



Commission for
Communications Regulation

Information Memorandum

LICENCE TO PROVIDE 3G SERVICES IN IRELAND

Document No:	05/41
Date:	15 June 2005

Contents

1	Introduction	2
2	Objective of the Competition	4
3	Licence Framework	5
3.1	SPECTRUM ALLOCATION	5
3.2	LICENCE CONDITIONS	6
3.3	LICENCE FEES	8
3.3.1	<i>Administrative fee</i>	8
3.3.2	<i>Spectrum Access fee payments</i>	9
3.3.3	<i>Annual spectrum fees</i>	11
3.4	INFRASTRUCTURE SHARING	12
4	The Licensing Process	14
5	Request for Tender Documents	16

1 Introduction

The objective of this memorandum¹ is to provide information to all interested parties about the licensing process for the third 3G 'B' mobile telecommunications licence. It provides a description of the licence and the licensing process itself, the licensing framework, fees and time-scales.

Third generation mobile telecommunications, also referred to as the IMT-2000 family of standards, represents a new technology cycle in mobile telecommunications. 3G brings the potential of high speed Internet and associated services such as high quality audio, video, and graphics to people by way of mobile communications in addition to voice communications. The unique combination of mobility, voice communication and data rates up to 40 times or more those of existing mobile phones (2G or GSM) will enable the development of unique new services which promise to revolutionise human interaction and communication in both the private and business segments. The new services will combine or strengthen the efficiency, entertainment and relational aspects of mobile communications, e.g., through mobile office services, location based services or mobile video conferencing. The 3G operators who are able to successfully combine a high quality network with services that offer relevance for their customers have the potential to capture strong revenues from the market.

In recent years, the Irish telecommunications sector has experienced impressive growth levels. Not only has the mobile penetration rate risen from only 29% in June 1999 to 94% by March 2005; the Irish Internet market similarly has experienced a significant expansion with over 38% of the population having Internet access in 2004². These figures indicate the vibrancy and continued activity in the Irish telecommunications market.

The Commission for Communications Regulation (ComReg) invites applications for the remaining 'B' licence to provide third generation mobile services in Ireland. If there is more than one applicant the selection of the successful Applicant³ will be carried out by way of an open tender using the comparative evaluation or "beauty contest" method. The terms and conditions are very much as offered in the original licence award process in December 2001⁴.

¹ This memorandum is for information purposes only and does not form part of any formal tender process. It is without prejudice to the legal position of the Commission or its rights and duties under relevant legislation.

² Irish communications Market: Quarterly Key Data. ComReg document 05/21

³ The term "Applicant" means a body corporate which has submitted an Application under these competitions.

⁴ See Document ODTR 01/96, available on www.comreg.ie.

The duration of the licence will be 20 years. If there is only a single applicant for the licence then, assuming all of the essential requirements are met, the licence will be issued within 6 weeks of the closing date for applications. In the event of there being two or more applications it will be necessary to conduct a comparative evaluation process. In that case it is expected that the highest ranked Applicant for the licence will be announced by 28th October 2005.

It should be stressed that this memorandum is only indicative of the licence requirements and process. Full details of the licensing process are contained in the tender documentation, which is available from ComReg at the address shown on page 16.

2 Objective of the Competition

The overall objective of the competition is to generate the most competitive and robust mobile market structure possible so that the Irish consumers can benefit from competitive tariffs and the availability of advanced services.

ComReg actively seeks to promote the development of competition by taking the following approach to the introduction of 3G mobile services in Ireland. Promotion of infrastructure competition by offering a 3G mobile licence, and also offering additional spectrum in the 900 MHz and/or 1800 MHz bands to a new market entrant under certain conditions, while also foreseeing the possibility of infrastructure sharing subject to certain conditions.

3 Licence Framework

The process for licensing 3G services in Ireland began in 2000 when the then Director of Telecommunications Regulation undertook two rounds of public consultation on 3G, in April and July 2000.⁵ Following the latter consultation and agreement on fees, the Director launched two competitions for a total of four 3G mobile licences, providing for entry of at least one additional network operator in the Irish mobile market. The competitions also made available further 900 MHz and 1800 MHz spectrum to successful new market entrants⁶ as well as spectrum in the 900 MHz and 3G bands to the operator who obtained the “A” licence, subject to the latter offering MVNO access.

The consultations addressed the potential market structure for the delivery of 3G mobile services, noting that future market relationships are likely to be more complex than those in the current mobile market, with a greater focus on value added content and service providers.

Licensees will be granted a licence, for a period of up to 20 years, under Section 5 of the Wireless Telegraphy Act, 1926 that will permit them to provide 3G services.

3.1 Spectrum Allocation

The third “B” licence will be assigned equal amounts of core 3G spectrum, i.e. 2 x 15 MHz of paired spectrum plus 5 MHz of unpaired spectrum, the same as previously offered in the original competition in 2001/2002. In order to achieve a fair level of competition with the incumbent operators, additional spectrum in the 900 MHz and 1800 MHz bands will also be made available, on the basis of demonstrable need, to a successful Applicant who is a new market entrant. This spectrum will comprise up to 2 x 7.2 MHz of spectrum in the 900 MHz band, and up to 2 x 6.0 MHz in the 1800 MHz band.

All spectrum in the 900 MHz and 1800 MHz bands made available as a result of the 3G mobile licence tender will be subject to appropriate spectrum access fees, as specified in the tender document (see section 3.3 below).

⁵ See documents ODTR/00/29, 00/48, 00/52 and 00/92 available on the ComReg web site: www.comreg.ie.

⁶ A new market entrant here means an applicant which is not currently licensed to provide mobile telecommunications services and networks in Ireland and is not linked to any existing operator (a full definition of “new market entrant” is in the tender document).

Interested parties should note that, in the event that the Licence is not awarded, the spectrum relating to the Licence may be subject to a re-tender and/or re-allocated by ComReg.

The tables below summarise the core spectrum allocated to each class of licence in the two competitions.

Type of Licence	Band	Bandwidth of the Licence
"A"	1920-1935/2110-2125 MHz	2 x 15 MHz
	1915-1920 MHz	1 x 5 MHz

Table 1: Overview of core spectrum allotted to the "A" licence on offer

Type of Licence	Band	Bandwidth of the Licence
"B" ₁	1935-1950/2125-2140 MHz	2 x 15 MHz
	1900-1905 MHz	1 x 5 MHz
"B" ₂	1950-1965/2140-2155 MHz	2 x 15 MHz
	1905-1910 MHz	1 x 5 MHz
"B" ₃	1965-1980/2155-2170 MHz	2 x 15 MHz
	1910-1915 MHz	1 x 5 MHz

Table 2: Overview of core spectrum allotted to the "B" licences on offer

All spectrum packages must include any necessary inter-carrier and inter-operator guard band requirements. In the case of 3G mobile spectrum, these bands should be compatible with the minimum carrier spacing requirements specified in CEPT ERC Decision ERC/DEC(99)25.

The spectrum currently available as the 3rd 'B' licence is the 'B₁' package, i.e., 1935-1950 paired with 2125-2140 MHz and 1900-1905 MHz.

The additional 900 MHz and/or 1800 MHz spectrum that may be awarded to a successful new market entrants is shown in table 3 below:

Additional spectrum for	Band	Bandwidth of the additional spectrum
New entrant	900 MHz 1800 MHz	2 x 7.2 MHz (in total) 2 x 6.0 MHz (up to four lots)

Table 3: Overview of additional spectrum

3.2 Licence Conditions

The 3G mobile licence will be issued for a period of up to 20 years to be renewable on an annual basis for the time being, although ComReg reserves the right to review this arrangement from time to time as part of its broader spectrum management duties. Continued availability of existing spectrum assignments in the 900 MHz and 1800 MHz bands to mobile telecommunications licensees will be reviewed three years prior to licence

expiry. Retention of such spectrum will be on a demonstrable need basis until the end date of the 3G licences.

The successful applicant will be required to launch commercial services no later than 30 April 2007 as a minimum requirement for obtaining a 3G licence.

The class “B” licences involve minimum requirements of 33% demographic coverage to be fulfilled by the end of October 2009 and 53% demographic coverage by the end of October 2011.

Applicants for the “A” or “B” licences which were licensed at the time of the original competition in 2001/2002 to provide GSM services and networks in Ireland were required to agree, as a pre-condition to enter the competition, to an obligation to provide national roaming facilities onto their GSM network to all new market entrants who meet the minimum roll-out requirement to qualify for roaming as set out below. The national roaming obligation will apply for a period of five years from the date of the granting of the 3G licence to the new market entrant, by which time ComReg considers that the new market entrant should have rolled out sufficient infrastructure or made appropriate sharing arrangements so as not to require the national roaming facility. The national roaming obligation will become effective only when the new market entrant has rolled out a 3G mobile radio access network infrastructure capable of serving at least 20% of the Irish population.

The minimum requirements with regard to coverage, speed of roll-out and national roaming are outlined in the table below.

Minimum Requirements	3 rd “B” Licence
Coverage	53% demographic coverage.
Speed of Roll-Out	33% demographic coverage by the end of October 2009. 53% demographic coverage by the end of October 2011.
National roaming	Acceptance of obligation to provide national roaming on existing 2G networks for new market entrant 3G licensees.

Table 4: Overview of licences and minimum requirements with regard to coverage, speed of roll-out and national roaming

In addition, minimum requirements with regard to the financial solidity and the coherence of the business plan will apply. Finally, applicants must agree to pay a spectrum access fee, see 3.3 below.

All Applicants will be encouraged to make voluntary offerings concerning coverage and roll-out in excess of the minimum requirements concerning coverage and roll-out and other offerings such as site sharing and quality of service. Performance guarantees underwriting these offerings will form part of the evaluation as well as the promotion of competition.

3.3 Licence Fees

Applicants should note that there are a number of fees payable in respect of the Licences offered. These fees relate to both once off and recurring charges. In the case of the spectrum access fee, the charge will comprise an up-front payment and deferred payments in certain years. For the annual spectrum fees a discount structure will apply for the early years of the Licence.

The fees can be summarised as outlined below:

Type of Licence	Administrative fee	(3G) Spectrum access fee	Annual spectrum fee
“B” ₃	Up to €200,000	€114.3 m (see 3.3.2)	€2.22 m

Table 5: Overview of licence fees for the 3rd “B” licence

3.3.1 Administrative fee

The total cost of running a competition for the “B” licence is estimated at €300,000 which will be recovered from the successful Applicant.

Accompanying its application, each Applicant must provide a valid bank draft for €300,000 as a deposit to cover the maximum amount of the administrative fee. ComReg intends to cash the draft within five working days.

Only Applicants who have been offered a Licence shall be liable for the costs of the competition. In the event that an Applicant is not offered or awarded a Licence its deposit will be refunded.

Where the final calculation of the administrative fee results in a figure lower than the amount of the deposit provided the difference will be returned to the Applicant.

Applicants will not be entitled to recover any interest earned.

3.3.2 Spectrum Access fee payments

A Spectrum Access Fee is required of the licensees, to be paid in accordance with the schedule set out below. The deferred structure takes account of the market conditions for mobile operators and the development period for 3G in Ireland.

The initial payment is due on the award of the licence. The deferred payments are due at the year-date for awarding the licences. Table 6 below contains an overview of the payable Spectrum Access Fee for the “B” licences. A bond is required for the annual payments falling due in years 1-5, to be provided by a bank, financial institution or equivalent. A detailed description of the payment scheme can be found in the tender document.

	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	Total Fee
Fee (€m)	44.4	0	0	0	3.8	3.8	3.8	3.8	3.8	3.8	7.6	7.6	7.6	7.6	7.6	8.9	0	0	0	0	0	114.3

Table 6: Overview of set payable Spectrum Access Fee for a “B” licence

In addition, all spectrum in the 900 MHz and/or 1800 MHz bands made available as a result of the 3G mobile licence tender will be subject to spectrum access fees comparable to those which apply to currently licensed spectrum in the 900 and 1800 MHz bands.

3.3.3 Annual spectrum fees

In respect of each 2 x 5 MHz in the 1920-1980 MHz and 2110-2170MHz bands, an annual fee of €634,870 will apply.

In respect of each 5 MHz in the unpaired 1900-1920 MHz and 2020-2025 MHz bands, an annual fee of €317,435 will apply.

As noted above, additional spectrum will be offered on the basis of demonstrable need for (a) MVNO access to the network covered by the “A” licence and (b) new entrant(s). If these licensees take up additional spectrum in the 900 and 1800 MHz bands, the licensee will pay a spectrum access fee as follows:

Additional spectrum for the new entrants:

The total spectrum available for new entrants and the applicable fee is as follows

- 2 x 7.2 MHz in the 900 MHz frequency band – €12.35 m;
- 2 x 6.0 MHz in the 1800 MHz Frequency band – €3.97 m.

If there is a single new entrant which wishes to take up the full allocation, it will pay the whole of the amount above. If the new entrant does not wish to take up the full spectrum allocation under this heading, the access fee will be set on a pro rata basis according to the amount of spectrum actually allocated.

The following Annual Spectrum Fees will apply for spectrum in the 900 MHz and 1800 MHz bands:

- €25,395 in respect of each 200KHz duplex radio frequency channel in the 900 MHz frequency band;
- €12,697 in respect of each 200KHz duplex radio frequency channel for the first block of 24 channels in 1800 MHz frequency band;
- €19,046 in respect of each 200KHz duplex radio frequency channel for the second block of 24 channels in 1800 MHz frequency band.

After a period of not less than two years these annual spectrum fees will be subject to review and adjustment where appropriate.

3.4 Infrastructure sharing

ComReg is keen to encourage sharing of radio transmission sites for 3G mobile and other radiocommunication services wherever possible to ensure that innovative new services can be rolled out speedily and with a minimal environmental impact.

Following the 3G licence competition in 2001/2002 all three licencees worked with ComReg to develop a Code of Practice on sharing of radio sites. A copy of the Code signed by all three licencees and ComReg is available in Document ComReg 03/28. The 3G licencees also provided commitments in their licences (spectrum rights of use)⁷ on the number of sites under the control of the licencee which they each would make available on a reasonable, transparent and non-discriminatory basis for site sharing purposes.

Similarly anyone applying for the 3rd 'B' licence will be invited to provide similar commitments, both in terms of participating in the Site Sharing Code of Practice and in making sites under the Applicant's control available for site sharing purposes.

Additional marks will be awarded for such commitments which relate to sites or support structures that are currently or may in the future be subject to planning permission, and to commitments relating to cost-oriented access conditions.

In meeting its roll-out and coverage targets, an operator may take into account shared infrastructure. However, in order to promote competition in infrastructure and services, operators must contribute a minimum level of infrastructure of their own. Infrastructure sharing, with the exception of site sharing, will only be permissible when each operator concerned has established a 3G mobile radio access network infrastructure capable of serving at least 20% of the Irish population. In other words, the operator must demonstrate that at least 20% demographic coverage is provided by infrastructure which is wholly under the control or ownership of that operator.

ComReg will assess the compliance of operators in this respect before commercial implementation of any infrastructure sharing arrangements is permitted.

⁷ See documents ComReg 04/16, 04/17 and 04/18 for the respective 3G Rights of Use of Hutchison 3G Ireland Ltd, O2 Ireland and Vodafone Ireland.

In assessing whether an infrastructure sharing agreement is permissible the ComReg would expect:

- Operators to maintain independent logical control of the network. In particular the operator should maintain independent logical control over important network elements, such as:
 - the Quality of Service settings for the operator's subscribers;
 - the traffic levels;
 - the power supply to the network elements, e.g., there should be sufficient resilience in power supplies to maintain the network;
 - separation of the Operation and Maintenance centres.
- Operators should not enter infrastructure sharing agreements that prohibit an operator from adding their own network elements to their shared infrastructure network. For example an operator should have the ability to add a independently owned mast & antenna to their shared infrastructure network;
- Operators should not enter infrastructure agreements which are designed to exclude third parties from access to facilities which they would otherwise use;
- Operators should not exchange any data beyond that technically necessary for infrastructure sharing to take place;
- The shared use of frequencies is not permitted.

In considering any infrastructure sharing arrangement an operator should satisfy itself that it is in compliance with the current regulatory framework.

4 The Licensing Process

If a competition is required as a result of two or more applications for the licence being received, the competition will be administered by the ComReg, which will establish a Steering Group responsible for the evaluation of applications and management of the selection process.

A set of tender documentation is available. The tender document is divided into two sections. The first section provides a detailed description of the process, and a description of the requirements regarding the structure of the applications. The second section contains appendices of supporting documentation, and a draft licence, which is to be filled in by the Applicant with regard to issues where ComReg invites the Applicants to give binding commitments such as on quality of service, coverage, speed of roll-out and site sharing, as well as financial performance guarantees. The draft licence allows Applicants to familiarise themselves with the framework conditions of the licence.

ComReg believes that, in the event of two or more applications being received, the best method of allocating the licences is to compare the merits of competing bids, so as to evaluate applicants on criteria such as promotion of competition, quality of service, network roll-out targets etc. ComReg will make a choice based on a comparative analysis of the bids. If there are factors which in the opinion of ComReg prevent a full and informed comparison, such as a lack of suitable applications, or similarities in applications which cannot be explained as coincidence, ComReg reserves the right to cancel the competition. If there is evidence of collusion, ComReg reserves the right to pass this on to the appropriate authorities and take whatever procedural steps are necessary as a consequence. Interested parties should note that if the licence on offer is not awarded, the spectrum relating to that licence may be re-issued by ComReg.

Only Applicants who meet the formal and minimum requirements specified in the tender document will be able to proceed to the comparative evaluation stage. In this comparative evaluation or “beauty contest” method, the applications, which are awarded the highest marks, will be ranked at the top of each category.

During the competition, applications will be subjected to a comparative evaluation on the basis of pre-determined evaluation criteria, dimension and weightings as outlined below:

“B” licence	
Dimension	Weight
Coverage, speed of roll-out and site sharing	30%
Quality of service	20%
Promotion of competition	20%
Performance guarantees	30%

Table 6: Evaluation Dimensions and weightings (“B” licence)

The evaluation will be in accordance with the dimensions outlined and weighted in the tables above.

In drawing up the list of Applicants to be offered licences, ComReg will apply the following rules in the following order:

1. The applications will be considered in descending order of merit;
2. The highest-ranked applicant for the 3rd “B” licence will be offered that licence.

For more detailed information regarding the evaluation of applications reference is made to the tender documentation.

Following the launch of the competition, a question and answer phase will take place. Applicants will be provided with a copy of the questions and answers which arose during the first competition. Written questions will be permitted from purchasers of the tender documents until 19 August 2005 at 14.00 hrs (local time).

The closing date for receipt of applications will be 9th September 2005 at 12.00 hrs (local time). The timetable below sets out the key events:

Event	Date
Launch of Competition	July 22nd 2005
Deadline for submission of Questions	August 19th 2005 at 14.00 hrs (local time)
Deadline for submission of tenders	September 9th 2005 at 12.00 hrs (local time)
Analysis of tenders	September 12th – October 24th 2005
Announcement of results	October 28th 2005

Table 7: Time schedule for Tender Process

ComReg reserves the right to alter the above dates.

5 Request for Tender Documents

Requests for the tender documents should be accompanied by a non-refundable bank draft for €10,000 made payable to the Commission for Communications Regulation.

All requests should be addressed to:

Commission for Communications Regulation
Abbey Court, Irish Life Centre
Lower Abbey Street
Dublin 1
IRELAND

ATT: Ms. Sinéad Devey

Phone +353 (01) 804 9621; Fax +353 (01) 804 9671

E-mail: marketframeworkconsult@comreg.ie