectrum Transfer Analysis and Procedures at Annex 4. ComReg invites comment on its draft guidelines and on other issues raised in this paper.

1.1 Purpose and scope of paper

- 1.12 Spectrum trading is the transfer from one undertaking to another of rights to use radio frequency spectrum and the associated conditions. Spectrum trading includes both outright transfer of rights of use of spectrum from the date of transfer to the end of the current right of use and leasing of rights of use of spectrum for a period of time whereby the right of use will revert to the lessor before the end of the term. ComReg notes that there are few international cases of transfers of rights of use of spectrum for a period shorter than the remainder of the licence duration (i.e. leasing), and notes that in many jurisdictions no framework for 'leasing' has been developed to date. For example, Ofcom does not permit leasing of rights of use in the 'mobile bands'.
- 1.13 ComReg does not, at this early stage internationally in the development of regulatory regimes for spectrum leasing in the bands in question, address a regime for leasing in this paper, although comments from interested parties would be welcome in this regard.
- 1.14 Accordingly, although the Framework Regulations also provide for leasing of rights of use to spectrum, ComReg will initially introduce a

regime for transfers only (including partial transfers) and will return to the matter of leasing rights of use of spectrum in the harmonised bands in due course.

- 1.15 In a spectrum transfer the rights and associated conditions are transferred for the remaining duration of the licence, whereas in a lease situation, any 'transfer' would be time dependent and would not be for the remaining duration of the licence. As a result, in ComReg's view, a potentially different approach and procedure might be required in order to establish an appropriate and proportionate regime for spectrum leasing, as for example, the potentially short term nature of leases may require a different analysis to ensure competition is not distorted.
- 1.16 This paper sets out ComReg's proposals for establishing procedures to review (and approve or decline) transfers of rights and associated conditions to use spectrum given its statutory obligations and, in including, without limitation, its duty to ensure that competition is not distorted by any transfer or accumulation of rights of use of spectrum.
- 1.17 Permitting spectrum transfers does not necessarily imply that competition concerns (or other concerns including accumulation of spectrum rights concerns) would arise; on the contrary many transfers may be pro-competitive and benefit the welfare of consumers and the economy. The scope for competition concerns to develop could arise however, through changes in the structure of markets such as shifting undue market power to some undertakings and/or reducing rivalry between undertakings generally.
- 1.18 This paper examines some of the ways in which changes in market structures could emerge, followed by an analysis of the measures to assess such competition issues.
- 1.19 ComReg engaged expert advisors, Oxera, to advise on the creation of a system of review for notified spectrum transfers and/or leases, as

outlined above, and for the prevention of spectrum hoarding. Oxera's report is published alongside this consultation as Document 12/76b.¹⁰

- 1.20 ComReg has considered the relevant spectrum transfer practices in use in a number of other jurisdictions, with regard to their suitability, in full or in part, for adoption in Ireland. In general there is a paucity of published procedures with which ComReg could benchmark (see Section 2.3). In this regard, proposed processes and procedures for conducting a review of notified spectrum transfers are set out as the main consultation issue in this paper and a draft set of Guidelines on spectrum transfer analysis and procedures is set out at Annex 4 (along with a draft notification form at Annex 5).
- 1.21 Interested parties should also note that this paper does not deal with "sharing" / "pooling"¹¹ of rights of use of spectrum between undertakings. As set out previously, in Document 11/89, ComReg considers that sharing and pooling would require assessment on a case by case basis in light of firm proposals from undertakings.
- 1.22 It is noted that spectrum rights of use may only be transferred between "*undertakings*". The term "undertaking" is a defined term in context of regulating ECN and ECS and means "*a person engaged or intending to engage in the provision of electronic communications networks or services or associated facilities*".

1.1.1 Types of transfers

- 1.23 ComReg's proposed framework considers the following types of transfers of a right of use of radio frequencies in a Wireless Telegraphy Licence:

¹⁰ See ComReg Document 12/76b Oxera report on "Spectrum trading issues – A framework for competition assessments" (July 2012)

¹¹ In Document 11/89 ComReg set its views on this matter in terms of "...*collaboration between wireless operators*", see page 19 therein.

1. where **all the rights and conditions attaching to a right of use of radio** frequencies in a Wireless Telegraphy Licence transfer from one undertaking to another by means of either:
 - the transfer of a Wireless Telegraphy Licence in full from one undertaking to another; or
 - the transfer of a portion of the radio frequency spectrum in a Wireless Telegraphy Licence from one undertaking to another¹²;

Or

2. where **all of the licence conditions attaching to a right of use of radio frequencies** in Wireless Telegraphy Licence would **not** remain applicable to the spectrum transferred to another undertaking¹³, noting that
 - the original licence holder would be required to continue to meet all the conditions in its licence, and
 - the transfer proposal containing any variation to the conditions attaching to the original right of use of radio frequencies would require to be considered by ComReg to be objectively justified and proportionate in the context of its statutory objectives¹⁴.

1.24 In relation to the latter type of transfer, ComReg considers that there may be merit in allowing the original holder of the right of use of spectrum and the transferee to propose variations to the original right of use where such amendments would, following analysis by

¹² Where this is the case, the notifying parties may need to demonstrate that any technical conditions associated with the band are met. Interested parties should note that Regulation 19(5) of the Framework Regulations requires that, where radio frequency use has been harmonised through the application of the Radio Spectrum Decision or other EU measures, a transfer of rights of use of use of radio frequencies shall comply with such harmonised use.

¹³ For example, in the upcoming multi-band spectrum auction, rights and conditions apply to 5 MHz spectrum blocks and depending on the outcome of the auction there may be more than one block in any one Wireless Telegraphy Licence. Where its proposed to transfer a 5MHz block (or portion of a block) ComReg would attach the conditions that apply to the block and/or consider the proposal containing any variation to the conditions attaching to a single block,

¹⁴ Any assessment of such proposed transfers would be conducted in accordance with ComReg's statutory functions, objectives and duties.

ComReg, be considered to be objectively justified and proportionate. The amended conditions would be reflected in a new Wireless Telegraphy Licence to be issued to the transferee, while the original licence holder would continue to be required to meet all the conditions of its licence.

- 1.25 Where ComReg proposes to assess proposals that involve a variation of the conditions attaching to the right of use of spectrum, it would assess them initially in terms of its statutory functions, objectives and duties. This assessment may require seeking the views of interested parties. Where ComReg forms the view that it would be appropriate to vary the conditions attaching to a right of use of radio frequencies, it will inform the parties of its views, and then proceed to assess the potential effects on competition which might result from the transfer in line with the process described in this paper.
- 1.26 ComReg notes that it may be inappropriate to approve the variation of the conditions attaching to a licence where such variation would effectively place other parties who acquired similar rights of use of spectrum when initially granted at a disadvantage. ComReg retains discretion to decline variations where concerns in this regard arise.

1.1.2 Impact on competition

- 1.27 Regulation 9(11) of the Authorisation Regulations requires ComReg to ensure that no distortion of competition arises from spectrum trading:
- *[the Regulator] shall ensure that competition is not distorted by any transfer or accumulation of rights of use for radio frequencies. For this purpose the Regulator may take appropriate measures such as mandating the sale or the lease of rights of use for radio frequencies”*
- 1.28 ComReg notes that Article 5 (2) of the RSPB Decision provides some guidance in this regard and states that:

- “...without prejudice to the application of competition rules and to the measures adopted by Member States in order to achieve general interest objectives in accordance with Article 9(4) of Directive 2002/21/EC, Member States may adopt, inter alia, measures:
- (d) prohibiting or imposing conditions on transfers of rights of use of spectrum, not subject to national or Union merger control, where such transfers are likely to result in **significant harm to competition**. [emphasis added]¹⁵

1.29 Absent any further guidance, and having carefully considered all the information before it, ComReg proposes to assess whether a transfer would be likely to lead to a distortion of competition using similar tools to those used in assessing whether a *substantial lessening of competition* might occur following a merger between two companies. A further discussion of this is set out in Chapter 4

1.1.3 Preventing spectrum hoarding

1.30 As well as addressing the immediate distortions to competition, ComReg has a role in addressing and ensuring that spectrum transfers do not give rise to hoarding of spectrum rights of use, including *ex post* regulation. Regulation 17 (10) of the Framework Regulations states that

- [The Regulator] may, having regard to its objectives under section 12 of the Act of 2002 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 paragraph shall be applied in a proportionate, non-discriminatory and transparent manner.

¹⁵ In France the test is the “*impediment to effective competition for access and use of spectrum*”. In Sweden the relevant test is “*adverse impact on competition*” and in Austria the test “*adverse effects on competition*”. The specific details however were not set out. Please see Annex 1 on International developments.

- 1.31 As a result ComReg's framework to assess transfers necessarily includes assessing factors such as to the likelihood of the spectrum being used and the existing capacity requirements of the recipient of the rights of use being transferred (see also Chapter 3).
- 1.32 Moreover, ComReg has *ex post* regulatory functions and duties including, in the case of spectrum transfers, those set out in Article 5(2)(e) of the RSPB Decision, to amend existing rights where this is necessary to remedy the distortion of competition arising from a transfer or accumulation of rights of use of spectrum.

1.2 Structure of this Document

- 1.33 This Document is structured as follows:
- **Chapter 1** sets out the Introduction (this chapter);
 - **Chapter 2** set outs the background to spectrum trading, including the legal background and international context;
 - **Chapter 3** outlines at a high level some of the key spectrum trading issues;
 - **Chapter 4** considers the competition assessment of spectrum transfers to ensure that distortions to competition do not arise;
 - **Chapter 5** sets out ComReg's draft procedures for reviewing spectrum trades in line with its statutory obligations;
 - **Chapter 6** sets out relevant next steps in relation to the establishment of the procedures; and
 - **Annexes** (providing additional background detail):
 1. International updates;
 2. ComReg's legal framework;
 3. Existing licence types in the RSPB bands;
 4. Draft Guidelines for Spectrum Transfer Analysis and Procedures; and
 5. Draft Notification Form.

- 1.34 This Document is accompanied by a report by Oxera, Document 12/76b, which considers *inter alia* a framework for competition assessments and other relevant spectrum trading issues.

1.3 Submitting comments

- 1.35 ComReg seeks the views of all interested parties on its proposed procedures. The time period for submitting responses to this consultation is set out herein, and potential respondents are asked to note that responses will be published, save for any confidential information which must be clearly identified as such. ComReg encourages all respondents to set out the reasoning for their adopted position on any issue, and to provide evidence or data in support of their adopted positions.

Chapter 2

2 Background

2.1 Introduction

2.1 This chapter sets out the following issues in relation to spectrum trading:

- An overview of the EU context;
- An overview of EU specific obligations;
- An overview of the international context; and
- The legal framework for spectrum in Ireland.

2.2 This chapter then sets out some background information regarding the existing uses of the RSPB bands in Ireland, and a summary of relevant material from ComReg's Spectrum Management Strategy (2011-2013).

2.2 Overview of EU context in relation to spectrum trading

2.3 One of the European Commission's objectives is to introduce market based mechanisms for spectrum use and allocation. The Commission considers that spectrum trading has the potential to foster further competition and investment in the communications sector. It has long considered access to radio spectrum as being a key need for wireless broadband networks and believes that a forward-looking European spectrum policy, while accommodating broadcasting, should promote efficient spectrum management by mandating the use of certain digital dividend frequencies for wireless broadband, by ensuring additional flexibility (including spectrum trading) and by supporting competition and innovation.¹⁶

2.4 In May 2004, the European Commission commissioned a 'Study on conditions and options in introducing secondary trading of radio

¹⁶ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0245:FIN:EN:PDF>

spectrum in the European Community'¹⁷. The study identified a potential net economic benefit of circa €8 - 9 billion per annum arising from the introduction of liberalisation and spectrum trading and circa €900 million arising from spectrum trading without liberalisation.¹⁸

- 2.5 ComReg has commenced a process to liberalise spectrum rights of use in certain bands and has also indicated that spectrum trading would apply to those bands which have been designated by the European Commission in the RSPP Decision.¹⁹

2.3 Overview of EU specific obligations regarding spectrum trading

- 2.6 This Chapter outlines certain key provisions of EU law which are contained in the Framework Directive²⁰, which is transposed in Irish Law by the Framework Regulations. Annex 2 of this paper contains a detailed list of certain other applicable rules which need to be considered in developing a spectrum trading regime in Ireland. .
- 2.7 Recital 24 of Directive 2009/140/EC (which amends the Framework Directive) states: *“Radio frequencies should be considered a scarce public resource that has an important public and market value. It is in the public interest that spectrum is managed as efficiently and effectively as possible from an economic, social and environmental perspective, taking account of the important role of radio spectrum for electronic communications, of the objectives of cultural diversity and*

¹⁷

http://ec.europa.eu/information_society/policy/ecomms/radio_spectrum/_document_storage/studies/secondary_trading/secontrad_final.pdf

¹⁸ Ibid at exhibit 15.22.

¹⁹ http://ec.europa.eu/information_society/policy/ecomms/radio_spectrum/eu_policy/rspp/index_en.htm

²⁰ 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”)

media pluralism, and of social and territorial cohesion. Obstacles to its efficient use should therefore be gradually withdrawn.”

2.8 Recital 39 of the same Directive states: *“In the interests of flexibility and efficiency, national regulatory authorities may allow spectrum users freely to transfer or lease their usage rights to third parties. This would allow spectrum valuation by the market. In view of their power to ensure effective use of spectrum, national regulatory authorities should take action so as to ensure that trading does not lead to a distortion of competition where spectrum is left unused.”*

2.9 Article 9b of the Framework Directive (as inserted by Directive 2009/140/EC) is titled *“Transfer or lease of individual rights to use radio frequencies”* and gives effect to Recital 39, as follows:

1. *Member States shall ensure that undertakings may transfer or lease to other undertakings in accordance with conditions attached to the rights of use of radio frequencies and in accordance with national procedures individual rights to use radio frequencies in the bands for which this is provided in the implementing measures adopted pursuant to paragraph 3.*

In other bands, Member States may also make provision for undertakings to transfer or lease individual rights to use radio frequencies to other undertakings in accordance with national procedures.

Conditions attached to individual rights to use radio frequencies shall continue to apply after the transfer or lease, unless otherwise specified by the competent national authority.

Member States may also determine that the provisions of this paragraph shall not apply where the undertaking’s individual right to use radio frequencies was initially obtained free of charge.

2. *Member States shall ensure that an undertaking’s intention to transfer rights to use radio frequencies, as well as the effective transfer thereof is notified in accordance with*

national procedures to the competent national authority responsible for granting individual rights of use and is made public. Where radio frequency use has been harmonised through the application of the Decision No 676/2002/EC (Radio Spectrum Decision) or other Community measures, any such transfer shall comply with such harmonised use.

3. *The Commission may adopt appropriate implementing measures to identify the bands for which rights to use radio frequencies may be transferred or leased between undertakings. These measures shall not cover frequencies which are used for broadcasting.*

These technical implementing measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 22(3).

- 2.10 Article 6(8) of the RSPB Decision has mandated trading in the liberalised bands as envisaged in Article 9(b)(3) of the Framework Directive. Accordingly, ComReg now proposes to develop a regime for the review of notified transfers of spectrum rights of use in these bands.

2.4 Key observations regarding the international context

- 2.11 Jurisdictions which have implemented spectrum trading frameworks appear to have taken different approaches as to which procedures to adopt. It would appear that procedures in some jurisdictions are quite fluid, with proposed spectrum trades assessed on a case by case basis, and that a more formal and prescribed set of rules is expected to evolve gradually, as individual trades are assessed.²¹

²¹ This seems to accord with the findings of study conducted on behalf of the European Commission (in 2004) where its consultants concluded that "...The countries that have decided to allow spectrum trading within their national legislation have done so in a general (i.e. not specific detailed) way....".

- 2.12 However some countries, including Spain and the UK, have conducted detailed consultations and extensive studies with a view to defining a framework for spectrum trading, using specific rules. Most recently, Ofcom set out its proposals to subject UK spectrum trades in the 'mobile spectrum' bands to an *ex ante* assessments as to the effects on competition.²²
- 2.13 In several Member States, the prior approval of the appropriate Minister or regulator is required before any spectrum trade may proceed. Section 3.2.2.3 of the Conference of European Postal and Telecommunications Electronic Communications Committee Report 169 ("ECC Report 169") sets out a comparison of the circumstances where spectrum trades can be blocked by the relevant authorities in other Member States.
- 2.14 Most Member States require some form of review or approval for all types of spectrum trade. In Denmark, the only trades which require prior review or approval are those where the original right of use was acquired on foot of an auction or a public tender process. Similarly in France, any spectrum right of use which was obtained on a "first come, first served" basis does not need prior consent of the regulator in order to be traded.
- 2.15 In Portugal, a public consultation must be conducted before a spectrum trade may proceed. In the UK, Ofcom concluded that it would not be proportionate or necessary to review all categories of spectrum trades before they may proceed, though Ofcom also concluded that trades of 'mobile spectrum' may be subjected to *ex ante* assessment similar to a competition law merger review (for example, having a two-phase process as per EC merger controls.²³)
- 2.16 ECC Report 169 sets out the various grounds under which proposed spectrum trades may not be approved, in different jurisdictions:

²² Ofcom (June 2011) Statement on proposals to make 900 MHz, 1800 MHz and 2100 MHz public wireless network licences tradable.

²³ In the case of the mobile spectrum bands Ofcom does perform an ex-ante competition check.

- Negative impact on competition (Austria, Czech Republic, Finland, France, Lithuania, Norway, Portugal, Romania, Slovenia, Sweden, Slovak Republic, Switzerland);
- The transferee does not qualify for obtaining a licence (Romania, UK);
- The licensee is in breach of its licence (UK);
- Unacceptable modification of usage (Romania, Sweden), including of internationally harmonised frequencies (Czech Republic, Portugal, Slovak Republic);
- Unpaid payment for a licence issued following an auction (Denmark, Sweden), or unpaid spectrum fees (Romania);
- Licence holder cannot guarantee compliance with obligations on the licence (Slovak Republic, Switzerland) such as minimum requirements of geographic coverage or provision of services with remaining spectrum (Denmark);
- Risk of interference (Finland);
- Risk to national security (Finland, UK);
- Transfer of spectrum assigned to public interest protection (defence, security and other non-commercial functions of State) (Lithuania);
- Effective and efficient use of spectrum (Portugal, Slovenia);
- Laws on broadcasting (radio and TV) are to be respected (Portugal, Romania); and
- Compliance with international obligations (UK).

2.5 Legal framework for spectrum in Ireland

- 2.17 The statutory functions, objectives and powers of ComReg which are especially relevant to spectrum trading are set out in Annex 2.

2.6 Existing uses of 'RSPB bands' in Ireland

- 2.18 At Annex 3, ComReg sets out an overview of the existing licences which are currently in force in the RSPB bands in Ireland, including details of their expiry dates. A wide range of licences are currently in force across the RSPB bands, for networks and/or services including wireless access and mobile telephony (including forthcoming liberalised use licences). ComReg's framework for enabling spectrum trading in these bands would be applicable to these licences, in accordance with European requirements.

2.7 ComReg's Spectrum Management Strategy (2011-2013)

- 2.19 In its response to the consultation on its draft Spectrum Management Strategy (2011-2013), ComReg stated the following in relation to spectrum trading:

"ComReg recognises that there are a number of issues which need to be considered, which include:

- a need to provide regulatory certainty in relation to the rights and obligations associated with secondary trading likely to be required by potential traders. For instance, the relevant provision of the Framework Directive requires in this regard, amongst other things, that conditions attached to individual rights of use shall continue to apply after a transfer or lease (unless otherwise specified by the national authority);*
- the provision of sufficient safeguards to protect the public interest, such as the need to ensure transparency and regulatory supervision of potential spectrum trades; and*

- *provision of appropriate protections against, and redress for, spectrum hoarding and other potentially harmful outcomes. In their absence, it is difficult to envisage efficient spectrum use or competition being promoted.*²⁴

2.20 ComReg also noted the following points in relation to spectrum trading:

- *“whilst the imposition of “use it or lose it” conditions in spectrum rights could have the effect of minimising or avoiding the inefficient use of spectrum once obtained by an undertaking, this regulatory tool can and should be distinguished from other potential measures (such as conducting a competition review in respect of an actual or potential transfer to determine whether competition would be distorted by the transfer or accumulation of rights and/or ex-ante rules to prevent such distortive accumulations of spectrum rights);*
- *the potential for over-concentration of rights in relation to valuable or critical spectrum (such as below 1 GHz) as identified by a respondent is noted; and..”*

2.21 In ComReg’s Spectrum Strategy Statement (2011-2013)²⁵, ComReg set out its preliminary views on spectrum trading and stated that it sees spectrum trading as an important right which spectrum holders should have and that trading should increase the welfare not just of the trading parties but of society generally. ComReg also noted

- *“that a spectrum trading regime would have to ensure that spectrum rights of use would not become concentrated in too few hands so that competition would be restricted to a significant extent.”*

2.22 ComReg further noted that in addition to the general application of *ex post* competition law rules, the Common Regulatory Framework²⁶

²⁴ See Section 3.3.2 of Document 11/88.

²⁵ See Section 4.2 of *Strategy for Managing the Radio Spectrum: 2011 – 2013*, ComReg Document 11/89.

²⁶ The ‘Specific Regulations’ comprise collectively the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (S.I. No. 333 of 2011), the

provides that Member States may lay down rules in order to prevent spectrum “*hoarding*”. These rules may include the setting of strict deadlines for the effective exploitation of spectrum rights of use, and the imposition of financial penalties or withdrawal of rights of use where there is non-compliance with such deadlines. The Irish regulatory framework does provide for the creation of these “*use it or lose it*” deadlines, though not for the imposition of financial penalties (without having recourse to the courts) where deadlines are missed.

2.23 Other relevant points noted by ComReg in its Spectrum Strategy Statement 2011-2013 (Document 11/89) are as follows:

- Other mechanisms could be employed to prevent spectrum hoarding, including the imposition of spectrum caps in auctions, controls on spectrum transfers, and the potential forced disposal of any spectrum right of use.
- There may be little incentive for holders of spectrum rights of use to trade with competitors and that experience to date, in other jurisdictions, bears this out. ComReg therefore set out its view that the periodic release (or re-release) of spectrum, in line with the expected cycle of technology and investment, is compatible with the aims of the Common Regulatory Framework and that this approach would ensure that no entrenched positions develop which could be sustained indefinitely and could be impervious to normal market pressures, thus resulting in market stagnation.

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

- That trading in the more valuable bands, which are coordinated at EU-level, is unlikely to happen very often, and that a regime of trading - within the notion of renewable or long lived spectrum rights of use - would be in the best interests of society for those bands which are coordinated at EU-level.
- There is not a scarcity of spectrum in Ireland other than in bands which are likely to be specified by the European Commission in accordance with Article 9b(3) of the Framework Directive 2011, and undertakings can acquire spectrum rights of use in other bands on a *'first come, first served'* basis.

Accordingly, ComReg considered that it was difficult to see how there could be a viable secondary market for spectrum trading in those bands where there is not a scarcity of spectrum, though it added that it would keep the situation under review and would extend trading to other bands in future, if necessary.

Chapter 3

3 Spectrum Trading Issues

- 3.1 This chapter sets out a number of issues which are relevant in considering proposals to transfer spectrum rights of use, with particular regard to licence conditions attached to such rights of use..
- 3.2 This chapter also considers measures which ComReg may take with respect to notified transfers (i.e. remedies to prevent distortion of competition/hoarding).
- 3.3 Finally, this chapter considers the application of spectrum trading to non-RSPP bands.

3.1 ComReg's statutory objectives

- 3.4 In granting spectrum rights of use (by means of licences granted under the Wireless Telegraphy Act 1926, as amended) ComReg takes into consideration its relevant statutory functions, objectives and duties, as described in greater detail in Chapter 2 and Annex 2. In order to achieve its overall objective of ensuring the efficient management and use of spectrum, ComReg attaches various conditions to its wireless telegraphy licences, including conditions relating to coverage, rollout and quality of service.²⁷
- 3.5 Other conditions may also be attached to such licences in order to give effect to requirements of relevant EC Decisions (noting that in some cases the National Regulatory Authority (NRA) has discretion as to how such Decisions shall be implemented).
- 3.6 Wireless telegraphy licences are granted for fixed, finite periods of time - for example, fifteen or twenty years. Typically, upon reaching its expiration date a licence shall expire in full and shall not be renewed or extended, while all rights thereunder shall also expire including any

²⁷ Part B of the Authorisation Regulations sets out a list of which licence conditions may be attached to rights of use.

spectrum rights of use.²⁸ When a spectrum right of use held by a licensee expires or terminates, the spectrum may be re-assigned by ComReg, either through a competitive process or on a first-come, first-served basis (depending on the circumstances of the particular spectrum band, and having regard to certain provisions of the Authorisation Regulations).²⁹

- 3.7 ComReg notes that somewhat different considerations arise on the initial grant of rights of use using open and transparent market mechanisms, especially where the rights of use encompass all or essentially all of the spectrum in one or more bands, and the trading of rights of use, which is likely to arise as a private agreement between one licensee and the prospective transferee. This is, in part, reflected by Article 5(2)(d) of the RSPB Decision, which provides for specific powers for a national regulator to prohibit or impose conditions on transfers, without prejudice to competition law and in addition to the other powers available to regulate competition.

3.2 Potential spectrum rights of use transfers

No proposals to vary the rights and conditions attached to rights of use of radio frequencies to be transferred between undertakings

- 3.8 The most straight-forward example of a transfer of a spectrum right of use would be where an entire licence was transferred from one undertaking to another. In such cases, the spectrum right of use would simply travel with the licence. However, in other cases some but not all of the spectrum right of use may be transferred from one undertaking to another – i.e. the licence itself is not being transferred.
- 3.9 Where an entire licence is transferred then all of the rights and conditions attached to that licence would in general also transfer.

²⁸ There are some rare and very limited exceptions to this, see for example Document 11/11.

²⁹ This is not the situation in all Member States; for example in the UK certain spectrum rights of use have been bought outright from the State, by private undertakings, and are held in perpetuity. In such cases, the spectrum right of use may be considered to be permanently "*transferred*" to an undertaking.

Where just some of the spectrum right of use is being transferred, such that the original licence remains with the original licence-holder, then all of the rights and conditions associated with that spectrum right of use would in general transfer to the transferee. To be clear, this means that all of the conditions attached to the spectrum right of use (through the relevant licence) would also attach to the transferred spectrum right of use. This would be done by attaching such conditions to any new licence as may be granted to the transferee of the right of use or, where appropriate, by amending the transferee's existing licence so as to incorporate such conditions. Under this approach, ComReg's objectives as reflected in such licence conditions licence would be unaffected by the transfer.

- 3.10 In its consideration of transfers of spectrum rights of use ComReg's focus shall be on ensuring that no distortion of competition³⁰ would result from any such transfer or from any accumulation of spectrum rights of use. The relevant statutory provisions in this regard are Regulation 9(11) of the Authorisation Regulations and Article 5(2)(d) of the RSPB Decision which states that *"Member states may adopt measures, prohibiting or imposing conditions on transfers of rights of use of spectrum, not subject to national or Union merger control, where such transfers are likely to result in significant harm to competition"*. [emphasis added].
- 3.11 In addition, ComReg notes that such a transfer would accord with its obligations under Regulation 19(2) of the Framework Regulations, which states that ComReg *"... shall ensure that the conditions attached to individual rights to use radio frequencies shall continue to apply after the transfer or lease, unless the Regulator specifies otherwise"*.

Proposals to vary the rights and conditions attached to a spectrum right of use to be transferred between undertakings

³⁰ ComReg notes that while the Authorisation Regulations 9(11) does not provide any guidance on what would constitute a distortion of competition the Article 5(2)(d) of the RSPB does provide particular guidance, and ComReg notes that the RSPB Decision is binding on Member States.

- 3.12 In some cases involving a proposed partial transfer of a spectrum right of use, it may be possible or indeed preferable that not all of conditions attaching to the original right of use should apply to the transferred portion of that right of use.
- 3.13 For example, say that a relatively small new entrant wishes to acquire some of the spectrum held by a larger incumbent, and that the incumbent is willing to transfer the spectrum to the new entrant. However, the incumbent has an obligation to provide national coverage whereas the new entrant has a completely different business model and only wishes to target a niche geographic area. As such, it may not make sense to require the new entrant to roll out a national network, in order that it can meet the same coverage obligations have been placed on the incumbent. In such cases, either party to the proposed spectrum transfer may propose that the national coverage obligation is modified in the case of that portion of the spectrum right of use that is being transferred. This might make sense from an economic perspective, as it may enable small-scale operators to enter the market by obtaining spectrum rights of use for niche services.
- 3.14 In all cases, it would be for the notifying parties to make any proposal to this effect, which would have to be considered by ComReg in the context of its statutory objectives, and any variation to an existing condition would need to be proportionate and objectively justified.
- 3.15 However, ComReg recalls recital 23 of the RSPB Decision, which notes that it may be appropriate to impose coverage obligations in respect of rights of use in the 800 MHz band, due to its suitability to provide wide area coverage. ComReg is of the view that the same principle may apply to all sub-1 GHz harmonised bands and accordingly, permitting the variation of licence conditions to remove coverage obligations may not be appropriate save for in exceptional circumstances.
- 3.16 It is also possible that certain spectrum transfers could result in increased competition in a market and/or in the more efficient use of

spectrum, to the ultimate benefit of consumers and in accordance with ComReg's statutory objectives. As such, it may not be reasonable to require, in all instances, that the conditions attaching to the original right of use be exactly mirrored in the transferred right of use. ComReg is therefore of the view that it would be appropriate for it to retain discretion to amend such conditions where such amendment is objectively justified, transparent, non-discriminatory and proportionate while being consistent with ComReg's statutory functions, objectives and duties.

- 3.17 From an economic perspective, the possibility of varying transferred spectrum rights of use may encourage trading generally.
- 3.18 There is thus merit in allowing the original holder of the right of use of spectrum and the transferee to propose variations to the original right of use.
- 3.19 ComReg notes that in the case of any proposed transfer of a spectrum right of use the amount of the fee for the original right of use must remain in place following the transfer. It would be for the parties to the proposed transfer to reach a commercial agreement as to the manner in which the original fee might be split between them. ComReg would then apply the new separate fees according to such agreement and would amend all licences to reflect the new fee structure.
- 3.20 It should be noted that ComReg will not permit a transfer to proceed which involves an existing licensee seeking to transfer some of its existing spectrum rights of use to a group company³¹, where the effect of such a transfer could, in ComReg's view result in a distortion of competition, or evasion any of its licence conditions and/or raising barriers to entry. Equally, if a licensee transfers a right of use to a group company ComReg may include a condition requiring the

³¹ For these purposes a group company of a company is its holding company, its subsidiary or a subsidiary of its holding company (as those terms are defined in s 155 of the Companies Act 1963 or analogous relationships in respect of bodies corporate not incorporated in Ireland).

possible divestiture of the right of use on a change in control of the group company.

3.2.1 Framework to consider proposals to vary conditions to transferred spectrum rights of use

- 3.21 ComReg considers that any assessment of a proposal to vary the conditions attaching to a transferred spectrum right of use should be separate to its assessment of the effects of the spectrum transfer on competition. Accordingly, where a notified spectrum transfer includes a proposal to vary any such condition, ComReg proposes that it shall assess any such proposal from the standpoint of the variation to the condition, before assessing whether the proposed transfer may result in a distortion to competition in any market.
- 3.22 Regulation 15(1) and 15 (4) of the Authorisation Regulations provides as follows:

15(1) “[ComReg] may amend the rights, conditions and procedures concerning, amongst other things, rights of use for radio frequencies provided that any such amendment may only be made in objectively justified cases and in a proportionate manner, taking into consideration, where appropriate, the specific conditions applicable to transferable rights of use for radio frequencies...”;

15(4) “Except where the proposed amendments are minor in nature and have been agreed with the holder of a right of use of radio frequencies, before making any amendment, [ComReg] shall:

- o Give notice, in such manner as it considers appropriate, of its intention to make the amendment and invite interested parties, including users and consumers, to make representations on the proposed amendment within such period as may be specified in the notice but not being, except in exceptional circumstances less than 28 days from the date of the notice, and*

- *Have regard to any representations made to it under subparagraph (a)."*

- 3.23 Interested parties should note that technical conditions which reflect requirements of EC Decisions³² (or those agreed at in any Memorandum of Understanding³³) cannot be varied.
- 3.24 Interested parties should note that prior to making any formal notification of a proposed spectrum transfer, the parties thereto may request a 'pre-notification meeting' with ComReg in order to discuss the information that they shall be required to provide as part of their formal notification. At such a meeting, parties may submit that a reduced or very minimal amount of information is only required of them (because, for example, it is very clear that the proposed transfer would not distort competition) and ComReg will consider any such submission and may adjust its information requirements accordingly – i.e. ComReg may inform the parties that they may omit certain information from their notification (while reserving its right to require this information at a later stage).
- 3.25 If having initially considered a notified transfer, ComReg determines that a proposal to vary conditions of the transferred spectrum right of use would not be objectively justified or proportionate, then it would inform the notifying parties of its decision and the proposed transfer would not be considered further.

3.3 Application of remedies to prevent distortion of competition/hoarding

- 3.26 ComReg notes that the legislative framework provides for ComReg to take appropriate measures to ensure that competition is not distorted by any transfer or accumulation of rights of use of radio frequencies.

³² Regulation 19(5) of the Framework Regulations requires that, where radio frequency use has been harmonised through the application of the Radio Spectrum Decision or other European Union measures, a transfer of rights of use to radio frequencies shall comply with such harmonised use.

³³ Between Ireland and another jurisdiction.

In addition, ComReg also notes that the RSPP Decision envisages the possible imposition of conditions on such transfers.

- 3.27 If a transfer is likely to lead to a distortion of competition ComReg may withhold approval for the transfer or in some instances, it may propose remedies/measures which would appropriately address its concerns such that the transfer may be effected, but subject to such conditions as ComReg may specify having regard to its statutory functions, objectives and duties in relation to management of radio spectrum.
- 3.28 ComReg notes that the imposition of 'remedies' in merger review is common practice and sets out its views on possible remedies in a spectrum transfer below. In particular it notes that remedies are conventionally classified as either structural or behavioural as follows:
- Structural remedies would generally change the structure of either (or both) the undertakings involved in the spectrum transfer and/or the overall market structure, typically through divestiture of part or the spectrum rights of use (potentially of a different frequency band) (see Regulation 9(11) of the Authorisation Regulations);
 - Behavioural remedies would normally be an ongoing remedy designed to modify or constrain behaviour of either (or both) the undertakings involved in the spectrum transfer and might include mandating the quality or output of the goods or services offered, or otherwise modifying their dealings with other undertakings in the relevant market.
- 3.29 ComReg notes that the likely benefits of structural remedies are that they provide an enduring remedy with relatively low monitoring and compliance costs. Further it notes that structural remedies have tended to be more frequently applied by competition authorities in merger review, partly because they require less ongoing monitoring. ComReg therefore would have a preference for structural remedies that is, measures such as the divestiture of spectrum rights of use (potentially in a different frequency band) to address competition concerns. It notes that this may also be a suitable remedy where

spectrum hoarding would be of a concern (in addition to the application of a date by which the transferred right of use of radio frequencies should be used by).³⁴

- 3.30 ComReg notes that on occasions, behavioural remedies—that is, commitments by either (or both) the notifying undertakings to do, or not do, certain acts (for example, to meet specified service levels, offer roaming or access criteria) may be appropriate as an adjunct to a proposed structural remedy.
- 3.31 ComReg's notes that the design of remedies may differ on a case-by-case basis, however, it believes that remedies should be aimed at *inter alia*:
- Protecting against a reduction of the competitive intensity in the market, where it considers that certain transfers pose a harm to the pre-transfer competition levels;
 - Not incurring significant administrative costs (e.g. remedies should not require significant ongoing monitoring and/or unduly onerous enforcement);
 - Minimising the loss of potential efficiencies stemming from the transfer;
 - Resulting in cost savings and other benefits that would be passed on to final consumers for their benefit; and
 - Ensuring that any divested assets are reallocated in a most efficient way.
- 3.32 Finally, ComReg notes that it shall at all times retain its discretion to exercise its existing powers under the Competition Act, 2002 (as amended).

3.4 Designation of trading in bands non-RSPB bands

- 3.33 A further consideration is whether ComReg's position as set out in Document 11/89 in relation to the introduction of a regime for

³⁴ It should be noted that the divestiture of a spectrum right of use of radio frequencies would necessarily also involve a notified transfer under this framework.

spectrum transfers and leases in bands other than those designated in the RSPP Decision remains current.

- 3.34 In coming to its view in Document 11/89 that it would initially establish a trading regime for the RSPP bands only, ComReg noted that due to Ireland's geographic position and relatively low usage of spectrum there is not a scarcity of spectrum here in the non-RSPP bands. Hence it considered that undertakings wishing to acquire rights of use of spectrum in other bands can on a first-come, first-served basis apply to ComReg.
- 3.35 In effect, ComReg believed that there would be no need for it as yet to designate other bands for trading.
- 3.36 ComReg considers this view still holds. In particular it notes that there remains a relatively low usage of spectrum in the non-RSPP bands and that undertakings can apply to ComReg on a first-come, first-served basis for rights of use of spectrum in these bands. Further it notes that the European Commission has not added to the list of RSPP bands at this time and no other bands have been harmonised at a European level.
- 3.37 In light of the foregoing, ComReg proposes to maintain its current position as regards the list of bands designated for trading. However it will review periodically whether other bands might also be designated for trading, using its spectrum strategy statements and related processes as a means to obtain views and in particular having regard to *inter alia* the following:
- The number and type of trades in the bands initially designated for trading;
 - The scarcity of spectrum in other bands; and
 - International developments, including the harmonisation of bands at an EU level;
- 3.38 ComReg would be interested in any views interested parties may have on the designation of other bands for trading at this time and the supporting reasoning for same.

Chapter 4

4 Competition Assessment of spectrum trades

4.1 Introduction

4.1 This Chapter sets out:

- A discussion of how spectrum trading can have implications for the market;
- A draft RIA on whether the competition assessment of trades should be based on existing provisions (ex post) or using an ex ante approval process;
- A comparison of different tests that can inform the design of an appropriate competition assessment of spectrum trades for ComReg; and
- The key elements that would be involved in the competition assessment of spectrum trades by ComReg.

4.2 Spectrum trading and Implications for the market

- 4.2 As noted in section 2, the trading of a spectrum rights of use between undertakings could have a pro-competitive effect on electronic communications markets, by enabling undertakings to use their spectrum rights of use more efficiently, to the benefit of consumers.
- 4.3 A spectrum right of use is a factor of production that combined with other intermediate inputs enables an undertaking to provide electronic communications services to users. It is a critical asset for any operator of a wireless electronic communications network and/or provider of a wireless electronic communications service.

- 4.4 Different radio frequency bands have different physical characteristics, for example lower frequencies are better for providing wide area coverage, whilst higher frequencies are better for capacity purposes. As a result, the costs associated with providing services to end users will differ depending on the particular frequency band(s) being used.³⁵
- 4.5 The degree of substitutability between bands may change over time, as a result of changes in technology. As a result, operators' needs in terms of the mix of spectrum rights of use at different frequencies may also change over time.
- 4.6 ECS providers have an interest in ensuring their networks are efficiently designed so as to minimise their unit costs. Spectrum trading could be a means by which an undertaking could acquire a mix of spectrum rights of use across different frequency bands, thereby enabling it to design a more efficient and effective network and/or service. Spectrum trades should therefore have positive outcomes for consumers, in terms of achieved cost savings, improved capacity and quality of service through the more effective use of a finite spectrum resource by undertakings.
- 4.7 However, in certain circumstances a spectrum trade could have a negative effect upon competition in a market, to the detriment of consumers. For example, it could result in a particular undertaking or undertakings accumulating such an amount of spectrum as to prevent, restrict or distort competition in a market or foreclose access to a market altogether. Such outcomes would be contrary to certain key functions, objectives and duties of ComReg, including: to ensure the efficient management and use of the radio frequency spectrum; to ensure that there is no distortion or restriction of competition in the electronic communications sector; and to promote the interests of users.

³⁵ ComReg previously commissioned and published a joint report by Red-M and Vilicom which estimated the likely cost differences of rolling out a mobile network using 900 MHz, 1800 MHz, or 2100 MHz spectrum. Retuning and Relocating GSM900 Spectrum Assignments in Ireland, ComReg Document 10/71.

- 4.8 In recognition of this possibility, Regulation 9(4) of the Framework Regulations provides that an *“undertaking intending to transfer rights to use radio frequencies shall notify [ComReg] of its intention to do so ... in accordance with procedures specified by [ComReg]”* and ComReg shall ensure that such notifications are made public. Further, and of particular relevance, Regulation 9(11) of the Authorisation Regulations provides that ComReg *“shall ensure that radio frequencies are efficiently and effectively used having regard to section 12(2)(a) of the Act of 2002 and Regulations 16(1) and 17(1) of the Framework Regulations, and ... **shall ensure that competition is not distorted by any transfer or accumulation of rights of use for radio frequencies.** For this purpose the Regulator may take appropriate measures such as mandating the sale or the lease of rights of use for radio frequencies.”*

4.2.1 Means by which a spectrum trade could affect a market

- 4.9 A spectrum trade could affect an electronic communications market in a number of ways:
- It could change the market structure, for example by affecting the incentives and/or opportunities for new entrants to enter the market or by causing existing operators to exit the market;
 - It could change the operators' pricing behaviour, at the wholesale or retail level; and
 - It could change the competitive dynamic in the market, for example by affecting incentives to innovate or to provide new services to consumers.

4.3 Competition Assessment of spectrum trades

- 4.10 Regulation 19(1) of the Framework Regulations requires ComReg to ensure that undertakings may transfer or lease individual spectrum rights of use to other undertakings, in the bands for which this is provided and in accordance with conditions attached to such rights of use and any procedures specified by ComReg.

- 4.11 ComReg has undertaken a draft RIA to consider its procedural options in terms of assessing the competition impacts of any spectrum trades as may be notified to it, having regard to ComReg's statutory functions and objectives.

4.3.1 Draft RIA on the Procedure for the Competition Assessment of Spectrum Trades

- 4.12 This section sets out ComReg's draft RIA on the procedure for the competition assessment of spectrum trades. The draft RIA was prepared in accordance with ComReg's RIA Guidelines (Document 07/56a³⁶) ("RIA Guidelines") and having regard to the RIA Guidelines issued by the Department of An Taoiseach in June 2009 ("Department's RIA Guidelines") and any relevant Policy Directions issued to ComReg by the Minister for Energy, Communications and Natural Resources under Section 13 of the 2002 Act (the "Policy Directions").
- 4.13 ComReg's RIA Guidelines, published in August 2007, set out, amongst other things, the circumstances in which a RIA might be appropriate. In summary, ComReg will generally conduct a RIA in any process that might result in the imposition of a regulatory obligation (or the significant amendment of an existing regulatory obligation) or which might otherwise significantly impact on a market or on stakeholders or consumers.
- 4.14 In the interests of continuing to ensure openness and transparency, and given that the outcome of this consultation may significantly impact on the electronic communications sector in Ireland, a draft RIA has been conducted and prepared. Alongside any comments on this consultation paper, ComReg invites interested parties to review this draft RIA and to submit any comments or information that they believe ComReg should consider. Chapter 6 of this document sets out the next steps in this process.

³⁶ Guidelines on ComReg's approach to Regulatory Impact Assessment, August 2007, ComReg Document 07/56a.

- 4.15 As set out in ComReg's RIA Guidelines, there are five steps to this draft RIA:
1. Identify the policy issue and the objectives;
 2. Identify and describe the regulatory options;
 3. Determine the impacts on stakeholders;
 4. Determine the impacts on competition; and
 5. Assess the impacts and choose the best option.

Identify the Policy Issue and the Objectives

- 4.16 Under Regulation 19(1) of the Framework Regulations, ComReg is required to ensure that undertakings may trade their spectrum rights of use, subject to various other provisions including Regulation 9(11) of the Authorisation Regulations which requires ComReg to ensure that radio frequencies are efficiently and effectively used. Regulation 9(11) also empowers ComReg to take appropriate measures such as mandating the sale or the lease of rights of use for radio frequencies.
- 4.17 In setting out a procedure for assessing the competition impacts of spectrum trades which reflects its relevant statutory functions, duties and objectives, ComReg does not wish to adversely affect the extent to which trades would otherwise take place. ComReg does not wish to reduce incentives to engage in trades which would be neutral in terms of any effects on competition, or which may result in more efficient use of spectrum to the benefit of consumers without having any distortive effect upon competition.
- 4.18 Similar to merger analysis, a consideration of the choice of procedure for the competition assessment of spectrum trades is whether it is likely to result in Type 1 or Type 2 errors. A Type 1 error would arise where the assessment process resulted in a trade, which would result in more efficient use of spectrum without distorting competition, nevertheless being blocked. A Type 2 error would arise where the assessment process allowed trades, which would have a distortive

effect on competition, to nevertheless proceed. If the goal is to minimise Type 1 errors, the process should be designed so that all trades are allowed in principle, with specific trades contested only where it was very clear that the trade would result in a distortion to competition. If the goal is to minimise Type 2 errors, all trades would be blocked in principle and only allowed to proceed in cases where it was very clear that the trade would not result in a distortion to competition.

Regulatory Options

4.19 The competition impacts of spectrum trades could be assessed by relying solely on an ex post review or by introducing an ex ante framework. Therefore the two options under consideration are as follows:

- Option 1 - Ex post: Under Option 1 all proposed spectrum trades notified to ComReg pursuant to Regulation 19(4) of the Framework Regulations could be implemented without the need for prior approval from ComReg. Regulatory intervention could arise after the trade had been implemented if there was a suspected breach of sections 4 and/or 5 of the Competition Act - i.e. unlawful arrangements between undertakings or an abuse of dominance.³⁷ An ex post procedure, therefore could be considered as a 'do nothing' option, in that it would not involve a new framework per se, but rather would involve relying on existing legislative provisions for the assessment of the competition impacts of notified spectrum trades. This approach would reduce or eliminate the potential for Type 1 errors but could increase the likelihood of Type 2 errors.

³⁷ It is worth noting that sections 4 and/or 5 of the Competition Act apply in the event of any suspected breach of those provisions, at any time and in any industry. The Competition Authority enforces the provisions generally while ComReg may enforce them in relation to anti-competitive practices in the electronic communications sector. Therefore, an ex post review of spectrum trades would not, strictly speaking, involve the creation of a new regulatory framework but would merely involve the application of existing legislative provisions.

- Option 2 - Ex ante: Under an ex ante framework all proposed spectrum trades notified to ComReg pursuant to Regulation 19(4) of the Framework Regulations, would be subject to prior assessment by ComReg, before they could be implemented, and ComReg could either allow or disallow any notified trade, or could allow such a trade subject either to one or both parties accepting certain conditions. This approach would reduce or eliminate Type 2 error but could give rise to Type 1 errors. A transfer which was approved under such an ex ante framework would still be subject to the provisions of the Competition Act 2002.

Stakeholder Analysis (Impact on trading parties, existing operators and potential new entrants)

- 4.20 Option 1 may be favoured by operators and potential new entrants, as against an ex ante framework, for a number of reasons. Firstly Option 1 would reduce the administrative burden and compliance costs for the notifying parties at least at the outset of any trade (and provided that there was no later intervention in relation to the potential breaches of the Competition Act 2002). Also Option 1 is likely to lead to faster implementation of the trade as a regulatory approval process would not be required to put the trade into effect. As a result, Option 1 may encourage higher levels of trading which may be particularly beneficial to potential new entrants.
- 4.21 If undertakings considered the likelihood of ex post intervention by ComReg to be low then this may affect their (assumed) preference for Option 1 over Option 2. Assuming Option 1 was chosen, if ComReg initiated an ex post investigation under the Competition Act 2002 the burden of proof would lie with ComReg to establish that a trade had prevented, restricted or distorted competition in a market or markets for electronic communications, or that an abuse of dominance had occurred, with a Court having final decision in the matter. Under an ex ante analysis (Option 2) ComReg would determine whether a notified trade may be put into effect, or may not be put into effect, or may be put into effect subject to conditions specified by ComReg being

complied with. In some ex post investigations it may be difficult to isolate the effect of the trade from other market developments, thus limiting ComReg's ability to intervene ex post in relation to the trade. Therefore, an operator(s) that was seeking to engage in a trade that could have anti-competitive effects may also favour Option 1 over Option 2.

- 4.22 However, as against the above, a number of factors could make Option 1 less attractive for operators compared to Option 2. Firstly, Option 1 would offer less protection for those not involved in the trade itself. Trades could proceed which have anticompetitive effects, with intervention only ever happening at a later date. Given the length of time it may take to initiate and complete a case under the Competition Act 2002, competing operators and consumers could suffer harm in the interim between when the trade takes place and when the case is completed. Therefore an ex ante framework may be favoured by undertakings, as against Option 1, on the basis that it may provide better protection for those parties not involved in the trade itself as ComReg would ensure that trades would not be permitted which would distort competition.
- 4.23 Secondly, implementation of a trade may involve significant sunk costs on the part of the trading parties. If, on the basis of ex post intervention, the trading parties were required to comply with a court decision to terminate a trade and reverse its effects, this could involve significant additional costs and administrative burdens on the trading parties to unwind the transaction.
- 4.24 An ex ante framework could discourage trading due to the greater administrative burden for trading parties, as any analysis of the cost and benefits of a trade for the trading parties would need to include the cost of passing the regulatory hurdle and the time involved in the approval process. Regulatory approval would be required in all cases and would involve notifying ComReg, and supplying relevant information to ComReg regarding the transfer. ComReg would determine whether a notified trade may be put into effect, or may not

be put into effect, or may be put into effect subject to conditions specified by ComReg being complied with.

- 4.25 An ex ante framework might result in slower implementation of all notified trades as regulatory approval would be required before parties could proceed with the trade.

Impact on competition

- 4.26 Certain spectrum trades could improve competition or increase efficiencies in a market(s), and could thus benefit players in the market(s) and their customers while also being in accordance with ComReg's statutory objectives. Insofar as the trade has a positive impact on competition, the benefits for competition (and consumers) would be achieved regardless of whether ComReg chose Option 1 or Option 2, although such benefits would likely occur earlier under Option 1. Such "pro-competition" trades could be delayed under an ex ante framework, with the length of delay determined by the assessment process put in place and the nature of the trade itself. Option 1 would also remove the potential for Type 1 errors.
- 4.27 However, under Option 1, it may be difficult to establish, through an ex post investigation of a trade, that any perceived distortion in competition is attributable to a spectrum trade which has already occurred. Any post-trade market developments which were negative in terms of the effect of competition may result from inefficient spectrum allocations resulting directly from the trade, but on the other hand they may result from other causes unrelated to the trade. The potential difficulties in linking a trade to the resultant negative effects on competition could reduce ComReg's ability to effectively intervene in cases where a trade, which has been implemented, appears to be having anti-competitive effects on a market. Also, because it is often far more difficult and costly to unwind a commercial transaction rather than to prevent it from occurring in the first place, it may be especially difficult to convince a court that a spectrum trade should be dissolved and unwound, in order to reverse its anti-competitive effects.

- 4.28 Subjecting a proposed trade to an ex ante assessment of its likely effects upon competition would likely provide better protection for existing competition in any market, since trades that would likely result in a distortion to competition would not proceed after the review process. However if the test was too restrictive, it could prevent trades which, on balance, were pro-competitive or neutral as to their effect upon competition (Type 1 errors). On the other hand, if the test was too loose, it could fail to prevent trades which were likely to result in a distortion in competition (Type 2 errors).
- 4.29 Provided that the test applied under an ex ante framework was appropriate, ComReg could determine that a proposed trade which was likely to result in a distortion in competition may not be put into effect, or may be put into effect subject to conditions specified by ComReg being complied with.

Impact on consumers

- 4.30 Under Option 1, consumers may benefit from the earlier implementation of trades which, on balance, were pro-competitive or neutral as to their effect upon competition. Such benefits would likely result from increased efficiencies and lower incurred costs for undertakings, leading to improved services and/or lower retail prices.
- 4.31 However, under Option 1, a distortion in competition resulting from a spectrum trade may have already occurred by the time an investigation by ComReg commences, and such ex post investigations often take a considerable length of time to complete and are dependent upon the requisite amount of evidence being found. Therefore, consumers may have already been negatively affected by the time any such investigation commences and may continue to be negatively affected for a considerable period of time thereafter. Further, depending on the particular circumstances it may be difficult to reverse the negative effects that have occurred to competition or compensate consumers who have been negatively affected.

- 4.32 Under an ex ante framework, consumers would likely have to wait longer for spectrum trades to proceed, and would therefore have to wait longer for the resultant benefits to flow from such trades. However, as against any such delays, an ex ante framework would protect consumers by ensuring that spectrum trades which were likely to result in a distortion in competition may not be put into effect, or may only be put into effect subject to conditions specified by ComReg being complied with.

Draft RIA: ComReg's preliminary view

- 4.33 ComReg is of the view that an ex ante framework is preferable, provided that such a framework is carefully designed in terms of it not being overly onerous on the parties involved in spectrum trades, that third parties would have proper opportunity to submit their views to ComReg and to provide information to assist ComReg's assessment, and that such assessment would be carried out by ComReg in a timely manner.
- 4.34 ComReg recognises that under an ex ante framework, in the case of trades which were pro-competitive or neutral as to their effects upon competition, the parties thereto and consumers would have to wait longer for such trades to be implemented. However, to the extent that any such delay may disadvantage the trading parties and/or consumers, such disadvantage is likely to be outweighed by the following benefits of an ex ante framework:
- It would provide greater certainty to the market that competition would be protected;
 - It would provide greater comfort to the parties to the trading arrangements where ComReg approved the arrangement up front;
 - It would ensure that ComReg could prevent anticompetitive effects in the market (resulting from trades) and would therefore better protect the interest of consumers;

- It would pre-empt any structural competition concerns before they materialise; and
- It would be consistent with merger controls in Ireland where mergers are also assessed on an ex ante basis.

4.35 Adopting an ex ante framework would also be in line with Oxera's recommendation.

4.4 Substantive Test to assess Distortion of Competition

4.36 Under Regulation 9(11) of the Authorisation Regulations, ComReg is required to "*ensure that competition is not distorted by any transfer or accumulation of rights of use for radio frequencies.*" Therefore, under an ex ante framework ComReg would need to put in place a test to determine whether a proposed trade would result in a distortion to competition.

4.37 The Authorisation Regulations do not provide guidance as to what would constitute a 'distortion to competition', nor do they specify the appropriate test by which to determine whether such a distortion of competition is likely to occur. Therefore if ComReg was to adopt an ex ante framework it would have to set out an appropriate substantive test by which to assess all notified spectrum trades.

4.38 Any change to the spectrum holdings of operators in a market could potentially distort competition in that market. From the perspective of consumers any such distortion could be positive or negative. For example, a trade could be pro-competitive if a smaller market player was able to obtain additional spectrum capacity and thereby expand or optimise its network, or if it enabled new market entry.

4.39 ComReg is of the view that the test should be designed so as to allow trades which would have a positive or neutral effect upon competition to be put into effect, while prohibiting trades which would negatively distort competition from being put into effect (or only allowing them to be put into effect subject to conditions specified by ComReg being complied with).

- 4.40 There are a number of substantive tests in use by competition authorities in the context of reviewing proposed mergers or acquisitions. A review of these tests is a useful starting point when considering an appropriate distortion of competition test that could be applied by ComReg when assessing notified spectrum trades.
- 4.41 There are also a number of other contexts in which competition tests exist (e.g. conducting market studies, or investigating suspected illegal state aids). The effects of a commercial transaction or behaviour on competition is likely to involve an analysis of similar factors.

Overview of substantive tests (for assessing distortion of competition)³⁸

Test	Context in which used	Jurisdiction
Dominance	mergers	Germany, Switzerland
AEC	Market studies	UK
SIEC	Mergers	EU
SLC	Mergers	Ireland, UK, Czech Republic, Poland, Netherlands

4.4.1 Merger test - Substantial Lessening of Competition

- 4.42 Under Irish law, the test applied by the Competition Authority in assessing any notified merger or acquisition is whether the merger or acquisition would result in a substantial lessening of competition (SLC) in a market. This same test is also used competition authorities in many other jurisdictions.³⁹
- 4.43 The SLC test is interpreted in terms of consumer welfare. Based on whether the price to buyers is expected to rise (or output fall) as a

³⁸ See Oxera report ComReg Document 12/76b

³⁹ The SLC test is also used in the UK, Australia, the Czech Republic, the Netherlands, and Poland.

result of a proposed merger or acquisition, the Competition Authority may conclude that an SLC will result from that merger or acquisition.⁴⁰ Where price is not the appropriate variable of consumer welfare, the Competition Authority measures changes in the other variables such as quality, output, variety and innovation.

- 4.44 In assessing horizontal mergers (i.e. a merger between two firms that produce substitutable or competing products⁴¹), the Competition Authority investigates the following elements:

“(a) Relevant geographic and product markets are defined to establish the framework in which the analysis of competition takes place. Section 2 outlines the approach to be followed.

(b) For each relevant market identified, the effect on market structure is measured (Section 3). For horizontal mergers, this involves calculating the post-merger HHI and the change in the HHI resulting from the merger. HHI thresholds outlined in Section 3 are used to screen relevant markets into categories of likelihood of a SLC in the market.

(c) For the relevant markets, an assessment is made of whether the merger has an effect on the level of rivalry among the existing competitors in the market. Both unilateral and coordinated effects are examined, as explained in Section 4.

(d) As well as considering the effect of the merger on rivalry among existing competitors, the extent to which entry by a new competitor would be sufficiently likely and timely so as to act as a competitive constraint, is examined. This is discussed in section 5.

(e) Also, the extent to which the merger leads directly to efficiency gains that cannot be realised by any means other than the merger is examined. This is discussed in section 5.

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http://www.tca.ie/images/uploaded/documents/n_02_004%20Merger%20Analysis%20Guidelines.PDF

⁴¹ Non-horizontal mergers include vertical mergers (e.g. manufacturer-retailer) or conglomerate mergers (e.g. bring together non-competing, possibly complementary, products).

(f) The analysis from the areas from (c) to (e) listed above are brought together in order to make a final assessment as to whether the merger would result in a SLC.” (see paragraph 1.6 of the Competition Authority’s Merger Guidelines⁴²)

- 4.45 The Competition Authority’s published Merger Guidelines set out how it defines the relevant market. For example, it considers each product produced or sold by the merging firms and considers the concept of a hypothetical monopolist, including its application of the SSNIP test⁴³. The Authority provides details of its measurement of market definition in Section 2 of its Merger Guidelines, noting that it the approach to market definition which it describes therein *“is not mechanical, but rather a conceptual framework within which relevant material can be organised”*. The Authority also states that *“In some cases, it will be possible to conclude that a merger will not lessen competition without examining some of these elements.”*). The Competition Authority notes that relevant markets may be defined by the products of the merging parties and by the geographic area within which the merging parties operate. The substitutability of products is looked at primarily from the standpoint of consumers (“demand-side” substitutability) though the ability of other operators switch to supplying the relevant products may also be examined (“supply-side” substitutability).
- 4.46 The Competition Authority’s Merger Guidelines set out certain analyses which it considers central to assessing the effects of a merger or acquisition on competition:
- Assessing the effect of a merger on market structure. In this regard, the Competition Authority measures market concentration, pre and post merger, and examines aspects of the market including *“vertical integration, cost and*

⁴² Decision No. N/ 02/ 004 - The Competition Authority Notice in respect of Guidelines for Merger Analysis, 16 December 2002 and available at <http://www.tca.ie/EN/Mergers--Acquisitions/Legislation-Guidance/Legislation-on-Mergers.aspx>

⁴³ The SSNIP test is explained in paragraphs 2.5 - 2.7 of the Merger Guidelines.

technology factors, and product differentiation". (Section 3 of the Merger Guidelines)⁴⁴;

- Assessing immediate competitive effects such as the effects of a merger on rivalry amongst existing competitors. (Section 4 of the Merger Guidelines)⁴⁵; and
- Assessing other competitive effects such as if market power may be constrained by the threat or occurrence of new entry or if a merger giving rise to anti-competitive effects might be more than compensated for by improvements in efficiencies resulting directly from the merger itself. In relation to the latter effect, the Competition Authority notes that the burden of identifying and demonstrating efficiencies rests with the merging parties.

4.47 A variant of a SLC test is the 'significant impediment to effective competition' test which is used by the European Commission. In the European Union Merger Regulation, the significant impediment to effective competition test is described as extending beyond the concept of dominance, only to the anti-competitive effects of a concentration resulting from the non-coordinated behaviour of operators which would not have a dominant position on the market concerned (such as in the retail market).

4.4.2 Merger test - Dominance

4.48 Dominance tests are used to assess mergers in Germany and Switzerland. Such tests assess whether a proposed merger would strengthen or create a dominant position in the market.

⁴⁴ Decision No. N/ 02/ 004 - The Competition Authority Notice in respect of Guidelines for Merger Analysis, 16 December 2002

⁴⁵ Decision No. N/ 02/ 004 - The Competition Authority Notice in respect of Guidelines for Merger Analysis, 16 December 2002

- 4.49 Dominance is typically defined as a situation where a market leader enjoys a degree of independence from competitive pressures so that, for example, it considers that it could increase its retail prices by a small but significant extent without being concerned that its customers may switch to a rival supplier. Dominance may be interpreted narrowly, as the merged firm becoming dominant, where only unilateral type effects are looked at or it may be broadly defined, to cover collective dominance, where coordinated effects such as interactions and behaviours between firms are analysed. The latter definition includes actions that are profitable for competitors only as a result of accommodating the reactions of the others and such behaviour includes tacit or explicit collusion.

4.4.3 Market Study test - Adverse Effect on Competition

- 4.50 The Adverse Effect on Competition (AEC) test is used in the UK by both the Office of Fair Trading (OFT) and the Competition Commission (CC) in conducting market studies.
- 4.51 For the purpose of its assessment, the CC sees competition as a process of rivalry between firms and other suppliers, and it presumes that rivalry generates benefits for consumers such as lower prices and costs, increases in innovation and productivity, and improved quality and choice. The CC considers the effects of rivalry over time and how these might be expected to develop. The process of rivalry may be illustrated by changes in market structure. When these processes are effected by features of the market, the CC considers that competition may be “*adversely affected*”.⁴⁶
- 4.52 The CC, in its analysis, would consider the extent to which the process of rivalry in a market will ensure that all firms in the market are open to challenge, such that no firm’s position in or share of the market is insulated from competitive pressure.

⁴⁶ Competition Commission (2003) on “*Market Investigation References: Competition Commission*” Guidelines’

- 4.53 The OFT and CC also consider the potential benefits of mergers, such as increased efficiencies and improved economies of scale, and whether such benefits would be passed on to consumers in the form of improved services or lower prices.
- 4.54 The AEC test does not go as far as to require that harm to consumers be demonstrated. It presumes that distortion of rivalry between operators would lead to negative effects on customers.

4.4.4 Oxera's Views and Recommendations

- 4.55 Oxera notes in its report (ComReg Document 12/76b) to ComReg that several types of substantive tests are applied in different jurisdictions in order to assess competition concerns in various contexts. Oxera notes that different tests have different scope, ranging from those with a relatively low threshold for finding that a distortion of competition would occur and for that reason blocking a merger (such as the dominance test) to those with a higher threshold (such as the SLC test).
- 4.56 Oxera also considered Ofcom's assessment of any potential distortion to competition in the UK arising from 1800 MHz spectrum rights of use held by Everything Everywhere. Oxera noted that Ofcom followed an approach similar to the AEC test, in that it analysed the following:
- Whether the technical advantages associated with owning spectrum suitable for LTE granted significant commercial advantages;
 - Whether such advantages accrue over a significant period of time;
 - Whether competitors could have wholesale access to LTE services in the short term; and
 - The scope for competitors without 1800MHz spectrum to respond through the adoption of alternative strategies.

- 4.57 In coming to a view on a substantive test for distortion of competition assessment Oxera notes “...*In practice, however, these [tests] are likely to involve the assessment of similar factors, such as the creation or strengthening of market power, incentives to raise prices, barriers to entry, and incentives to collude, all of which would ultimately be detrimental to consumers.*” (page 27)
- 4.58 Of the range of substantive tests considered, Oxera is of the view that an SLC test would be an appropriate test for ComReg to select in the context of assessing spectrum trades. Oxera sets out the following reasons for its view:
- “...*it would be appropriate to bring [ComReg’s] practices into line with those of the Competition Authority to ensure that there are no inconsistencies between the two approaches*”; and
 - “... *spectrum transactions do not necessarily lead to consumer harm and may lead to substantial benefits to consumers (in the form of lower prices and better quality). Therefore this possibility should be captured within the test, as it would be within the SLC test...*”
- 4.59 Oxera considers that adopting a SLC test would assist ComReg in avoiding a situation where a transaction that could be beneficial to consumers might be blocked.

4.4.5 ComReg’s View

- 4.60 ComReg, having considered the range of substantive tests that may be used for the purpose of assessing the effects of any spectrum trade on competition in a market, is of the view that the SLC test would be the most appropriate test to adopt, for a number of reasons:
- The Competition Authority’s Merger Guidelines are based on the SLC test and have been in effect since December 2002. As mergers in Ireland are assessed using this test, it appears appropriate that a similar test should also be applied in the

assessment of spectrum trades. Operators in the Irish market are likely to already be familiar with the Competition Authority's approach to mergers and the manner in which it carries out its assessment.

- The SLC test recognises that mergers/trades do not necessarily lead to consumer harm – indeed they may bring substantial benefits to consumers. It is based on the concept of minimising Type 1 errors. This should be an important consideration for spectrum trades also.

4.61 ComReg thus proposes that it would establish an ex ante regime for reviewing notified spectrum transfers between undertakings, in order to determine whether any such transfer would distort competition in any market for electronic communications. In developing its proposal, ComReg has had regard to a number of sources including the Competition Authority's established regime for ex ante review of mergers and acquisitions above a certain size. For the avoidance of any doubt, and to clearly distinguish between the separate functions and powers of ComReg and the Competition Authority, parties are asked to note the following:

- Some spectrum transfers could form part of a merger or acquisition that is being reviewed by the Competition Authority. In such circumstances, ComReg would not review the spectrum transfer under its proposed regime – the matter would fall exclusively to the Competition Authority.
- Some spectrum transfers could form part of a merger or acquisition that is not being reviewed by the Competition Authority (for example, because the prescribed turnover thresholds are not met). In such circumstances, ComReg would review the transfer under its regime, in order to determine whether the transfer would distort competition in any market for electronic communications. However, in doing so ComReg would not be reviewing the actual merger or acquisition, as ComReg has no legal function or power to do

so. ComReg would confine itself to reviewing the proposed spectrum transfer.

4.5 Key elements of the Distortion to Competition test

4.62 ComReg is of the view that the key elements of the distortion to competition test should be as follows:

- Will the proposed spectrum trade lead to unilateral effects? ComReg is of the view that it would need to assess whether the increased spectrum holdings of the acquiring party would give it an incentive and ability to increase its prices in the retail market, taking into account:
 - The ability of competitors to compete effectively after the trade,
 - The likelihood of new entry after the trade, and
 - The ability of customers to react to any price increase by switching to competitors.
- Will the proposed spectrum trade lead to coordinated effects? ComReg is of the view that it would need to assess whether the proposed trade would increase incentives and the ability of operators in the market to coordinate on price (or other factors), taking into account:
 - The impact of the proposed trade on symmetry in the market,
 - The extent of multi market contact,
 - Barriers to entry, and
 - The availability of credible punishment mechanism.
- Will a detriment to consumers be likely to result from the spectrum trade? A detriment to customers could take the form

of higher prices, reduced quality of service, and/or a reduction in the range and type of services provided. ComReg is of the view that it would need to undertake an assessment of whether any potential negative effects of the trade would be outweighed by the positive effects that the notifying parties claim would emerge as a result of the trade (such as improved economies of scale, increased efficiencies, or lower operating costs), by focusing on evidence provided by the parties for efficiencies/countervailing factors to support the trade.

4.5.1 Specific criteria of competition analysis

4.63 ComReg is of the view that it would be appropriate to take a holistic approach to the assessment of each notified spectrum trade and that the following criteria would be considered when forming its view:

- Spectrum holdings and retail market position of parties participating in the trade. In doing so, ComReg will take into account differences between spectrum bands, for example, in terms of their propagation characteristics and other factors which may affect substitutability and may result in there being different values attached to different bands.
- Concentration in the retail market – ComReg would take into account the number of competitors in the market as well as their market share.
- Closeness of competition between transacting parties including in the retail market – ComReg would take into account the degree to which the transacting parties are close competitors before the trade and whether the trade would lead to more distant competitors.
- Possibility of unilateral effects - ComReg would undertake an assessment of the transferees' incentives to raise retail prices after the trade by considering the extent of customer switching in the market and whether they are able to switch to alternative

suppliers and how quickly they could switch in the event of a price increase.

- Coordinated effects – ComReg would consider whether the trade would affect the ability and incentives of operators to agree and sustain a collusive price (via tacit or explicit collusion).
- Barriers to entry/potential competition – ComReg would take into consideration barriers to entry into the retail market and the degree to which potential competition could arise in the future,
- Efficiencies arising from the transaction – ComReg would assess any evidence provided by the notified parties with claims that the trade would result in efficiencies which would benefit consumers.

4.64 ComReg's assessment of these issues is set out in more detail in Annex 4 (Draft Guidelines for Spectrum Transfer Analysis and Procedures).

Chapter 5

5 Proposed procedural framework

5.1 Overview

5.1 This chapter sets out ComReg's proposed procedural framework for the notification and assessment of proposed spectrum transfers. All timelines associated with procedural steps are indicative⁴⁷. ComReg will, nevertheless endeavour to meet the timelines it sets out.

5.2 The proposed framework includes the following main steps:

- Notification and Publication: the notification of the proposed transfer by the parties thereto and the publication of associated details by ComReg on its website.
- Assessment: the assessment step may consist of two distinct assessments depending on the proposed transfer;
 1. *Variation of Spectrum Rights of Use Assessment*: This assessment will be conducted only if the proposed transfer includes a proposal on the variation of spectrum rights of use and will be conducted in the manner set out in Chapter 3;
 2. *Distortion of competition assessment*: This assessment will be applicable to all notified spectrum transfers (and may include consideration of conditions which ComReg may attach to any approval).
- ComReg determination as to whether the notified spectrum transfer may be put into effect, or may not be put into

⁴⁷ ComReg is not bound to specific timelines. Further, ComReg notes that the US Federal Communications Commission reserves its right to suspend its 'informal' timelines when its ability to process and review the merits of an application is impeded by justifiable delay, the parties' actions, or external events.

effect, or may be put into effect subject to conditions specified by ComReg being complied with; and

- Giving effect to the notified spectrum transfer (where ComReg has determined that it may be put into effect, or may be put into effect subject to conditions specified by ComReg being complied with): The mechanics by which ComReg would permit the transfer and authorise spectrum rights of use to the transferee.

- 5.3 Further details of the proposed framework, including indicative procedural steps and associated timelines, are discussed below.
- 5.4 Interested parties should note that prior to making any formal notification of a proposed spectrum trade, the parties thereto may request a 'pre-notification meeting' with ComReg in order to discuss the information that they shall be required to provide as part of their formal notification. At such a meeting, parties may request that a reduced amount of information should be required of them (because, for example, it is very clear that the proposed transfer would not distort competition) and ComReg will consider any such request and may adjust its information requirements accordingly – i.e. ComReg may inform the parties that they may omit certain information from their notification (while reserving its right to require this information at a later stage).

5.2 Notification and Publication

- 5.5 The first step envisaged in the proposed spectrum transfer process is that a "Notification Form"⁴⁸ is submitted to ComReg, signed by both the current holder of the spectrum right of use and the intended recipient of same (together the "Notifying Undertakings").⁴⁹
- 5.6 ComReg will consider that it has received a notification in accordance with Regulation 19(4) of the Framework Regulations (the

⁴⁸ A draft Notification Form is attached at Annex 5 of this Document.

⁴⁹ Regulation 19(4) of the Framework Regulations (see Annex 2)

'Notification') only where it is satisfied that all of the information set out in the Notification Form has been supplied to its satisfaction. Where required information has not been provided, or where such information as has been provided is inaccurate or incomplete, ComReg will not deem a valid Notification to have been received and will not commence its assessment(s).

- 5.7 The "Notification Date" is the date of receipt of a fully completed Notification Form including all information required thereunder, and receipt of the required administrative fee. ComReg shall determine whether any Notification Form is complete and therefore valid.
- 5.8 The Notification Form would allow Notifying Undertakings to include a request that ComReg amend any of the conditions attaching to the spectrum right of use that they wish to transfer.⁵⁰
- 5.9 The Notification Form requires a declaration from the Notifying Undertakings that the full amount of the spectrum usage fees associated with the spectrum right of use will continue to be paid in full following the transfer (Notifying Undertakings shall agree amongst themselves as to how any such spectrum usage fee shall be shared between them, post transfer, and all existing or new licences shall be amended or drafted by ComReg so as to reflect those agreed terms).
- 5.10 ComReg proposes that all notified trades in the harmonised bands will be subject to an administrative fee of €5000. The level of the fee may be reviewed for other bands if required.

⁵⁰ As described in greater detail in Chapter 3, the default position shall be that all conditions shall transfer – i.e. the recipient undertaking ("the Transferee") shall be subject to an identical set of conditions as the transferring undertaking ("the Transferor"). However, ComReg also notes in Chapter 3 that in some cases it may be possible or indeed preferable that not all of conditions attaching to the original right of use should apply to the transferred portion of that right of use. It will be for the Notifying Parties to make any proposal to this effect, which would be considered by ComReg in the context of its statutory objectives, and any variation to an existing condition would need to be proportionate and objectively justified.

5.2.1 Potential information requirements

- 5.11 The information which it is proposed should be provided to ComReg at the outset of any notification is set out in the draft Notification Form at Annex 5. In addition, ComReg proposes that where it is of the view that in order to consider a notified spectrum transfer it requires further information it may, by notice in writing served on either Notifying Undertaking, require either Notifying Undertaking to provide such further information within a specified period of time, and any Notifying Undertaking of whom such a requirement is made shall comply with it.⁵¹

5.2.2 Publication

- 5.12 Within 1 week of the Notification Date, ComReg will publish a notice on its website of the proposed application for spectrum transfer.⁵² ComReg proposes that following information would be made public in such a notice:

- The name(s) of the Notifying Undertakings and their main business activities;
- The reference number of the application for spectrum transfer (which will be assigned by ComReg);
- The Notification Date;
- The name and contact details of the ComReg officer handling the matter;

⁵¹ ComReg reserves its right to suspend its indicative timelines when such information requests are not met in full within the specified period of time.

⁵² Please see Annex 1 which provides an overview of the type of trading procedures in a selection of other countries. ComReg notes from Electronic Communications Committee (ECC) Report 169 on *“Description of practices relative to trading of spectrum right of use”* that eight countries do not publish information prior to a transfer while seven countries publish some information before a transfer. In brief, the range of information published includes the following: Basic information on both parties (Austria, Czech Republic, the UK); and Information on the Licence (including licence number for Denmark and the UK), frequency, technical details and territory (Denmark, Lithuania).

- The technical details of the proposed spectrum transfer; and
- The timelines within which third party comments might be submitted.

5.13 ComReg considers that the above proposed approach is in line with international practice⁵³ and would provide interested parties with sufficient information to allow them to provide meaningful comment.

5.3 Transfer Assessment(s)

5.14 Upon receipt of the Notification Form, if there is no proposal by the Notifying Undertakings to vary any condition attached to the spectrum right of use at issue then the assessment of whether the transfer would result in a distortion of competition would commence. The date on which such an assessment commences shall be referred to as the 'Commencement Date'.

5.15 Upon receipt of the Notification Form, if the Notifying Undertakings do propose to vary a condition attached to the spectrum right of use at issue then ComReg will assess that proposal before the distortion to competition assessment⁵⁴. In such circumstances, the "Commencement Date" will be the date on which ComReg approves in principle the proposed variation to the condition(s) of the spectrum right of use at issue. ComReg would then commence its assessment as to whether the notified spectrum transfer would result in a distortion of competition

5.3.1 Variation of Rights of Use Assessment

5.16 This assessment will be carried out in accordance with Regulation 15 of the Authorisation Regulations (See Chapter 3.1.1)

⁵³ At Section 4.2 of its report, Oxera considers that the information requirements would need to be in line with the mechanisms and measures to assess 'distortion of competition'. It recommends that broad categories of information should be sought by ComReg and provides views on what categories seem relevant to it. ComReg finds these categories to be reasonable.

⁵⁴ Variations of spectrum rights of use are discussed in detail in Chapter 3.

5.3.2 Distortion to Competition Assessment (and remedies)

- 5.17 As set out in Chapter 4, ComReg is of the view that an SLC test should be used to assess whether notified spectrum transfers are likely to result in a distortion in competition in any market.
- 5.18 ComReg is of the view that any assessment should consist of two phases. Notified transfers would first be subjected to a “Phase 1 Assessment”. If, upon completion of a Phase 1 Assessment, ComReg was of the view that the proposed transfer would not lead to a distortion to competition then the transfer could be approved and put into effect. However, if upon completion of a Phase 1 Assessment ComReg was of the view that a more in-depth assessment was required then it could proceed to a “Phase 2 Assessment”.
- 5.19 Such a two-phase approach is applied by the Competition Authority in its merger reviews⁵⁵; ComReg considers that such an approach would facilitate the expeditious assessment of those transfers which should not raise any competition concerns, with only more complex or problematic transfers having to go to Phase 2 assessment.

Phase 1 Assessment

- 5.20 ComReg proposes that Phase 1 Assessments may take up to 7 weeks from the Commencement Date. ComReg further proposes that within 1 week of the Notification Date it would publish a notice on its website setting out a summary of the notified spectrum transfer and inviting interested third parties to make submissions in regard to same. ComReg would then allow two weeks for submissions, while reserving discretion to shorten or lengthen the two-week period where it considered it necessary or appropriate to do so.
- 5.21 During the Phase 1 Assessment, the Notifying Undertakings may also be offered or may request a meeting with ComReg in order to discuss

⁵⁵ Oxera notes that two phase assessments are also utilised in the context of merger assessment by the European Commission; the US Department of Justice (DOJ) and Federal Trade Commission (FTC); and UK Office of Fair Trading (OFT) and the Competition Commission (CC).

and clarify information provided in the Notification Form, or to offer any proposals to address any perceived competition concerns.

- 5.22 Following Phase 1 assessment, ComReg may determine that a proposed spectrum transfer may be put into effect, on the basis that it would not result in a distortion in competition in any market. It may also determine that a proposed spectrum transfer may be put into effect, subject to the imposition of conditions aimed at mitigating any potential distortion of competition.
- 5.23 If, following its Phase 1 assessment, ComReg is unable to determine whether the proposed spectrum transfer would result in a distortion in competition in any market, then it may form the decision to proceed to a Phase 2 Assessment.
- 5.24 In summary, at the end of a Phase 1 Assessment ComReg would make a decision to:
- approve the proposed trade; or
 - approve the proposed trade subject to conditions; or
 - commence a Phase 2 Assessment.

Phase 2 Assessment

- 5.25 ComReg considers that that a Phase 2 Assessment would take up to 8 weeks to complete. ComReg proposes that it would inform the Notifying Undertakings of its decision to proceed to a Phase 2 Assessment and publish a notice to this effect on its website. Such a notice would include information on the areas of concern that ComReg intends to investigate further. Notifying Undertakings and third parties would have a period of up to 3 weeks from the date of publication of the notice in which to make submissions to ComReg. ComReg would consider all submissions received as part of any Phase 2 Assessment.
- 5.26 ComReg would form a written final determination that the proposed spectrum transfer may be put into effect, or that it may not be put into

effect, or that it may be put into effect subject to certain conditions specified by ComReg being complied with, at the end of its Phase 2 Assessment.

- 5.27 A final determination that a proposed spectrum transfer may not be put into effect would have to be based upon a finding that the proposed transfer would result in distortion in competition in a market,
- 5.28 ComReg considers that at such time as it appears that it may form a final determination that a proposed spectrum transfer may not be put into effect, it may inform the Notifying Undertakings of this possibility and invite them to meet in order discuss any remedies which could reduce or eliminate ComReg's concerns as to the likely effects upon competition.
- 5.29 Such remedies could be behavioural or structural. An example of a behavioural remedy would be a coverage commitment in respect of the transferred right of use. A structural remedy might involve the divesting or reduction of one or more spectrum holdings. Further, ComReg may impose remedies to prevent spectrum hoarding, which may take the form of 'use it or lose it' conditions.
- 5.30 An approved spectrum transfer would be contingent on any agreed remedies either proposed by the Notifying Undertakings or specified by ComReg being implemented and complied with. Such remedies would be reflected in the applicable spectrum rights of use granted by ComReg.

5.3.3 Approval / Determination

- 5.31 ComReg would issue its determination on the notified transfer following the completion of its analysis of the proposal. Further, in line with Regulation 17 (4) of the Framework Regulations, ComReg will publish a notification of the effective transfer on its website.

5.3.4 Giving effect to the transfer

- 5.32 To give effect to the transfer, the rights of use of spectrum to be transferred would need to be surrendered by the licence holder once ComReg has determined that the transfer is approved.
- 5.33 ComReg may issue the original licence holder with a 'new' licence reflecting the reduced rights of use of spectrum.
- 5.34 The party acquiring spectrum rights of use in the transferred spectrum will be granted a new licence authorising spectrum rights of use for the transferred spectrum for the remaining duration of the original licence.
- 5.35 The level of the SUFs for the spectrum rights of use would remain unaffected in the transfer, with any amount of SUFs reduced in the original licence holder's licence (reflecting the reduced rights of use of spectrum) being applied to the new licence issued to the transferee. ComReg would expect that the notifying undertakings would submit a proposal in this regard, which must reflect any amendment of the overall SUFs for the spectrum rights of use.

5.4 Overview of Indicative Timelines for Distortion to Competition Assessment

The timelines outlined below are indicative:

	Milestone	Associated Timeline
Notification & Publication	The “Notification Date” is the date that ComReg is provided with a full and complete Notification.	“Notification Date”
	Publication of proposed notified trade on website “Notification Publication”	Up to 1 week after “Notification Date”
Phase 1	The start of the distortion of competition test (i.e. Phase 1) is the “Commencement Date”.	“Commencement Date”
	“Phase 1 submissions”	Up to 2 weeks after “Commencement Date”
	Phase 1 discussions with Notifying Parties “Phase 1 Discussions”	Up to 4 weeks after “Commencement Date”
	Publication of Phase 1 determination “Phase 1 Determination”	Up to 7 weeks after “Commencement Date”
Phase 2	“Phase 2 Submissions”	Up to 3 weeks after “Phase 1 Determination”
	Provision of preliminary phase 2 determination to Notifying Parties “Phase 2 Preliminary Determination”	Up to 8 weeks after “Phase 1 Determination”
	Response to Phase 2 Preliminary Determination from the Notifying Parties “Response to the Phase 2 Preliminary Determination”	Up to 3 weeks after “Phase 2 Preliminary Determination”
	Publication of “Phase 2 Final Determination”	

5.5 Summary of Procedural Framework

5.36 The following flow chart summarises the procedures as set out above;

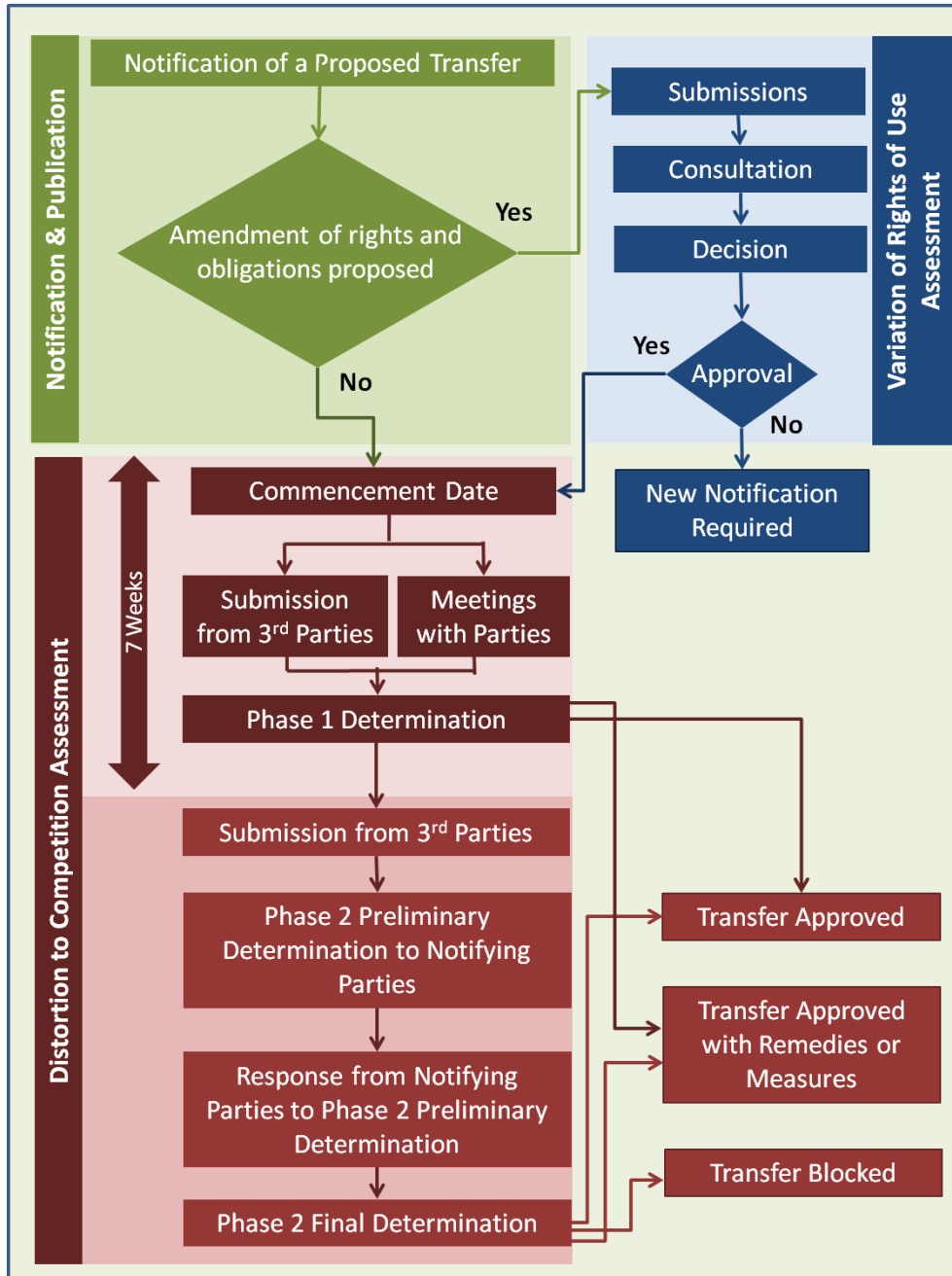


Figure 1 Procedural Framework Flowchart

Chapter 6

6 Submitting Comments and Next Steps

- 6.1 All input and comments are welcome; however, it would make the task of analysing responses easier if comments were referenced to the relevant section of each chapter and annex from this document.
- 6.2 Please also set out your reasoning and all supporting information for any views expressed.
- 6.3 ComReg would encourage submissions to be made as machine readable softcopy and discourages the submission of scanned documents.
- 6.4 The period for comment will run until 5 pm on 24 August 2012, during which time ComReg welcomes written comments on any of the issues raised in this paper.
- 6.5 All responses to this consultation should be clearly marked:-

“Reference: Submissions re ComReg 12/76” as indicated above, and sent by post or e-mail to arrive before 5pm on 24 August 2012 to:

Mr. Fiachra O’Doherty
Commission for Communication Regulation
Irish Life Centre
Abbey Street
Freepost
Dublin 1
Ireland

Ph: +353-1-8049600
Email: fiachra.odoherty@comreg.ie
- 6.6 In order to promote further openness and transparency ComReg will publish all respondents’ submissions to this response to consultation,

subject to the provisions of ComReg's guidelines on the treatment of confidential information⁵⁶.

- 6.7 We would request that electronic submissions be submitted in an unprotected format so that they can be appended into the ComReg submissions document for publishing electronically.
- 6.8 ComReg appreciates that some of the issues raised in this paper may require respondents 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 to consultations are 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 this annex.

6.1 Next Steps

- 6.9 All submissions which are received will be published (redacted as necessary in order to take account of any confidential or commercially sensitive information).
- 6.10 Having analysed and considered the submissions received, ComReg intends to publish a Response to Consultation Document in Q4 of 2012 which will, inter alia summarise the responses to the consultation and include ComReg's Decision and the final version of the guidelines and Notification Form.

⁵⁶ Response to Consultation - Guidelines on the treatment of confidential information (March 2005) ComReg Document 05/24.