4G/TV Co-existence Oversight Board Meeting

Chair's report to Ministers and Ofcom Meeting date: 28 July 2016

Attendees

David Hendon, Chair
Paul Rosbotham (Vodafone)
Robin Vernon (O2)
Inge Hansen (EE)
Alan Boyle (BBC)
Alexandra McNair (ITV)
John Ballard (Arqiva)
Philip Milton (Channel 4)
Roger Darlington (Non-Executive)
William Webb (Non-Executive)
Ben Roome (DMSL)
Alberto Fernandes (Ofcom)
Nick Munn (DCMS)
Sue Ramroop (DCMS)
Michelle Brownrigg (DUK)
Andrew Dumbreck (Technical Advisor)

Apologies

Mark Caines (Ofcom)
Ian Dewhurst (DCMS)
Erol Hepsaydir (Three)

1. Executive Summary

1.1 There were 15,696 confirmed cases of 4G interference at 800MHz as of the end of June 2016. The position continues to be lower than expected.

1.2 All KPI targets were met in June; all 545 confirmed 4G interference cases were resolved within the 10 working day target, achieving a 100% pass rate.

1.3 The mailing operation trial for both initial and reminder mailings began on 25 July, just one week later than originally expected. The two review points planned for September and December are being checked by at800 to determine if they are affected.

1.4 The cluster prediction work by the Coexistence Technical Working Group (CTWG) continues. An interim report to the Board on progress to date indicates that there are some shared characteristics that may assist at800 in identifying potential areas in the future so that resource may be managed accordingly in anticipation of new mast activation. The CTWG will provide their findings and final recommendations at the September Board meeting.

2. at800 update

Roll-out

2.1 As of the end of June, there were 15,696 confirmed cases of DTT interference caused by 4G at 800MHz.

Mast Analysis

2.2 The trend for minor fluctuations in the number of cumulative cases reported within 28 days of mast activation for both 900m and 1.5km continues in June with 0.34 (from 0.35 in May) and 0.46 (from 0.47) respectively. This is also the case for the monthly cases at both distances with 0.21 in June (from 0.24 in May) for 900m and 0.25 from 0.37 for 1.5km.

2.3 The average number of cumulative cases per active mast decreased from 1.22 (May) to 1.21 (June) and the rolling average of confirmed cases per activated mast across a 3-month period to June is at 1.24, which has dropped from the rolling average to May of 1.36.

2.4 at800 report that the decline in the cumulative number of cases per mast can be partly attributed to a greater proportion of new masts activated since March 2016 being located in postcodes where there are already active masts and where at800 had already taken mitigating actions.

Installer Scheme and Audit Summary

2.5 Due to a high number of mast activations throughout June and a period of high-pressure weather across the east coast of England at the beginning of the month, which generated a spike in calls, the number of engineer visits (1,709) increased by 15% compared to those in May (1,483).

2.6 Over 1,000 calls were received during a two-day period in early June, and as there had been recent mast activations in the area, there was an initial marked increase in the number of booked engineer appointments. Upon identifying that the volume of calls were well above average, at800 liaised with Digital UK (DUK) and the BBC about other possible underlying causes (i.e. transmission problems or engineering work) and it was confirmed that the issue was due to the weather, namely a high-pressure front.

2.7 To ensure consistent messaging, at800 and DUK recorded information messages at their contact centres about the on-going situation with advice not to re-tune and an estimate of when the weather front was expected to pass with a request to call back if disruption continued beyond that point. Notices were also posted on their websites with the same message.

2.8 The Board recognised that this was another demonstration of good collaboration across the organisations and noted that the weather, as well as seasonal causes

such as increased foliage during spring and summer, occasionally causes disruption to both broadcasting and mobile transmissions that cannot be avoided.

2.9 There have been a total of 42,771 engineer appointments (38,255 to unique addresses), of which 2,581 have been subject to audit. To date, there have been 244 audit overturns with 187 4G to non-4G cases and 57 non-4G to 4G and 143 form completion errors: 97 for 4G to non-4G and 46 for non-4G to 4G.

2.10 There were 1,958 visits originally scheduled to take place in June (in comparison, there were 1,711 visits arranged in May); 1,822 were undertaken and closed as arranged; 5 visits were rearranged by at800 to meet capacity restraints and the remaining 131 were cancelled by the viewer. Nearly 96% of the completed appointments took place within the three working day target.

2.11 There were 94 audits completed in June for engineer visits originally undertaken in April (1), May (41) and June (52). The focus on assessing areas or engineers that have not previously been audited continues; a total of 33 different engineers were audited across the three regional contractors.

2.12 There were eight overturns in total: five from 4G to non-4G and three from non-4G to 4G. Overall, the overturns were due to the engineers concerned not taking into account the LTE signals, other system factors in the home installations (e.g. faulty cables, presence of amplifiers and poor aerial quality) and failing to qualify their diagnoses (whether 4G or non-4G) by conducting the mandatory post-work filter tests.

2.13 There were six form completion errors: three 4G to non-4G and three non-4G to 4G. The errors were due to limited note taking and failures in accounting for meter readings and guard bands between the DTT and LTE signals.

2.14 All the overturn and form completion issues have been flagged to the respective regional contractor managers who will be following up with the relevant engineers, reiterating the need for post-work filter checks and for quality in the notes on the completion forms.

2.15 In addition, a new version of the form is being finalised by DMSL to help the engineers note all meter readings and remedial work undertaken before providing a final diagnosis.

Mailing operation trial

2.16 In collaboration with the operational teams at all four mobile network operators (MNO), at800 has developed the processes for the mailing operation trial, including the testing of a new forecast submission template.

2.17 To ensure alignment of the new processes with each MNO, the mailing trial commenced on 25 July, one week later than originally planned. at800 will confirm whether the two review points for September and December 2016 are affected. at800 had previously notified the Board of the delay in early July, providing the revised schedule of the trial.

Communications

2.18 In mid-June, at800 adapted the supporting 'raising awareness' communication strategy (which includes contacting local councillors, MPs, local authority and communal housing providers and using local media and social media about the 4G rollout programme and at800's existence and purpose) from targeting areas where a significant proportion of properties had been directly mailed with postcards as part of the usual rollout mailings to targeting areas based on imminent mast forecasts.

2.19 This modified approach will support the modifications to the mailing trial which aims to ensure that those viewers identified as at potentially at-risk of DTT interference will be notified/aware of the issue nearer the time of a mast actually activating.

2.20 As this will increase local awareness the at800 marketing and communications team is working closely with its Viewer Experience and operations teams by seeking approval on targeted areas to ensure resource and capacity may be managed accordingly without adverse impact, both to at800 and the viewers they support.

Customer support

2.21 To ensure the content of their website is clear, informative and easy to understand, at800 has developed a questionnaire to gather feedback and opinion from those who have used the website's online enquiry form. The survey will run for three months and further to evaluation of the results, changes will be made to the website as necessary. So far, 119 questionnaires have been completed with initial feedback positive: nearly 86% of respondents felt the website was very easy to use and over 96% considered the content 'clear and easy to understand'.

2.22 Incidentally, I note that at800 has been shortlisted for the Technology and Telecoms category of the UK Customer Experience Awards in September and look forward to learning the outcome.

3. KPI Report

3.1 at800 reported passes against all KPIs in June. All 545 confirmed 4G interference cases were resolved within the ten working day target, achieving a 100% pass rate for KPIA1.

3.2 This is the twelfth consecutive month at800 have reported a 'green' RAG rating for KPIA, achieving a 99% or 100% pass rate each month since July 2015. The Board commended at800 on their achievement.

4. Cluster predictions – interim report

4.1 At the January 2016 meeting, the Board agreed that the CTWG would investigate whether there are any common or shared characteristics for the minority of masts that are associated with relatively large numbers of confirmed 4G interference cases (known as interference 'hot-spots' or 'clusters') 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 to assist in managing adequate capacity and resources at the point of activation.

4.2 On behalf of the CTWG, Andrew Dumbreck, Technical Advisor to the Board, presented their 'Cluster Prediction' interim report on progress to date. Further to investigations and analysis on areas with significant call volume within the first twenty days of new mast activation, there are initial indications that clusters tend to occur in suburban areas/small towns with semi-detached or terraced housing, where there is a combination of high degradation, low DTT field strength and an available 6 multiplex (MUX) DTT transmission.

4.3 The CTWG are aware that whilst there are technical factors, there are also socio-economic and other factors that may contribute to the 'cluster effect' such as the quality of the in-home system installations and the likelihood that in smaller towns, community behaviour may be more prevalent with a tendency for 'word of mouth' on issues such as TV disruption, prompting more calls to the at800 call centre.

4.4 Analysis will continue over the next months and the CTWG expect to provide their final report and recommendations at the September 2016 Board meeting.

4.5 The Board recommended that when another 'cluster' occurs, at800 consider gathering information directly from viewers via engineers about what prompted the

call i.e. postcard, local gossip etc. as this may help understanding the behavioural aspects.

5. AOB & Next Meeting

5.1 The Board previously agreed to cancel the meetings scheduled for 24 August and 22 December. The next formal discussion will take place on Thursday 22 September 2016.

5.2 However should issues arise that require discussion or a member requests a meeting, arrangements will be made accordingly. Board reports will be provided as usual, regardless of whether a meeting has taken place or not.

David Hendon
Chair
4G/TV Co-existence Oversight Board