

1. What licence do I need to use Wireless Local Area Network (WLAN) equipment for private applications in the 2400-2483.5 MHz (2.4 GHz) band?

The 2.4 GHz band is a licence-exempt band and may be used without a Wireless Telegraphy Act licence, but subject to certain conditions as set out in the Licence Exemption Regulations. These conditions include certain minimum technical parameters that are detailed in the relevant UK Interface Requirement IR 2005.

2. What licence do I need to operate a WLAN in the 2.4 GHz band to enable me to offer public telecommunication services?

The Licence Exemption Statutory Instrument SI 2003 74 permits operation of self-provided systems and commercial public access services provided that equipment conforms to the published Interface Requirement (IR 2005).

3. What other radio services are authorised to operate in the 2.4 GHz band?

Currently the band 2400-2483.5 MHz is used in the UK for a variety of private applications, these include, short range low power devices such as 'Bluetooth', microwave ovens, ISM (industrial, scientific and medical) equipment and WLANs. All general short-range device usage of the band must conform to the UK Interface Requirements 2030 (IR2030) or in the case of WLANs, Interface Requirement 2005 (IR 2005) which defines technical limits, including power levels, which must be adhered to. Use of any equipment that does not conform to the relevant IR, is illegal. All use of the band is on a non-interference non-protected basis.

4. I would like to use bands around 5 GHz for WLAN services, which bands are available?

Three bands at 5 GHz have been allocated for wireless LANs and similar services.

Table 1 5 GHz Bands

Frequency (MHz)	Band Abbreviation
5150-5350	A
5470-5725	B
5725-5875	C

Bands A and B

These bands are available for WLAN use. The Licence Exemption Statutory Instrument SI 2003 74 permits operation of self-provided systems and commercial public access services in these two bands for **mobile and nomadic** broadband devices provided that equipment conforms to the published Interface Requirement (IR 2006).

Initially this will be mainly indoor deployment because the market has not yet succeeded in developing equipment to meet the full requirements of the

Interface Requirement IR 2006 to permit higher power use outdoors. IR 2006 is available on the RA website.

Band C

Band C remains work in progress and is not yet available. However work on it is proceeding rapidly. Significant interest and demand has been registered in its use to provide a more fixed type of service to give access to broadband Internet and other 'best endeavours' types of applications on a simple 'plug and play' basis. The technologies proposed are the same or variants of those being put forward for the other 5 GHz bands with a bias towards fixed operation.

Further information on Band C will be published on the RA Website when it becomes available.