

## **4G/TV Co-existence Oversight Board Report**

### **Chair's report to Ministers and Ofcom: April 2016**

#### **1. Executive Summary**

- 1.1 In keeping with the bi-monthly timetable, and as there were no urgent issues requiring discussion, the Board agreed not to meet on Thursday 28 April. This report reflects the updates provided via the regular Board papers. The next face-to-face discussion will take place on Thursday 26 May.
- 1.2 The position on interference remains lower than expected with 14,060 confirmed cases of 4G interference at 800MHz as of the end of March, excluding the 35 cases during the pilots.
- 1.3 All KPI targets were met. All 619 4G interference cases confirmed in March were resolved within the ten working day target, achieving a 100% pass rate for KPIA..

#### **2. at800 update**

##### Roll-out

- 2.1 At the end of March, there were 14,060 confirmed cases of DTT interference caused by 4G at 800MHz, excluding the 35 cases found within the pilots.
- 2.2 An interference 'hotspot' was identified in the Alcester area (near Stratford-upon-Avon). Since the activation of a 4G mast at 800 MHz in mid-March, and up to the start of April at800 received calls from 72 households and visited 46 confirming 43 cases of 4G interference, well above the average experience.
- 2.3 Details regarding the cluster have been shared with the Coexistence Technical Working Group (CTWG) for analysis and investigation into the circumstances that may be contributing to the atypical interference activity in the area.
- 2.4 The data on this particular location will also assist the current work by CTWG to better understand whether there are any common or shared characteristics of the minority of masts where data indicates that the majority of interference is confirmed (interference 'hot-spots') and if so, what those are and how this information may assist as an additional indicator for at800 when predicting the likelihood of 4G interference in locations with similar masts.
- 2.5 In the meantime, communications in the Alcester area have been widened to raise awareness of the potential issues and the existence and purpose of at800 to provide

support; this has included liaising with local press in the immediate and surrounding areas and contacting the local councillor. at800 will continue to monitor the Alcester area and provide data to the CTWG as and when to assist with the analysis.

#### Mast Analysis

- 2.6 The cumulative cases of interference reported within 28 days of mast activation remained static from January to February for both distances at 0.35 for 900m and 0.48 for 1.5km. The number of monthly cases reported within 28 days significantly reduced in February from January: 0.41 from 0.51 for 900m and 0.47 from 0.59 for 1.5km.
- 2.7 The rolling average of confirmed cases per activated mast across a 3-month period to March has also reduced to 1.46 (from 1.65 in February) and the average number of cumulative cases per active mast was at 1.27 in March (from 1.29 in February). This is the first month that the average number of cumulative cases has reduced, diverging from the rising trend reported since February 2015.

#### Installer Scheme and Audit Summary

- 2.8 There were 1,568 engineer visits originally scheduled to take place in March with the majority (1,469) undertaken and closed as arranged as 86 visits were cancelled by the viewer and 13 rearranged by at800 to meet capacity restraints. 97.10% of the completed appointments took place within the three working day target.
- 2.9 There have been a total of 37,869 engineer visits to date (33,933 to unique addresses), of which 2,326 have been subject to audit.
- 2.10 There were 119 audits completed in March on engineer visits from January (17), February (68) and March (34) with at least one audit on the work of each of the forty-seven at800-accredited engineers.
- 2.11 From these audits, there were 11 cases overturned: 9 from 4G to non-4G and 2 from non-4G to confirmed 4G. Of the 9 4G to non-4G overturns, 7 cases were attributed to a faulty or misconfigured spectrum analyser that generated incorrect signal readings resulting in misdiagnosis of 4G interference and the remaining 2 overturns were due to the engineer not accounting for poor quality RF connections, which were replaced at audit thereby resolving the issue; the 2 non-4G to 4G overturns were because remedial work to existing aerial installations and retuning meant that the potential for the contribution of detected 4G signals to the interference was not taken into account.

- 2.12 In addition to these overturns, there were 7 form completion errors; 6 cases were changed from 4G to non-4G as the engineers mistook the presence of 4G signals as the contributing factor for the interference when elements in the installation were actually causing the disruption and one from non-4G to 4G as conflicting outcomes had been noted which, when assessed, determined the issue was 4G.
- 2.13 In keeping with usual practice, all the overturns have been reviewed with the respective engineers.

#### Mailings

- 2.14 It recently came to the attention of at800 that there had been a small number of households that had not received a postcard despite their location within an at-risk area because they were 'new builds' and their existence as dwellings was not included in the available data used in the prediction model.
- 2.15 As a result, at800 obtained and is using an updated Ordnance Survey dataset of populated pixels to identify any new properties in areas that have been already mailed and are within 1.5km of a mast activated since December 2015. at800 is mailing the 'additional' properties identified through the updated dataset to ensure awareness of the mitigation scheme and the existence of the company should any interference issues occur or have occurred since activation.

### **3. KPI Report**

- 3.1 at800 reported passes against all KPIs and SLAs in March.
- 3.2 For KPIA Service Restoration where a household is a primary DTT user, all 619 confirmed 4G interference cases were resolved within the 10 working day target, achieving a 100% pass rate.

### **4. AOB & Next Meeting**

- 4.1 The Board will next meet on Thursday 26 May 2016.

David Hendon

Chair

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