

This information sheet provides details about Private Business Radio (PBR). A business radio system is used to pass messages between a base station and mobile sets and mobile to mobile as an aid to conducting business. The different Business Radio licences allow the licensee to operate different types of systems in accordance with licence conditions and Wireless Telegraphy legislation.

Talkthrough Facilities: Use by Wide-Area and On-Site Private Business Radio (PBR) Licensees

OfW59 (previously Radiocommunications Agency information sheet RA 359)

1. What is talkthrough?

Most PBR systems operate using two separate frequencies. Base stations transmit to mobile stations on frequency A, and mobile stations transmit back to base stations on frequency B.

This does not allow mobiles to talk directly to other mobiles, as each mobile transmits on frequency B only and receives on frequency A only. Normally a dispatcher or controller acts as a focal point for communications, relaying messages from mobile to mobile as required.

With talkthrough, mobiles can communicate automatically through base stations. If a base station is set to talkthrough mode, any signal it receives from a mobile station is immediately re-transmitted to every other mobile unit monitoring the base station's output. This enables PBR systems to operate without a dispatcher to relay messages verbally.

2. Benefits and usage

Talkthrough can increase PBR's benefits to some business users. It is permitted only under the control of the licensee. PBR channels are crowded, and we may restrict your use of talkthrough to certain times of day and/or days of the week, to minimise its effect on other users of the channel. In some cases, we will authorise talkthrough only for emergency use.

You must adopt a suitable method of control to select and deselect talkthrough as necessary. Possible methods include:

- an additional continuous tone-controlled signalling system (CTCSS) tone or digitally coded squelch (DCS) code;
- Selective call (SELCALL) or dual-tone multi-frequency (DTMF) tones (less than one second for the complete burst);
- a time-out facility; and
- a switch on the operator's console.

Some of these methods are detailed in information sheet OfW55 (*Signalling Systems*).

Uncontrolled use of talkthrough, or operation of a system without sub-audible tones and without a suitable control method to select and deselect talkthrough, is not permitted.

If you use 'store and forward' equipment to achieve talkthrough, it must use Carrier Sense on the frequency on which the relayed message is transmitted. Recorded messages must not exceed 30 seconds in length. Again, you must use a suitable method of selecting and deselecting talkthrough.

PBR is intended for communicating business messages. If talkthrough encourages or facilitates use of your PBR system for non-business purposes (e.g. personal messages), we may withdraw your talkthrough facility.

3. Applying for talkthrough

Whether you are a new or an existing licensee, you should submit a business case to us, detailing your requirement for talkthrough and the operational times when you expect to use it. When we receive your application, we will consider your business case on its merits and assess the likely impact of talkthrough on your assigned frequency's other users.

New systems

If you are installing a new PBR system and you do not yet have a Private Business Radio (PBR) licence, you can apply for talkthrough when completing and submitting your application form Of21.

Existing systems

If you already have a PBR licence, you can apply for permission to add talkthrough to your existing system as and when the business need arises. You can apply using form Of21, or by letter, fax or e-mail; you will need to give full details of your existing licence, the business case and the operational times you think you will require.

4. Equipment

You should not buy or install talkthrough equipment before you have a licence schedule authorising its use. The equipment you use must comply with UK Radio Interface Requirement IR2001.

5. Enquiries

If you have any questions on talkthrough, talk to your radio supplier or contact the Ofcom Contact Centre.

Ofcom Contact Centre

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