

OfW 350 Requirements and Guidance Notes for Ground Probing Radar

What is GPR?

A ground probing radar (“GPR”) is a device that uses radio waves for the purpose of detecting or obtaining images of buried objects, or determining the physical properties beneath the ground. The emissions from a GPR are intentionally directed down into the ground for this purpose, and systems are designed to operate only when in contact with, or within close proximity to the ground.

Do I need a licence to use GPR?

Yes. Section 1(1) of the Wireless Telegraphy Act 2006 makes it an offence for any person to establish or use any station for wireless telegraphy or to install or use any apparatus for wireless telegraphy except under and in accordance with a licence granted by Ofcom under that section unless the radio device is exempt from licensing requirements.

Do I need to pay a licence fee?

The licence fee is £50. Once Ofcom have received your GPR application form “Ofw 349” and the licence fee, Ofcom will issue you with a licence which allows you to operate your GPR radio equipment (the “Radio Equipment”).

Your licence must be renewed every three years, starting three years from the initial issue date of the licence. Although it is your responsibility to pay a 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 be revoked and continued use of the equipment will be an offence under the Wireless Telegraphy Act 2006.

As GPR shares spectrum with a variety of other radio users it is necessary for Ofcom to be able to assess the level of use of GPR and any potential impact this may have had on other radio users. In order to do this Ofcom require that a log of use is kept by licensees, and that this provided to Ofcom at anytime upon request. The information to be included in the Log should include, at a minimum:

- the model number of the Radio Equipment;
- details of every location at which the Radio Equipment is used;
- the date and duration of use for each time the Radio Equipment is used;
- the type of use; and
- the frequency band used to operate the Radio Equipment.

A log template OfW 352 is available, and Ofcom would prefer that upon request, the record is submitted in this format.

What are the requirements relating to the use of the licence?

(a) Technical Requirements

Your Radio Equipment must comply with the technical requirements stated in Annex B – Table 3 of the UK Frequency Allocation Table 2004, Issue No. 13.

This is available at <http://www.ofcom.org.uk/radiocomms/isu/ukfat/>

The Radio Equipment must employ a deactivation mechanism which automatically deactivates the Radio Equipment when normal use is interrupted.

(b) Additional usage requirement

Licensees must only operate the Radio Equipment so that it is in contact with, or in close proximity to the ground and so that the emissions from the Radio Equipment are at all times directed into the ground.

As GPR shares spectrum with other radio users it is important that equipment is used at all times in a way that minimises the risk of interference to other radio users as far as possible. For this reason Licensees are recommended to operate in accordance with a code of practice which defines these behaviours. Ofcom has worked with the EuroGPR trade association to develop and approve a code of practice for GPR. This is available at <http://www.eurogpr.org/codeofpractice.htm> (the "Code of Practice").

(c) Use in vicinity of Radio Astronomy Sites

GPR operation in the UK is not normally permitted within 7km of radio astronomy sites as GPR equipment could interfere with the sensitive receiver equipment used at these sites.

The following are the list of radio astronomy sites around which use is not permitted without special clearance. From time-to-time it may be necessary for Ofcom to revise this list to reflect changes in radio astronomy activity within the UK. If this does happen we will inform licensees.

Radio Astronomy Sites	National Grid Reference Coordinates
Defford	SO 90684368
Cambridge	TL 39495425
Knockin	SJ 31812056
Darnhall	SJ 63486093
Jodrell Bank	SJ 79507110
Pickmere	SJ 70337590

Site maps are included at the end of this document.

Ofcom recognise that there may be occasions where it is necessary to operate GPR equipment within these areas. In order to facilitate this, Ofcom operate a special clearance procedure for GPR. To use this service, a licensee must complete the request form "OfW351", available on the Ofcom website, prior to using the Radio Equipment within a 7 kilometre radius of the radio astronomy sites.

Operators are advised to submit the request form to Ofcom at least three weeks before the planned use of the Radio Equipment. Ofcom will coordinate with radio astronomy users and attempt to facilitate the request. On some occasions it may not be possible to permit use and in such cases, to the extent practicable, reasons will be given and it may be possible to agree to the use of the Radio Equipment on

alternative dates depending on the project schedule for the radio astronomy observations.

Future plans

It is our expectation that the European Commission (EC) will issue a Decision in the near future covering, amongst other application, Ground Probing Radar. Ofcom is required to implement EC Decisions on radio spectrum matters and it is our expectation that arrangements for GPR will need to change in order to ensure UK arrangements are in line with the Decision. Once the detail of the EC Decision becomes available, Ofcom will provide further details of its plans here for implementing the Decision and how this will change arrangements for GPR.

Contact Information

If you have any technical questions, please contact Siew Yoon Tan on 020 7981 3066 or siewyoon.tan@ofcom.org.uk.

For general licensing queries, please contact Gordon Drake on 020 7981 3157 or gordon.drake@ofcom.org.uk

Payment Information

Cheques, payable to Ofcom, should be sent to

Ofcom
GPR Licensing
03:78
Riverside House
2a Southwark Bridge Road
London
SE1 9HA

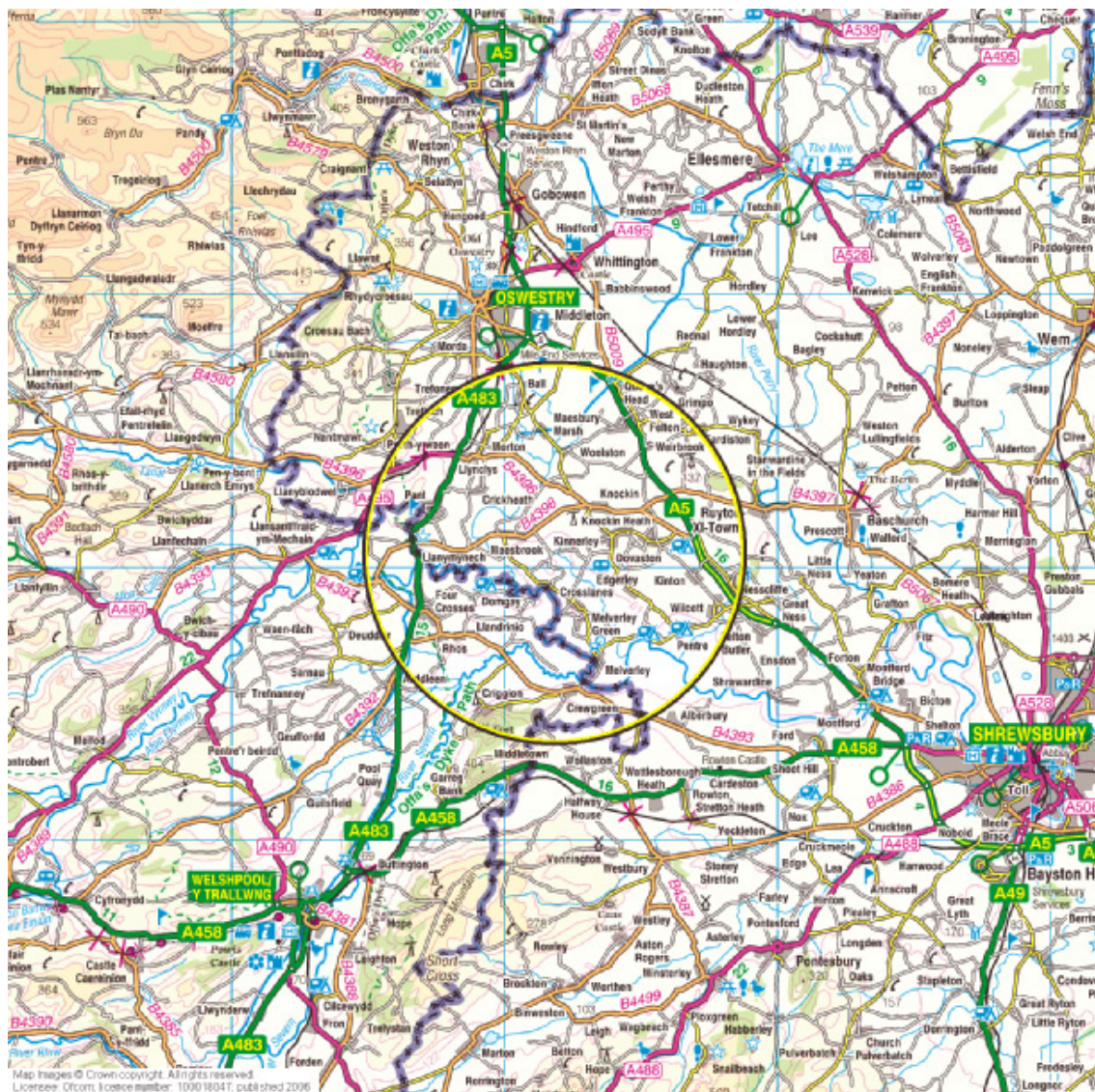
If payment by credit card would be preferred, please ring 020 7981 3157 to arrange.

Cambridge

Jodrell Bank, Pickmere and Darnhall



Knockin



Defford

