

## **Response to Ofcom's second consultation on coexistence of new services in the 800MHz band with digital terrestrial television**

### **Introduction**

Mandercom Consultants specialises in TV signal transmission, reception and distribution technology. We have extensive knowledge of the communal aerial installation industry, as well as their clients, and have provided related services to government departments, Digital UK and Ofcom.

### **Communal aerial systems**

Although it appears not to be explicitly stated in the consultation document, we are given to understand that MitCo will not have a budget for cases of interference to communal aerial systems. Instead, landlords will be required to make their own arrangements for their communal aerial systems to be protected from harmful levels of interference. If the costs are significant, the landlord may want to recover them through service charges paid by residents. Users of communal aerial systems may end up paying for remedial work, whereas others will not.

We believe that one of MitCo's objectives should be to minimise the number of homes that suffer any loss of TV service due to LTE base station emissions. To achieve this, procedures for households using communal aerial systems must be developed in some detail, otherwise the estimated 953,000 households identified in Table 5.1 as potentially affected by interference will experience loss of service.

We believe that MitCo will have to undertake a large amount of work to identify buildings with communal aerial systems in areas where they are likely to be affected, and contact the landlords well before base stations are activated. Our experience is that this is not easy; while there are for example some social landlords with large numbers of properties and who may be willing to co-operate in identifying properties with communal aerial systems, there are many landlords with small numbers of properties who will be harder to find.

Without a suitable incentive, such as having costs covered, many landlords will be tempted to wait to see what happens, on the grounds that money and effort can be saved if the system continues to work. This approach risks loss of service to all residents using the system.

None of the existing KPIs is appropriate for measuring MitCo's performance in this respect.

### **Escalation**

Paragraph 3.13 states "...households for whom a DTT receiver filter will not restore DTT reception. For these households Government has decided to offer platform changes." The step from filter to platform change seems unduly large.

Given that manufacturers are planning to introduce new models of UHF TV aerials with significant rejection of the LTE frequencies, and that masthead amplifiers will in many cases be the dominant cause of intermodulation, we believe that the option to change the aerial and masthead amplifier should also be included. This is likely to be considerably less expensive than a platform change, and has the advantage of solving the problem for all DTT receivers fed by the aerial. This would be a far more satisfactory solution to householders than platform change presumably on just one TV.