



Commission for
Communications Regulation

**Consultation Document &
Request for Expressions of Interest**

**New Licensing Scheme for Provision of
Business Radio Services to Third Parties**

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1 Foreword

This document puts forward proposals for a new, flexible licensing scheme for the provision of Business Radio services to third parties using frequencies in the VHF and UHF bands. The initiative builds on the existing ComReg licensing scheme for Community Repeaters and is likely to be of particular interest to existing Community Repeater operators and equipment suppliers who may also wish to offer bundled radio service packages. Comments on the proposed new scheme are invited and Expressions of Interest in the new licences are being sought as the first stage of the proposed scheme.

The proposed scheme will provide licensees with unprecedented flexibility to provide a wide range of business radio services to third parties anywhere in the country, subject to compliance with the licence conditions. I believe the new scheme will provide valuable new opportunities for the Business Radio sector and look forward to working with the industry to ensure the scheme's success

Isolde Goggin

Chairperson

Commission for Communications Regulation

2 Introduction

This consultation document outlines ComReg's proposals for a new licensing scheme to provide Business Radio (BR) services to third parties in Ireland. The Third Party Business Radio (TPBR) licence builds on the existing Community Repeater licensing scheme. Whereas Community Repeaters enable services to be provided in a specific geographic area from a single base station, the proposed new scheme will enable services to be provided on a substantially national basis, subject to certain limitations to protect services in other countries.

The proposed TPBR licence will provide a flexible and cost-effective means to provide narrow band business radio services of any type, including community repeater services, special event radio use, on-site systems or paging, and at any location, subject to compliance with certain technical conditions. The licensing process will involve two or three distinct stages, depending on the level of interest shown in the scheme. Stage 1, to which this document relates, is an invitation for Expressions of Interest. Stage 2 will be the main licensing Stage, during which those who have submitted expressions of interest will be invited to submit formal applications for licences. Depending on whether the demand for frequencies identified from the Expressions of Interest exceeds the number of available frequencies, Stage 2 may comprise a simple selection procedure to determine which applicants are awarded licences. It should be noted that only those who submit Expressions of Interest in accordance with Section 7 of this document will be invited to submit formal licence applications in the second Stage of the process. Licences will be awarded at the end of Stage 2 and will be valid for five years from that date, which will be regarded as the start date of the scheme for licensing purposes.

Stage 3 of the process will enable interested parties to apply on a first come, first served basis for any frequencies that have not been licensed by the end of Stage 2, subject to compliance with the overall limits on channels assigned to each operator. Stage 3 will therefore only apply if there are channels available

after completion of Stage 2. Stage 3 will run for a maximum of 12 months from the commencement of the licensing scheme, subject to availability.

Business radio typically provides two-way voice or data communication between two or more individuals belonging to a specific user group. Examples of business radio users include taxi, courier or delivery operatives, warehouse staff, security guards, construction companies and local authorities. Many organisations with sizeable and permanent requirements for business radio operate their own systems, which are directly licensed by ComReg. Smaller or occasional users may subscribe to community repeater services or use licence-exempt PMR446 radios which can provide basic voice communication over distances of around 1 km under favourable conditions. It is likely that many other individuals and companies could benefit from the use of licensed business radio services but are either unaware of the facility or are deterred by the cost and complexity of procuring their own systems.

The proposed TPBR licence would provide the business radio community with a simple but versatile service offering that can be tailored to meet the short term or longer term needs of individual users as these evolve over time, without the need for third parties to acquire individual licences. TPBR licences would be intended primarily for the provision of business radio services to end users, which may be either organisations or individuals. Unlike most existing business radio licences, the proposed TPBR licence scheme would permit licences to be transferred to or traded with other entities, subject to prior agreement with and administration of the change of licensee details by ComReg.

This document describes the types of service that might be provided under TPBR licences, the conditions that will apply to the licences, the frequencies that would be available and the procedures that ComReg is considering adopting for granting TPBR licences.

ComReg would welcome comments on the proposals presented in this Consultation document, in particular with regard to the proposed limitation on the number of TPBR licences to be granted.

3 Responding to the Consultation

The consultation period will run from 23 June 2005 to 5 August 2005. Written comments should be marked “Response to ComReg’s proposed New Licensing Scheme for Provision of Business Radio Services to Third Parties” and submitted electronically (preferably) or in hard copy before 5.00 p.m. on 5 August 2005, to:

Ms Susan Fleming
ComReg
Block DEF, Abbey Court
Irish Life Centre, Lower Abbey Street
Dublin 1
E-mail: susan.fleming@comreg.ie

It would be helpful when responding if you would make specific reference to the questions raised in Section 6 of this document.

In order to promote further openness and transparency ComReg will publish all respondents’ responses to this consultation, subject to the provisions of ComReg’s guidelines on the treatment of confidential information – ComReg 05/24.

Please note

ComReg appreciates that many 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 web-site and for inspection generally, respondents to consultations are requested to clearly identify any confidential material and place confidential material in a separate annex to their response.

Such Information will be treated in accordance with the provisions of ComReg’s guidelines on the treatment of confidential information – ComReg 05/24.

4 Frequency Spectrum Information

The spectrum available for business radio is a finite resource that is intensively used in some parts of the country. It is the policy of ComReg to manage the spectrum in an efficient and orderly manner in order to obtain the optimum use from this national resource. While ComReg would endeavour to minimise the potential for interference between licensed TPBR systems, no liability shall accrue to ComReg arising from interference to licensees of such systems should ComReg proceed with the licensing scheme.

ComReg has identified a total of twenty channels in each of the following frequency bands that could be used for TPBR services:

- i) 68 – 87.5 MHz (VHF Low Band)
- ii) 138 – 174 MHz (VHF High Band)
- iii) 450 – 470 MHz (UHF High Band)

In order to provide sufficient opportunities for both existing community repeater operators and new market entrants to obtain TPBR licences, ComReg intends to offer sufficient TPBR licences to accommodate a minimum of ten applicants with each licensee being awarded:

- A total of between two and six channels from the above frequency bands, according to each applicant's requirements as stated in the application and subject to a maximum of two channels per frequency band;

Each licensed frequency channel would comprise of paired frequencies, which could be used in either simplex (single frequency) or duplex (dual frequency) mode. Where channels are operated in duplex mode, or where shared transmission sites are used, licensees would be required to adhere to the specified base station and mobile station transmit frequencies.

TPBR licensees would be responsible for planning their usage of the spectrum whilst ensuring compliance with the terms of their licences and maintaining

their systems in a manner that minimises the risk of harmful interference to other licensed spectrum users.

It should be noted that these radio frequencies are also used in neighbouring countries and radio transmissions are not inhibited by national borders. As a result, it may be necessary to limit the use of frequencies in border or Eastern coastal areas in order to avoid interference to or from neighbouring countries. Such limits may take the form of restrictions on, amongst other things, transmitter height or radiated power.

Changes in the spectrum available for TPBR services may arise for a number of reasons. These include:

- Changes in accordance with the requirements of international organisations or to facilitate co-ordination with neighbouring countries;
- Changes necessitated by EU legislation;
- Changes in order to meet national requirements.

In the interests of the efficient use of the radio spectrum it is the policy of ComReg to review the use of the spectrum on an ongoing basis, to reflect such factors as well as changes in the market place. ComReg would endeavour to provide as much notice as possible in the event that any such changes were required.

5 Outline of Proposed TPBR Licensing Scheme

5.1 Types of service

The proposed TPBR licences would enable licence holders or their customers (subject to the licence holder's agreement) to provide one-way or two-way voice or data communications at any location within Ireland, subject to compliance with the technical conditions of the licence. Such services would include paging, telemetry and geographic location tracking services as well as conventional speech and data. Coverage could extend from a single building to wide area regional or national coverage. The licensed spectrum may also be made available commercially on a national or regional basis to third parties for provision of their own services, on terms agreed with the licence holder. In such circumstances responsibility for compliance with the licence conditions would remain entirely with the licensee. Use of equipment that is covered by a TPBR licence by a third party would not require a radio licence to be held by the third party.

5.2 Types of Equipment

In common with other licensed radio services, all radio equipment used to deliver TPBR services must comply with the Radio and Telecommunications Terminal Equipment Directive 1999/5/EC (the R&TTE Directive)¹ which was enacted into Irish law on 5 June 2001 by Statutory Instrument 240 of 2001. Harmonised standards under the R&TTE Directive, published by the European Telecommunications Standards Institute (ETSI) and CENELEC, can be used to demonstrate compliance to the essential requirements of the R&TTE Directive². Information on the R&TTE Directive may be found in ComReg documents 00/61 and 00/62R – please note that these documents are subject to

¹ OJEC reference L 91, 7.4.1999, p.10 (available from http://europa.eu.int/eur-lex/en/search/search_oj.html)

² A list of the harmonised standards under the R&TTE Directive is maintained at <http://europa.eu.int/comm/enterprise/newapproach/standardization/harmstds/reflist/radiotte.html>

revision and updates³. For information, a list of the most common standards for business radio systems is detailed below:

- EN 300 086 (radio equipment using an integral antenna intended primarily for analogue speech)
- EN 300 113 (radio equipment intended for the transmission of data (and/or speech) using constant or non-constant envelope modulation and having an antenna connector)
- EN 300 210 (radio equipment transmitting signals to initiate a specific response in the receiver)
- EN 300 224 (on-site paging)
- EN 300 296 (radio equipment using integral antennas intended primarily for analogue speech)
- EN 300 341 (radio equipment using an integral antenna transmitting signals to initiate a specific response in the receiver)
- EN 300 390 (Radio equipment intended for the transmission of data (and speech) and using an integral antenna).

Compliance with harmonised standards is not compulsory. Alternative standards may be used so long as they demonstrate compliance to the essential requirements of R&TTE Directive.

5.3 Geographic Extent of the Licences

ComReg's intention is that frequencies identified for TPBR services would be available on a national basis. However, since these frequencies may also be used in neighbouring countries, it may be necessary for ComReg to place restriction on the use of these channels, particularly in border areas and along the East Coast.

³ Further information on the R&TTE Directive can be found at <http://europa.eu.int/comm/enterprise/rtte/>

In order to minimise these constraints, ComReg will endeavour to achieve co-ordination of these channels, however this may not be possible in all cases. Where technical constraints are required, they will be included in the licence schedule. In the event of interference to or caused by the TPBR station(s) following the issue of a licence, which necessitates additional constraints, these would be notified to the licensee and the licence modified accordingly. In this event, all expenses must be borne by the licensee.

5.4 Technical Conditions

ComReg proposes that the following Effective Radiated Power limits would apply to TPBR systems unless otherwise stated in the licence:

- Base Station equipment: 25 watts (14dBW)
- Mobile Station equipment: 10 watts (10dBW)
- Handportable equipment: 5 watts (7dBW)

Licensees would be required to adhere to the guidelines in ETSI Technical Report ETR 053, "Radio Site Engineering for Radio Equipment and Systems in the Mobile Service", to minimise the risk of interference between co-sited radio systems.

5.5 Provision of Electronic Communications Services

As with all operators providing electronic communications networks and/or services to third parties, TPBR licensees will require to be authorised by ComReg. ComReg Document 03/81 is available from the ComReg website and specifies conditions attached to General Authorisations.

5.6 Application Process for TPBR Licences

As the number of frequencies that are available for TPBR licences is limited, ComReg will need to assess the demand for these licences before deciding on the licensing approach. A two or three stage approach to licensing TPBR

services is therefore proposed, depending on the level of interest shown in the scheme.

- i) As the first Stage, ComReg is inviting Expressions of Interest in TPBR licences in response to Section 7 of this Consultation Document, which will be used to gauge demand. This first Stage will run from 23rd June until 5th August, 2005. Expressions of interest should state the number of channels required in each of the three available frequency bands as specified in Section 4 of this document. A maximum of two channels may be applied for in each frequency band and the total number of channels applied for must be between two and six.
- ii) The second Stage will comprise the main licensing Stage, during which those who have submitted expressions of interest will be invited to formally apply for licences. Depending on whether the demand for frequencies exceeds the frequencies that are available, Stage 2 may comprise a simple selective procedure to determine which applicants are awarded licences. Stage 2 will run for a period to be specified in the response to consultation.
- iii) **Note that only those who submit Expressions of Interest in accordance with Section 7 of this document will be considered in stage 2 of the TPBR licensing process.**
- iv) Stage 3 of the process will enable applicants to apply on a first come, first served basis for frequencies that have not been licensed by the end of Stage 2, subject to compliance with the overall limits on channels assigned, i.e. two per frequency band and six in total. Stage 3 will therefore only apply if there are channels available after completion of Stage 2. In this event, Stage 3 will run for a period of up to twelve months from commencement of the licensing scheme.

To ensure that frequencies are assigned on a transparent and equitable basis, individual channels will be assigned by lottery within the bands requested in the applications to those who have been granted TPBR licences.

Applicants may apply for between two and six channels and request additional channels, up to the maximum of six, at any time during Stage 3, subject to availability. The scheme will be reviewed at the end of Stage 2, the end of Stage 3 and before the end of year four of the scheme.

5.7 Licence Fees and Duration

Licences issued under the TPBR scheme will have a maximum duration of five years and will be reviewed before the end of year four. All TPBR licences issued under the scheme will be subject to expiry and/or renewal at the fifth anniversary of the commencement of the scheme, regardless of when the licence is actually issued. A TPBR licence will be issued for each frequency channel. ComReg proposes that TPBR licences will be subject to a licence fee of €5,000 for the duration of the licence. The fee would be payable in full in advance and will be non-refundable.

5.8 Transfer of TPBR Licences

ComReg anticipates that each duplex channel will be individually licensed and that licensees will be permitted to transfer individual licences to other entities or to acquire further licences from existing licensees on normal commercial terms, subject to prior approval from ComReg and administrative licence transfer. In such cases the transferred channels will not count towards the limit of two channels per frequency band and six channels in total permitted per licensee.

6 Request for Comments on the Proposal

Comments are invited on the proposed TPBR licensing scheme, in particular with regard to the following aspects:

- i) The procedure for granting TPBR licences, as described above;
- ii) The proposal to limit the number of TPBR licensees to between 10 and 30 licensees, depending on demand;
- iii) The proposal to limit the number of channels directly licensed under this scheme to a maximum of six per licensee (two per frequency band);
- iv) The proposed fees for the new scheme;
- v) The proposal to allow transfer of licences under the scheme, and in this case, to permit licensees to acquire more than two channels per frequency band and more than six channels in total;
- vi) The proposal to allow licensed TPBR spectrum to be made available by the licensee on a commercial basis to third parties for provision of the third party's own services.

7 Request for Expressions of Interest

ComReg is formally inviting Expressions of Interest in TPBR licences in response to this Consultation Document. Expressions of interest should contain as a minimum the following information:

- i) The number of channels which will be requested initially in each frequency band (subject to a minimum of two in total and a maximum of two per frequency band and six in total)
- ii) Whether any further channels might be sought in the future and if so in which frequency band(s) and over what timescale (note that this is for information only and the licensing of additional channels will be subject to availability at the time).
- iii) The intended use to which the channels will be put, e.g. type of customers and type of services - on-site, local area or wide area coverage.
- iv) Equipment to be used to provide services under the licence
- v) Name, address for correspondence and company registration number.

The deadline for receipt of Expressions of Interest is 5.00 p.m. on 5 August 2005.

Expressions of Interest should be marked “Expression of Interest in ComReg’s proposed New Licensing Scheme for Provision of Business Radio Services to Third Parties”.

Expressions of Interest should be submitted electronically (preferably) or in hard copy before 5.00 p.m. on 5 August 2005, to:

Ms Susan Fleming
ComReg
Block DEF, Abbey Court
Irish Life Centre, Lower Abbey Street
Dublin 1
E-mail: susan.fleming@comreg.ie

Respondents should note that the submission of an Expression of Interest at this stage in no way commits ComReg to developing this licensing scheme or to issuing a licence at any stage in the future.

Subject to a review of the responses to this document and the decision of ComReg whether and how to license TPBR systems, ComReg may proceed to license TPBR systems in accordance with the procedure described in Section 5.6 of this document.