



**Industry/market**  
**Telecommunications**

## Case Study: Trials

### The Problem:

Virgin Media (VM) commissioned Realwireless to produce a white paper on how smallcells can improve service in busy urban areas for LTE or 3G networks. Our client was asked to participate in the study by providing RF coverage and in building RF penetration data from their lightRadio™ Metro Radio Outdoor (MRO). The locations chosen by Virgin Media were a high street in Newcastle and one in Bristol.

At the time, the client's initial thoughts were that this would be an expensive exercise as it required access to a full LTE network, which would also require a good deal of backhaul connectivity planning to get to the lighting columns where the MRO was to be located.

### Project: SmallCell street coverage and in building penetration

#### Impleo's solution:

By just focussing on the key aspect of the trial, "to supply RF coverage" Impleo simplified the solution to a small local LTE network. This was delivered using a virtualised ePC running on a PC server, together with a virtualised video server and a set of test tools. All this was set up and operated from a vehicle parked on location, next to the lighting column, using portable power.

#### Why Impleo?

Impleo's agility and flexibility enabled them to provide a bespoke solution for the client with minimal interruption and cost. In addition, the team produced a detailed report showing the coverage analysis overlaid onto street views which provided VM and the client an early view of the improved service ahead of the white paper.

#### Benefit/ROI

The client was seen by Virgin Media as a willing partner who could come up with creative solutions. It allowed the client to position a virtual ePC that would potentially lower the cost of entry to LTE Trials and show credibility for their early virtualised solution. In addition, it led to the client supporting Virgin Media's press day with their MRO prominently displayed and used for a series of demonstrations to the audience. The Realwireless report can be found at the link below.

<http://www.realwireless.biz/realwireless/wp-content/uploads/2012/10/Small-Cells-Value-for-operators-based-on-Virgin-Media-Trials-V3.1.pdf>