

4G/TV Co-existence Oversight Board Report

Chair's report to Ministers and Ofcom: July 2015

1. Executive Summary

- 1.1 The Board agreed not to meet as arranged on Wednesday 29 July. This report reflects the updates provided via the regular Board papers and, in relation to the mailing issue (below at 1.4-1.5 and 3.5-3.11), from email communications sent by Ben Roome, at800 CEO.
- 1.2 The position on interference remains lower than expected with 7,196 confirmed cases of 4G interference at 800MHz as of the end of June, excluding the 35 cases during the pilots.
- 1.3 All KPI targets were met with KPIA achieving a 100% pass rate of service restoration as all 495 4G interference cases confirmed in June were resolved within the 10 working day target. For the first month since March, the green target for KPIA1, to complete 97.5% of visits with viewers as scheduled, was met and exceeded with a 99.22% pass rate. The improvement is primarily due to the implementation of a new, mainly automated, booking system to manage engineer resource and capacity.
- 1.4 In July, whilst conducting a review of the reminder mailing trial processes, at800 discovered that there were households who had not received a postcard as they should have done for planned mast activations from March onwards because subsequent changes to the risk category had not been taken into account when re-profiling the mailing. An additional check has since been added to the process to avoid a repeat occurrence.
- 1.5 In prompt response, at800 conducted a special mailing for those 63,000 properties at risk of interference in areas where a mast has been activated but no postcard had been sent; a further 570,000 postcards will be sent to at-risk properties where a mast is planned but not yet activated. at800 will provide a report to the Board once the full impact has been assessed.

2. at800 update

Roll-out

- 2.1 At the end of June, there were 7,196 confirmed cases of DTT interference caused by 4G at 800MHz, excluding the 35 cases found within the pilots.

Mast Analysis

- 2.2 The number of monthly and cumulative cases reported within 28 days at 900m is currently at 0.36 and 0.20 cases per mast respectively; in April, this was 0.37 and 0.19. The number of monthly cases per month for 1.5km has reduced from 0.51 in April to 0.45 in May and for cumulative cases, there was a miniscule increase from 0.33 (April) to 0.34 in May.
- 2.3 The rolling average of confirmed cases per activated mast across a 3-month period to June was 1.21 and the average number of cumulative cases per mast was at 1.07.

Installer Scheme and Audit Summary

- 2.4 In the May and June Board reports, I noted that at800 were developing a more automated system to assist with scheduling engineer appointments to improve capacity management, particularly across regions.
- 2.5 This was to ensure that, as per the requirements of KPI A1, appointments were completed as scheduled with viewers with the need to rearrange visits kept to a minimum. In both May and June, the KPI target had been marginally missed because of the challenges faced in coordinating engineer visits across dispersed geographical locations; the capacity challenges in these months had also been exacerbated by higher than usual mailing activity through April and May, generating an increase in the volume of calls and therefore, the number of appointments.
- 2.6 June was the first full month where the majority of engineer visits were managed using the new system and there was a marked reduction in the number of visits rearranged by at800; 12 appointments were cancelled and rearranged in June compared to 37 in May and 33 in April.
- 2.7 As well as improving customer service and reliability, it is expected that the automated system will enable better resource planning across the country, including reductions in travelling times between visits and the number of teams required, with subsequent financial operational savings.
- 2.8 In June 59 audits were completed on engineer visits from April (8), May (50) and June (1) with no overturns.
- 2.9 As part of at800's focus on reducing the number of form errors, a meeting was held with the regional contractors to agree the rollout of proposed amendments to the form and online portal. Business rules have also been clarified, as has the scope of the engineer's functions. Details on this work will follow its completion in August.

Communications

- 2.10 From June, at800 began targeting its Facebook adverts to households in postcode areas within 1500m of a newly activated mast. The adverts, which appear on Facebook timelines for around four days one week after a nearby mast has gone live, enable at800 to raise additional awareness in a timely and highly targeted manner. The Facebook adverts in June had a potential reach of over 200,000 users and generated 3,709 clicks to the at800 website.

3. Mailings

- 3.1 In August 2014, at800 presented proposals to amend the mailing operation to narrow the time between a viewer receiving a postcard and a nearby mast activating, thereby reducing the risk that viewers will not retain postcards and therefore be unaware of potential DTT interference issues and whom to contact for assistance. The modified processes were to be tested via a trial on reminder mailings.
- 3.2 Reiterating the core principle for initial mailings to arrive at households before a mast activates, and subject to the agreement of the mobile network operators to modify their internal mast notification procedures, the Board had approved the proposal. The expectation was that the reminder mailing trial would commence from November 2014, with the length of the trial to be formally agreed, and a report provided to the Board thereafter.
- 3.3 The trial was postponed to early 2015, as at800 resources were re-directed to resolving a separate and unrelated mailing issue. In February 2015, at800 advised the Board that due to the level of complexity in the modified processes because of the shorter time-frames involved, there were unacceptable risks of potential failure to notify households as required which had to be addressed before the trial could commence. With Board agreement, the trial was postponed until further notice.
- 3.4 Since February, at800 has been developing the processes to minimise the risks for the reminder mailing trial and ultimately, the whole mailing operation. At the request of Ofcom, at800 has also conducted analysis into the timeline for households whose reminder mailings may have been sent but may still experience disruption from masts that have not yet been activated.
- 3.5 During the recent mailing operation reviews and analysis, at800 discovered that due to some changes to the risk profiling in the mailing model, there were households that had not received a postcard as they should have done. Fortunately, this only

affected planned mast activations since March and only a small proportion of those have been activated, therefore limiting the number of households missed.

- 3.6 In response, and as soon as the error was discovered, at800 conducted a special mailing for the 63,000 households now identified as 'at-risk' where a mast has been activated but not sent a postcard because the initial modelling (pre-changes) had not identified them in a risk area.
- 3.7 In addition, at800 will be mailing throughout July and August to those properties (approx. 570,000) where the risk has changed because mast activation is planned but has not yet happened. at800 is aware that a small proportion of those 570,000 properties may receive a postcard after a nearby mast has activated and will be able to determine the exact number once the mailing is complete by the end of August.
- 3.8 To avoid a repeat occurrence, at800 has incorporated an additional check into the risk modelling processes to double-check for changes in the risk categorisation.
- 3.9 In anticipation of an increase in call volumes to the contact centre, extra agents will be available and at800 will closely monitor capacity and response times to ensure standards are maintained. at800 has also alerted Digital UK (DUK) so that their call centre is aware and prepared for increases in calls and queries from viewers.
- 3.10 at800 has assured the Board that viewers in an at-risk area who contacted the call centre prior to receiving a postcard would have been triaged correctly and provided appropriate support as the active mast data was correct and up to date despite the mailing errors. Those viewers who contact at800 after having arranged independent work to restore their DTT service as a result of not having received prior notification, and who would have been eligible for support from at800, will be compensated as per the usual code of service.
- 3.11 at800 will provide the Board with a report in September or October, at whichever point they have been able to assess the full impact on issues such as call volumes, engineer visits (and capacity) and number of confirmed and/or reported cases of interference after mast activation. The reporting will also provide the revised SLA B1 results for March – August 2015.

4. Coexistence Technical Working Group (CTWG)

- 4.1 Further to the work the CTWG completed last year in verifying the LS Telcom model to replace the previous prediction software, the Board commissioned the group to investigate potential modelling improvements to increase prediction accuracy.
- 4.2 After identifying that a better representation of real household aerials and TV receiver ability to discriminate different frequencies would have the biggest impacts on prediction accuracy, the group have been conducting research, testing and analysis into a variety of related areas.
- 4.3 As a result of this work, the CTWG identified a set of new modelling parameters and conducted initial testing to ensure the revised model worked correctly with assessments on the subsequent impacts to mailing.
- 4.4 Whilst the new parameters are predicting more accurately in general, the results of comparisons of the prediction data with known interference cases as a validation check, mean that further work is required to refine the modelling changes. Once the group are satisfied that the prediction model is more accurate, they will consider the options for adjustments to the risk-based mailing rules, which will be affected by the modelling improvements.
- 4.5 The CTWG expect to present their final modelling change proposals, including the mailing rules options, and recommendations to the Board by October 2015.

5. KPI Report

- 5.1 at800 reported passes against all KPIs. For KPIA Service Restoration where a household is a primary DTT user, all 495 confirmed 4G interference cases in June were resolved within the 10 working day target.
- 5.2 As outlined at para. 2.4 to 2.6, June was the first month (since March) that the target for KPIA1, in which 97.5% engineer (installer) visits are to be completed as scheduled with viewers, was met and exceeded with a 99.22% pass rate. As explained, at800 have implemented a more automated capacity management system to ensure the need to re-arrange visits is kept to a minimum and targets are met.

6. AOB & Next Meeting

- 6.1 The next meeting is scheduled for Wednesday 26 August 2015. The Board agreed that a decision on whether the meeting goes ahead, dependant upon arising issues, would be taken nearer the date. If the meeting does go ahead, I have invited the Board to attend via tele-conference, if preferred, to limit impacts on travelling time etc. The September meeting (Wednesday 23rd) will go ahead as arranged.
- 6.2 The meeting timetable for 2016 has been set on a monthly roster with meetings continuing to take place at Ofcom offices. Whilst it is likely that the Board will meet every other month with the first meeting in 2016 on Thursday 28 January, the option to amend the meeting frequency has been reserved should circumstances change and/or a Board member proposes to do so. A decision on when the Board will next meet will take place at each meeting or via correspondence in the intervening period.

David Hendon

Chair

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