

Private Business Radio Licence Application Form

This application form replaces former Radiocommunications Agency information sheets RA1, RA 1a, RA 5, RA 30, RA 163, RA 209 and RA 283. Customers wishing to apply for the Private Business Radio (PBR) Suppliers licence should use form OfW115 formerly RA 347.

An electronic version of this form is also available online. If you would prefer to make your application using the electronic version, please visit Ofcom's website at www.ofcom.org.uk

Section 1 Customer details

1 Are you applying for a licence for an existing system?

In the case of a takeover, a letter from the existing licensee authorising the takeover must be included with the application.

Yes No

If Yes, what is the licence number?

2 Who is the licence to be issued to?

A licence can only be issued to a legal entity. Ofcom recognises the following main types of legal entity:

- individual or sole trader;
- partnership;
- public limited company;
- limited company; and
- incorporated association.

As well as;

- corporations;
- local authorities and
- unincorporated registered charities.

For a partnership, please give the full name of one partner (who must also sign the declaration on page 8) and supply a list of the full names of all other partners in the declaration.

If you are an existing PBR licensee please provide your customer reference number

Individual or sole trader

Full name

Partnership

Full name

Limited or public limited company*

Name

Incorporated association*

Name

*Please state the company registration number

Other legal entity

Name

Registration number

3 What is the trading name (if any) of the business that will operate and control the business radio service?

4 Where would you like the licence to be sent?
For a public limited company, limited company or incorporated association, this must be the registered office.

Address

Postcode

Tel

Fax

Email

5 Please supply a contact name and address for licence renewals, accounts queries and additional correspondence.

Address

Postcode

Tel

Fax

Email

6 If the addresses in Questions 4 and 5 are different, do you wish to have copies of the licence sent to each location? Yes No

7 Please supply the names and contact details of people in your organisation who are responsible for the operation of business radio equipment, and who Ofcom can contact in case of queries about your application and/or business radio system.

Non-technical contact

Name

Tel

Fax

Email

Technical contact (if different)

Name

Tel

Fax

Email

8 Please describe the nature of your business, giving as full a description as possible of what the mobile radios will be used for.

Section 2

Type of licence

9 What type of licence are you applying for?

(Please tick *one* box only)

For systems operating more than 3km and typically up to 30km in radius from a specified location

For systems operating more than 3km and typically up to 30km in radius from a specified location

For national and regional exclusive systems

For shared wide-area data systems

For distress alarm systems using PBR spectrum

For systems operating in a limited area up to 3km in radius from a specified location

For one-way paging with optional speech systems UHF (459 MHz)

For two-way paging/speech communication systems

For paging and emergency speech systems (hospitals only)

For UK general systems only

For one-way paging systems HF (26 MHz), VHF (49 MHz), UHF (459 MHz)

For short-range paging systems

Water industry systems only

After making your selection please proceed to the question indicated.

Wide-Area PBR Speech and Data Systems licence
Go to Question 10

Wide-Area PBR One-way Paging and Speech Systems licence
Go to Question 10

National and Regional PBR licence
Go to Question 10

IR2008 licence
Go to Question 17

Wide-Area Distress Alarms licence
Go to Question 20

On-Site PBR Speech and Data Systems licence
Go to Question 10

On-Site PBR One-Way Paging (and Speech) Systems licence
Go to Question 25

On-Site PBR Local Communications licence
Go to Question 25

On-Site PBR Hospital Paging licence
Go to Question 25

PBR UK General licence
Go to page 7

Self-Select PBR licence
Go to Question 25

Short Range Business Paging licence
Go to Question 25

Authority to Operate VHF Mobile Business Radio System
Go to Question 10

Section 3

Technical details

10 What type of transmission will be used?

The 'data' option should be selected only if you wish to use MPT 1379-type data. For IR2008 systems please go to Question 17.

Speech

Data

Paging

11 Do you require either of the following for your system? (Speech and data systems only)

Controlled talkthrough

Telephone interconnect

12 What callsign will you be using?
(Speech systems only)

The callsign must not be more than 12 characters and must not be a place name. A callsign is a requirement of operation under the terms of the licence.

13 What is the total number of mobile units to be used? *(Speech and data systems only)*

Include all vehicle-mounted and handheld equipment. Do not include the base station (if one is to be used).

14 Please indicate your preferred choice of frequency band.

As it may not be possible to assign your preferred band, you should also indicate a second choice.

Please note:
 UHF1 dual frequencies are for use only in major conurbations; and
 UHF2 single frequencies are no longer available for new assignments.

<input type="checkbox"/>	VHF Low	68.0 to 87.5 MHz
<input type="checkbox"/>	VHF Mid	138.0 to 165.0375 MHz
<input type="checkbox"/>	VHF High	165.05 to 174.0 MHz
<input type="checkbox"/>	UHF1	420.0 to 450.0 MHz
<input type="checkbox"/>	UHF2	450.0 to 470.0 MHz

15 Please specify the method of operation.

Not applicable for paging go to Question 24.

Single-frequency operation
 Dual-frequency operation

16 Please indicate any preferred requirement for a specific channel and/or CTCSS/DCS.

Please note that it may not be possible to assign your choice of frequency/tone/code. *(not applicable for paging)*

Base transmit: MHz
 Mobile transmit: MHz
 CTCSS/DCS:

Now go to Question 24

17 Please indicate your preferred choice of frequency band.

<input type="checkbox"/>	VHF Low	68.0 to 87.5 MHz
<input type="checkbox"/>	VHF Mid	138.0 to 165.0375 MHz

18 Please indicate your preferred choice of timeslots.

A maximum of eight per channel per site may be selected, at least one of which **must** be a base timeslot. A maximum of four timeslots on both the Base and Mobile slots is permitted.

Base TX
 1 2 3 4 5 6 7 8

Mobile TX
 1 2 3 4 5 6 7 8

19 What is the total number of mobile units to be used?

Include all vehicle-mounted and handheld equipment. Do not include the base station *(if one is to be used)*.

Now go to Question 24

20 What type of transmission will be used?

Speech
 Data
 Speech and data

21 Ofcom will assign you a frequency from the channels listed opposite. If you have a preferred frequency, please indicate your first and second preferences in the appropriate boxes.

160.5500 MHz
 168.9375 MHz

Please note that it may not be possible to assign your choice of frequency.

22 Please indicate any preferred requirement for CTCSS/DCS. CTCSS/DCS:

Please note that it may not be possible to assign your choice of CTCSS/DCS.

23 What is the total number of alarm stations to be used?

Section 4 Base station/operating area details

24 Will you be using a base station? Yes No

A base station is defined as a radio transceiver attached to a permanently fixed antenna, located permanently at one site and connected to an appropriate external power source.

25 What is the address of the base station/operating area?

Address

Postcode

26 What is the national grid reference (NGR) for this location? Grid letters Eastings Northings

/ /

The NGR is made up of two letters followed by six figures, e.g. TQ 300 800 (or one letter and six figures in Northern Ireland), and is obtainable from an Ordnance Survey map.

27 Please indicate the size of the coverage area you require to carry out your business effectively.

If you answered No to Question 24, please go to page 7

28 What type of antenna would you like to use with your base station?

Omni-directional antenna
 Downtilt antenna
 Downfire antenna
 Radiating cable
 Directional antenna

If applicable, please state your chosen antenna's angle of tilt below the horizontal plane. degrees

If you wish to use a directional antenna, please indicate the direction of main radiation. degrees east of north

What is the gain of your chosen antenna? dB (relative to a dipole)

29 What is the height of the top of the base station antenna?

metres (above ground level)

30 What base station ERP level do you or your supplier consider is required for your radio system?

watts

Standard ERP levels of 2 watts for on-site systems and 10 watts for wide-area systems are normally assigned.

Sometimes, however, Ofcom may assign a higher ERP level if one is required to provide satisfactory coverage, up to a maximum of 5 watts for on-site and 25 watts for wide-area systems.

You must enclose supporting evidence, if you require an ERP Level higher than the standard levels stated above.

31 Will your base station be remotely controlled?

Yes Please complete Questions 32 to 38

No Go to Question 39

REMOTE CONTROL

(The method of control required may not be available, depending on the location of intended operation. Where the preferred method is not available, you will need to consider a suitable alternative.)

32 How many remote control points will the base station have?

If more than one control point, please complete Questions 33 to 38 on a separate piece of paper for each additional control point.

33 What is the address of the remote control point?

Address

Postcode

Tel

Contact at this location

34 What method of control do you wish to use from the remote control point?

If you tick RFW, complete Questions 35 to 38. Otherwise, Go to Question 39.

Microwave links are licensed separately by Ofcom.

Landline

Landline and microwave

Dial-up landline

Microwave only

Reverse frequency working (RFW)

Please explain why you require RFW

2.4 GHz low-power device compliant with ETS 300 328

35 What is the NGR for the location of the RFW remote control point?

Grid letters

Eastings

Northings

 / /

36 What is the height of the top of the RFW control point antenna above ground level?

Metres (above ground level)

37 What type of directional antenna would you like to use for the RFW control point?

The frequency band used and operational conditions will normally dictate which antenna type is used. Please contact your business radio supplier for guidance.

Three-element

Four-element

Six-element

Eight-element

Omni-directional

38 What is the direction of maximum radiation from the RFW control point antenna?

degrees east of north

39 Do you wish Ofcom to accept all future technical applications/amendments direct from your supplier?

Yes

No

If Yes, please enclose a power of attorney – a written authority, signed in the presence of a solicitor, that is given by one person to another to act on their behalf in their absence.

Declaration

I declare that all the details given in this application form are correct to the best of my knowledge.

The information on this application form is being collected on behalf of Ofcom.

Signature of applicant

For self and partners (tick if applicable)

Date of application

Full name in (in block capitals)

Position in organisation

Partnerships must be applied for by one partner signing 'for self and partners'. A director or authorised person must sign for public limited companies, limited companies and other legal entities.

Partnership members

Name

Signature

Name

Signature

Name

Signature

Name

Signature

If the number of partners exceeds the space provided above, additional partners' details should be provided on a separate sheet of paper in the format given above and attached to this form.

Checklist

Failure to complete this form fully or provide any additional information requested may delay the processing of your application.

Have you enclosed payment for the licence fee? Please make cheques or postal orders payable to 'Ofcom'.

If applying on behalf of a partnership, have you listed all the partners in the declaration?

If your system has a base station with more than one remote control point, have you attached details of all the remote control points?

If this application is to take over an existing assignment, have you enclosed a letter from the existing licensee authorising the takeover?

Have you signed the declaration?

Please note that any false information provided may, at Ofcom's discretion, invalidate the licence after it has been granted.

Where to send this form

Please send your completed application form to the Ofcom Contact Centre or your local Ofcom office. Details of Ofcom's local offices are available on www.ofcom.org.uk or by contacting the Ofcom Contact Centre.

Ofcom Contact Centre

Riverside House
2a Southwark Bridge Road
London, SE1 9HA

Tel: 0845 456 3000

Fax: 0845 456 3333

Email: contact@ofcom.org.uk

Supplier's details

It may be helpful for your business radio supplier to be notified of the frequency assignment made to you. Complete the following if you would like a copy of your licence and additional or revised schedules to be sent to your supplier.

Contact name

Tel

Fax

Supplier's name and address

<input type="text"/>
<input type="text"/>
<input type="text"/>

Please find enclosed a copy of your customer's licence schedule as requested on their licence application form.

Private Business Radio Licence Guidance Notes and Licence Fees

Please read these notes carefully before completing this form.

1 General information

Under the terms of the Wireless Telegraphy Act 1949, it is an offence to install or use radio apparatus, unless:

- you do so under and in accordance with a licence issued by Ofcom (the Office of Communications); or
- the apparatus is specifically exempt from licensing.

Responsibility for obtaining and paying for a licence rests with the **user** of the system, not with the supplier of the equipment. You may need the help of your equipment supplier to complete the technical part of the form. However, it must be signed and submitted by you, the applicant, as you will be responsible for the service.

Submitting a licence application form does **not** permit you to use or even install any equipment – you must wait until we have issued the licence and you have received it.

1.1 Radio interference

Since the operation of a new system may cause interference to existing users, your supplier may consider it necessary to carry out compatibility tests before you apply for your licence.

Once installed and operating, your system must not cause undue interference to any other wireless telegraphy equipment. If it does, you may need to stop operating until the cause of the interference has been rectified. Ofcom cannot offer any protection against interference radiated by other authorised services, or by industrial, scientific and medical equipment; however, if you do experience interference, please contact the Ofcom Contact Centre on 0845 456 3000.

1.2 Licence fees

Sections 2 and 3 of these guidance notes set out the fees for different types of licence.

Please make cheques or postal orders payable to 'Ofcom' and cross them 'A/C Payee'.

Certain Crown bodies (including NHS hospitals, ambulance services and trusts) may have their fees settled by an omnibus payment from an Official Government Department. If you are in any doubt, please call the Ofcom Contact Centre.

If you are an existing licensee and are using this form to request a change to your licence, you do not need to enclose a fee.

Your licence must be renewed annually or every three years, depending on the licence type – see Section 3 of these notes. Although it is your responsibility to pay the renewal fee on or before the renewal date, we will normally send you a reminder beforehand.

If you do not pay the renewal fee by the renewal date, the licence will expire and continued use of the equipment will be an offence under the Wireless Telegraphy Act 1949.

The following fees are for licence classes, which are not covered by Of21:

- Private Business Radio Suppliers – £200
 - Private Business Radio Road Construction – £2000
 - GSM-R (for railway operational business only) – £158,400 per channel
 - 5.8 GHz Band C Fixed Wireless Access licence – £50 which includes registration of up to 50 terminals. For every terminal beyond 50 you should add £1 to the cost of your licence
 - Private Mobile Radio (Standard) – for existing PMR (Standard) licensees only
 - £140 for up to 10 mobile stations
 - £250 for 11 to 25 mobile stations
 - £500 for 26 to 60 mobile stations
 - £1,000 for 61 to 100 mobile stations
 - £1,750 for 101 to 200 mobile stations
 - £3,500 for 201 to 500 mobile stations
 - £7,000 for 501 to 1000 mobile stations
- For more than 1000 mobile stations**
- £7,000 for the first 1000, plus
 - £5,000 for each successive group of 500
 - £5,000 for any final group of less than 500

1.3 Further information

The following leaflets contain details of the licence classes covered by this application form:

- PBR Wide-Area Distress Alarm licence – OfW73
- IR2008 licence – OfW58
- Short-Range Business Paging licence – OfW116
- All other licence classes – Of20

2 Factors affecting PBR licence fees

2.1 Location of business radio operation

For some licence classes, the level of fee depends on whether business radio operation takes place in geographical areas designated as heavily congested, congested or non-congested.

An area is heavily congested if the level of traffic on a particular channel:

- results in users making several unsuccessful call attempts; and/or
- causes unwanted call terminations due to co-channel interference.

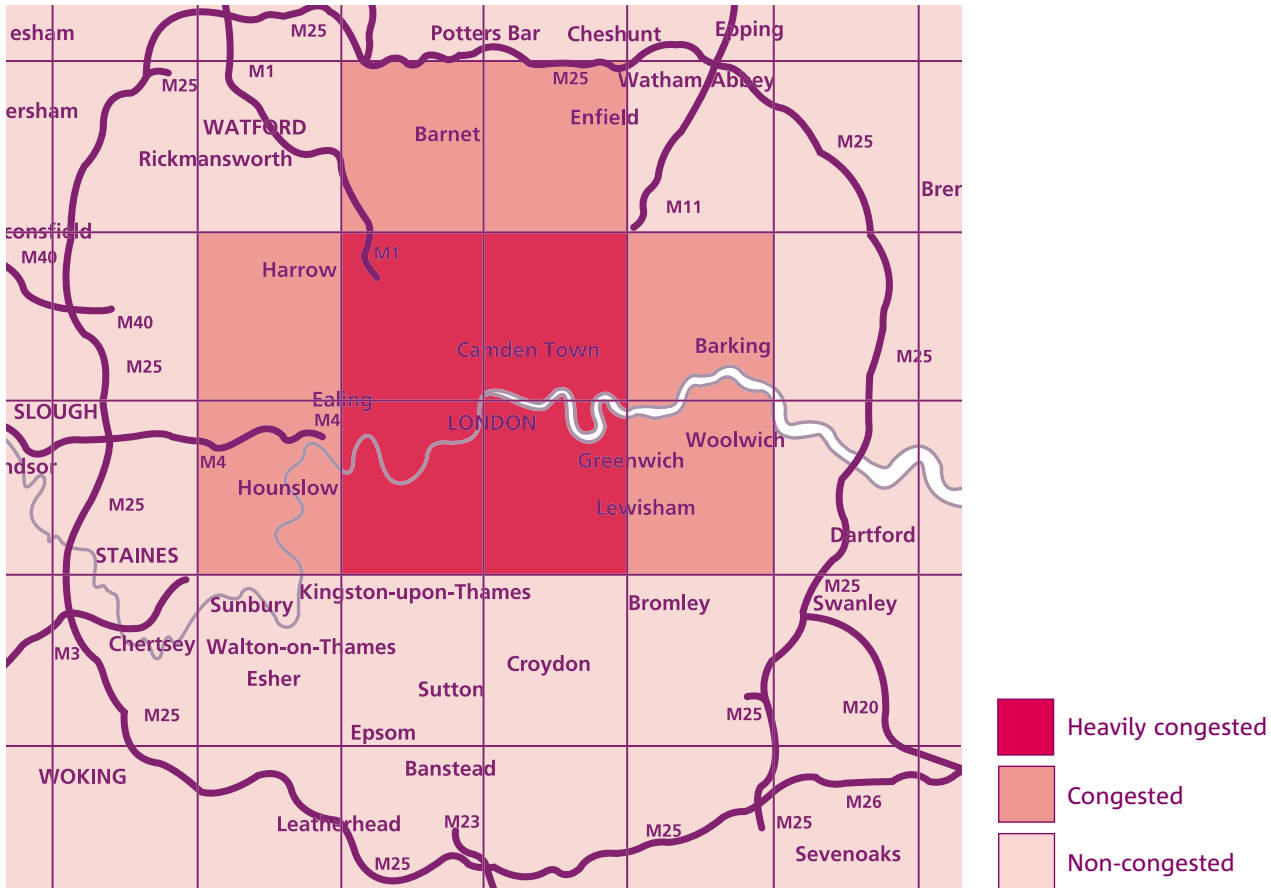
An area is congested if the level of traffic on a particular channel is high enough to cause some inconvenience to users wishing to make calls (i.e. occasional unsuccessful call attempts and occasional co-channel interference problems).

Table 2.1 indicates the 10km x 10km areas in the UK that have been designated as heavily congested and congested for PBR licences.

Table 2.1: Congested geographical areas

Designation	Heavily congested	Congested
National Grid Reference	TQ200700; TQ200800; TQ300700; TQ300800	TQ100700; TQ100800; TQ200900; TQ300900; TQ400700; TQ400800

These areas are indicated on the map below:



2.2 Frequency band used

As Table 2.2 shows, some frequency bands become congested in certain parts of the country, while others remain non-congested throughout the UK.

Table 2.2: Congested frequency bands

Band	Band I VHF Low VHF Mid Band III	VHF High UHF Band 1 UHF Band 2
Level of congestion	Non-congested throughout the UK	Heavily congested when used in heavily congested areas (see Table 2.1) Congested when used in congested areas (see Table 2.1) Non-congested when used elsewhere in the UK

2.3 Level of exclusivity

An ‘exclusivity factor’ is a fee modifier applied to some licence classes. It varies according to the type of business use and the number of mobile stations used on a channel. Table 2.3 shows the exclusivity factors for different types and levels of use.

Table 2.3: Exclusivity factors

Number of mobiles per channel, for different business classes				Exclusivity factor
Data-dominant and data-only users	Local government and Band III users	Taxis, minicabs and couriers	All other PBR users	
1 to 38	1 to 18	1 to 11	1 to 8	0.05
39 to 150	19 to 72	12 to 45	9 to 30	0.2
151 to 375	73 to 180	46 to 113	31 to 75	0.5
More than 375	More than 180	More than 113	More than 75	1

3 Current PBR licence fees

The fees listed here are payable annually unless otherwise indicated.

3.1 National and Regional PBR licence

(a) National use

National channels can be used throughout the UK. Users of national channels pay a fee per 2 x 12.5 kHz channel, depending on the frequency band used:

Level of congestion in area of operation (see Table 2.1)	Heavily congested and congested	Non-congested
Band	VHF High UHF Band 1 UHF Band 2	Band I VHF Low VHF Mid Band III
Annual fee per 2 x 12.5 kHz channel	£9,900	£8,250

(b) Regional use

Regional channels can be used throughout one or more, but not all, of England, Scotland, Wales and Northern Ireland. Users of regional channels pay a fee per 2 x 12.5 kHz channel, depending on the area(s) of operation and the frequency band used.

Level of congestion in area of operation (see Table 2.1)	Heavily congested and congested	Non-congested																
Band	VHF High UHF Band 1 UHF Band 2	Band I VHF Low VHF Mid Band III																
Annual fee per 2 x 12.5 kHz channel	<table border="1"> <tr> <td>England</td> <td>£6,435</td> </tr> <tr> <td>Scotland</td> <td>£1,485</td> </tr> <tr> <td>Wales</td> <td>£990</td> </tr> <tr> <td>Northern Ireland</td> <td>£990</td> </tr> </table>	England	£6,435	Scotland	£1,485	Wales	£990	Northern Ireland	£990	<table border="1"> <tr> <td>England</td> <td>£5,363</td> </tr> <tr> <td>Scotland</td> <td>£1,237</td> </tr> <tr> <td>Wales</td> <td>£825</td> </tr> <tr> <td>Northern Ireland</td> <td>£825</td> </tr> </table>	England	£5,363	Scotland	£1,237	Wales	£825	Northern Ireland	£825
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3.2 PBR UK General licence

The licence fee for this product is £60 every three years, however many mobiles you use. Because of the low cost of this licence, the option to apply for a shorter 'fixed-term' period is not available.

3.3 Wide-Area PBR licences

(a) Wide-Area PBR Speech and Data Systems licence

The fee per 2 x 12.5 kHz channel per site depends on the area of business radio operation, the frequency band used and the exclusivity factor (see Section 2).

First, look at Table 2.2 to see whether the frequency band you wish to use is non-congested throughout the UK, or varies according to the area of radio operation. If the latter, look at Table 2.1 to see how congested your proposed area of operation is.

The fee per 2 x 12.5 kHz channel per site is:

Exclusivity factor (see Table 2.3)	Level of congestion (see Tables 2.1 and 2.2)		
	Heavily congested	Congested	Non-congested
0.05	£200	£100	£75
0.2	£328	£164	£82
0.5	£820	£410	£205
1	£1,640	£820	£410

(b) Wide-Area PBR One-Way Paging and Speech Systems licence

The fee per 25 kHz channel per site depends on the area of business radio operation (see Section 2.1)

Level of congestion in area of operation (see Table 2.1)	Heavily congested	Congested	Non-congested
Fee per 25 kHz channel per site	£200	£100	£75

(c) Wide-Area PBR Distress Alarm licence

The fee per 12.5 kHz channel per site depends on the area of business radio operation (see Section 2.1).

Level of congestion in area of operation (see Table 2.1)	Heavily congested	Congested	Non-congested
Fee per 12.5 kHz channel per site	£100	£75	£75

(d) IR2008 (Shared Wide-Area Data Systems) licence

The fee per 12.5 kHz channel per site per timeslot depends upon the area of business radio operation and the frequency band used (see Sections 2.1 and 2.2). The same fee applies to both 250-millisecond and 500-millisecond timeslots.

First, look at Table 2.2 to see whether the frequency band you wish to use is non-congested throughout the UK, or varies according to the area of business radio operation. If the latter, look at Table 2.1 to see how congested your proposed area of operation is.

Level of congestion in area of operation (see Table 2.1)	Heavily congested	Congested	Non-congested
Fee per 2 x 12.5 kHz channel per timeslot	£100	£50	£25

3.4 On-Site PBR licences

(a) On-Site PBR Speech and Data Systems licence

The fee per 2 x 12.5 kHz channel per site depends on the area of radio operation and the frequency band used (see Sections 2.1 and 2.2).

First, look at Table 2.2 to see whether the frequency band you wish to use is non-congested throughout the UK, or varies according to the area of operation. If the latter, look at Table 2.1 to see how congested your proposed area of operation is.

Level of congestion in area of operation (see Table 2.1 and 2.2)	Heavily congested	Congested	Non-congested
Fee per 2 x 12.5 kHz channel per site	£200	£100	£75

(b) On-Site PBR One-Way Paging and Speech Systems licence

The fee is £75 per channel per site, payable every three years.

(c) On-Site PBR Local Communications Systems licence

The fee per channel per site depends on the area of business radio operation (see Section 2.1).

Level of congestion in area of operation (see Table 2.1)	Heavily congested	Congested	Non-congested
Fee per channel per site per timeslot	£200	£100	£75

(d) On-Site PBR Hospital Paging and Emergency Speech Systems licence

The fee is £150 per channel per site, payable every three years.

3.5 Self-Select PBR One-Way Paging Systems licence

The fee is £50 per site, payable every three years.

3.6 Short-Range Business Paging licence

There is no licence fee for this service. However, you do still need to obtain a licence.

