Community Radio Coverage Maps

Coverage area maps

Ofcom's community radio coverage maps show two coverage areas. The smaller area ['technical coverage'] represents the coverage of the licence as recognised by Ofcom for administrative purposes only, and is based on standard criteria similar to those applied to commercial local radio licences. The larger area ['audible zone'] is one within the majority of which the signals are usually strong enough to deliver an audible and useful service, but where reception may be degraded to a noticeable extent by interference.

Technical Coverage

The technical coverage shows the area on which basis Ofcom calculates its WT act licence fees, and administers regulations on the ownership of radio licences.
The coverage indicated does not represent or imply any warranty by Ofcom that the technical conditions which form the basis of its definition are satisfied at all points within the area shown, nor that these conditions would not be satisfied at locations outside that area. The associated technical conditions represent a conservative average threshold (for each relevant measure) for generally acceptable reception for most circumstances.

Audible zone

The audible zone is based on a uniformly applied minimum median field strength for the community radio service of:

- for VHF/FM services, 54 dB (µV/m) at a receiving aerial height of 10m above ground level (in either plane of polarisation);

- for medium wave (AM) services, 66 dB (µV/m) at a receiving aerial height of 2m above ground level.

This is a figure which is generally accepted to make most radios work acceptably under most listening conditions, although higher figures are generally necessary in urban areas (both for FM and AM). However, interference from other broadcast services will require correspondingly higher signal strengths in order to meet the same quality of reception.

General

A critical factor in assessing technical coverage is the interference affecting the frequency channel. This is typically much greater for Community Radio frequencies than for local licences, and this is why there is (usually) a very large difference between the technical coverage and the audible zone.

It was recognised in the Ofcom consultation document "The licensing of community radio" (section 7) that a field strength in the order of 10dB higher than 54 dB (µV/m) could be required by VHF/FM community radio stations to achieve the same degree of protection from interference as commercial or BBC services.

The consultation document is available on our website at:

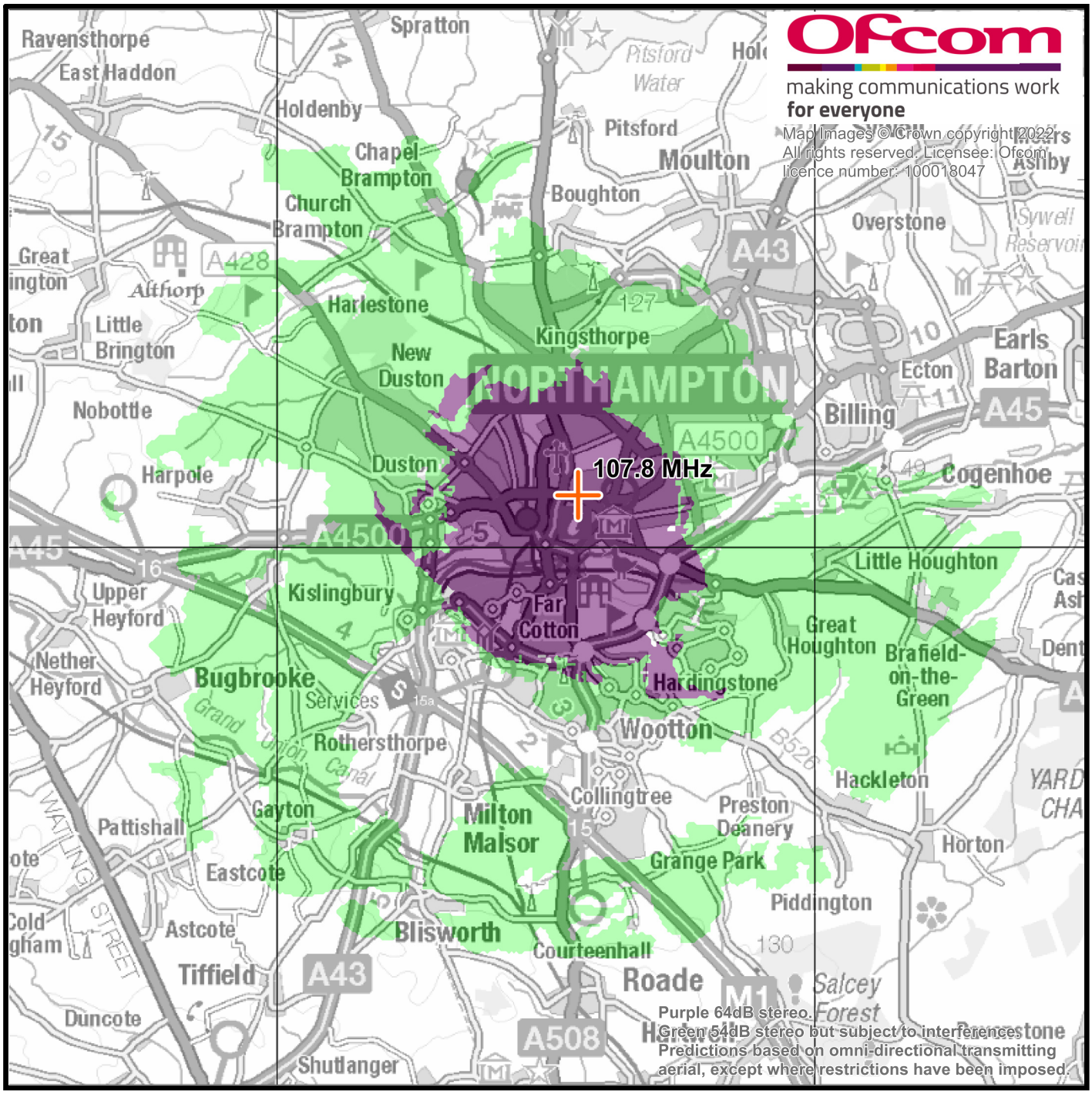
http://www.ofcom.org.uk/consult/condocs/comm_radio/com_radio

Because the sources of interference may vary over the course of the licence, the technical coverage is not based on a detailed calculation of actual interference, but instead on a representative level typical of many Community Radio stations. This equates to a required signal level of 70 dB(µV/m) for co-channel interference, 65 dB(µV/m) for other relationships. However, the actual interference levels may be higher (or lower) than this. This is because the choices available to Ofcom were either to offer a licence with a high level of interference, or to offer no licence at all.

The coverage shown is based on predictions of field strength, which have not been subject to detailed verification by measurement, and assume an omni-directional transmitting aerial. Ofcom is not prepared to enter into discussion or negotiation concerning the accuracy of these maps.

Further details of how Ofcom define technical coverage can be found within the Ofcom engineering document for local radio planning "Coverage and planning policy for analogue radio broadcasting services", which is available on our web site at:

https://www.ofcom.org.uk/__data/assets/pdf_file/0018/54621/analogue-coverage-policy.pdf



Northampton (Inspiration FM) community radio coverage area - 15th November 2022