

## Digital Terrestrial Television (DTT)

### Background

The commencement of digital terrestrial television may require some frequency adjustments to other systems using the radio frequency spectrum.

Digital terrestrial television will use spectrum in the UHF frequency bands and three transmitters are licensed for each of 8 main population centres in the country. In Auckland, Hamilton, Napier and Wellington both a main station and infill coverage are to be used.

The [digital licence frequency plan](#), including some changes of frequency for existing analogue television services, was finalised in August 2007 and published on 12 September 2007.

The analogue frequency changes are now completed and licences for digital transmissions have been created. Some other parties who currently use frequencies in the UHF band may need to make adjustments to their equipment to ensure it works satisfactorily once full digital transmissions commence in late February 2008.

### Users other than broadcast television licensees

Users of radio microphones and similar devices are able to use part of the UHF band, without charge, under a General Licence. This licence requires users to avoid causing interference to television and does not provide any protection of their service. Whilst the low power permitted under the present General Licence makes it unlikely that interference would be caused to digital television reception, it is probable that radio microphone users may find degradation to their services from television if they are using frequencies that are now licensed for digital television use.

The preferred solution is to adjust the frequency of the radio microphone equipment to operate on another frequency not used by television services in the area of use of the radio microphone. Depending upon the equipment used it may be necessary to contact the equipment supplier to implement a frequency change. In some cases, particularly with older systems, new equipment may be required. Such frequency changes are consistent with the nature of the General Licence.

Users of television distribution systems in building complexes may find that locally inserted signals are degraded or unusable. This may occur in installations where existing “off air” channels are reticulated without filtering or frequency changes, and local channels are inserted using the same frequencies that are licensed for digital television in the area.

The preferred solution is to adjust the frequency of the locally inserted channel to another frequency not otherwise used for broadcasting in the area.

This situation may also occur in domestic homes when a video recorder (or other device) is used and the connection between the recorder and television receiver uses a coaxial type connection. The output of the video recorder may be degraded if the frequency output has been set to a frequency now licensed for digital television.

The preferred solution in this case is to use a “video lead” connection from the video recorder, but if this is not possible the output frequency of the video recorder will need to be adjusted.

### General

The above issues are matters for the individual users to resolve and do not warrant individual investigation action by the Ministry. In the case of radio microphones the Ministry has no record of the location, frequency or extent of use of such equipment. However given the localised nature of use there is still expected to be adequate spectrum not used by either digital or analogue television licences to allow satisfactory retuning of existing radio microphone equipment.

The frequencies used for local insertion of channels in building cabling systems or in domestic installations are matters for the equipment owner to determine.