Guidance note for use of Business Radio frequencies and tower cranes.

This guidance note is provided for equipment suppliers and Business Radio licensees, the advice is suitable for the Business Radio Simple Site and Business Radio Technically Assigned licences. If you have any comments or questions about the guidance note please contact kevin.delaney@ofcom.org.uk

Assigning Frequencies for Tower Cranes

If you licence frequencies using a Business Radio Technically Assigned licence for the purposes of crane operation then you should inform Ofcom of the height of the crane above ground level in order that Ofcom can calculate the distance covered by the radio signal from the Ofcom and consider interference to and from the crane.

If you are using either a simplex or duplex frequency then you should include the crane as a base station and record the height of the crane as the height of the antenna above ground level.

Licence Fee

For a duplex system If the coverage area of the crane is within that of the parent base station then the crane base station will not attract a licence fee, you will be charged for one base station. For a simplex system record the crane as a base station noting the height of the antenna.

Temporary Use

Ofcom can allocate either a single or dual frequency channel. If a crane is going to be at a site for a considerable amount of time the user will require a licence and it will be necessary for Ofcom to assign a channel. However, if the duration of the contract is less than twelve months, equipment can be hired from a radio equipment supplier holding a current Business Radio Suppliers Licence You will not pay a licence fee to Ofcom, instead you will pay the equipment supplier for hire of radios.

Field Strength.

In defining what does or does not cause unacceptable interference, it has been decided to define a maximum signal strength at a distance from a crane no matter which techniques are employed. This shall be a maximum of 48 dB/μv per metre measured at 2 kilometres from the crane at a height of 3 metres above ground level. It is not intended that every crane radio should be required to conform with this figure. It would not, for example, be necessary in areas of the UK where use of radio communications is relatively light. However, if an interference complaint is received, and the offending radio system does not conform to these parameters then it will be necessary for that system to be re-engineered so that it does conform.