

Openreach response to Ofgem's consultation on the  
*Incentive on Connections Engagement: Looking Back  
Reports 2017-18 and Looking Forward Reports 2018-19*

July 2018

## Foreword

On 22 June 2018, Ofgem published an open letter inviting stakeholders to provide their views, via the Incentive on Connections Engagement ("ICE") process, on how well distribution network operators (DNOs) engage with their larger connections customers.

This submission is provided on behalf of Openreach, a legally and functionally separate line of business within British Telecommunications plc ("BT")<sup>1</sup>, in response to proposals related to Openreach's business.

The Openreach response to the ICE consultation is composed of two main elements:

- This document, which provides summary narrative on Openreach's current issues with DNO performance, and what changes we wish to see; and
- Openreach's more detailed comments on the performance and engagement of the DNOs. This part of the response makes use of the templates provided by Ofgem.

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<sup>1</sup> As part of BT's implementation of its formal notification dated 10 March 2017 under section 89C of the Communications Act 2003 ("the Act"), the Openreach business will be operated by Openreach Limited, which was incorporated as a separate legal entity on 24 March 2017, following the fulfilment of certain conditions set out in the notification.

# 1. Executive Summary

1. Openreach is responsible for maintaining and developing the communications access network (also known as the “first mile”) across Britain. This network is used by over 600 Communications Providers (CPs) to give consumers and businesses voice and broadband services.
2. An integral part of Openreach’s external network are the c.78k FTTC (Fibre to the Cabinet) cabinets that are used to provide superfast fibre broadband<sup>2</sup> services to up to 384 local homes and businesses.
3. When an FTTC cabinet is damaged as a result of a Road Traffic Incident (RTI), a complex recovery process kicks in. This includes Openreach replacing damaged equipment typically by the end of the next working day.
4. DNOs are also efficient in helping make the affected site safe, with power to site typically capped within 3 hour of the RTI being reported.
5. However, DNO power restoration is a slow and cumbersome process, and there is currently no meaningful Service Level Agreement (SLA) offered by the DNOs for power restoration in recovery situations following an RTI.<sup>3</sup>
6. Under current arrangements, power restoration for an Openreach FTTC cabinet is given the same priority by the DNOs as a lamp-post. This is despite the fact that an FTTC cabinet can have as many as 384 (soon to become 512) premises relying on it for the provision of superfast fibre broadband service.
7. When RTIs occur, there is the potential for significant end customer detriment owing to extended downtime, often accompanied by (given Openreach’s reliance on the DNOs for power restoration) a lack of clarity on when full service restoration will take place. Customers of superfast fibre broadband services expect rapid restoration, and where this is not forthcoming, Openreach typically takes a reputational hit.
8. When DNO power restoration is holding up restoration of service to end customers, Openreach will try and mitigate end customer impacts by conducting battery swaps in the FTTC cabinet. However, this is an inefficient and expensive process, and does not provide a good end customer experience as it comes with regular service interruption with each battery swap-out.
9. Some patchy progress has been made with informal support arrangements established with some of the DNOs, but despite engagement over time, there has been a general reluctance across the DNOs to put forward a scalable or acceptable solution to the problem.
10. Openreach seeks from the DNOs a reasonable SLA scheme to deal with power restoration following RTI situations. In order to provide the DNO with an effective incentive, the SLA should include a requirement to fix service by the end of the next working day following the reporting of the RTI, and for a proactive service credit to become payable where this requirement isn’t met.

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<sup>2</sup> Defined by Ofcom as providing a minimum of 30 Mbit/s download speed. See paragraph 1.3 of Ofcom’s 2017 Connected Nations Report: [https://www.ofcom.org.uk/data/assets/pdf\\_file/0024/108843/summary-report-connected-nations-2017.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0024/108843/summary-report-connected-nations-2017.pdf)

<sup>3</sup> There is no formal SLA for service restoration. Restoration is treated by the DNOs as a new connection, where the (loose) industry standard SLA is 25+ days.

11. Openreach considers that such an SLA would not be burdensome, and is essential to bring service following RTIs up to the levels demanded by end customers that rely on superfast fibre broadband services.
12. Openreach has no confidence that the DNOs will voluntarily provide an acceptable or scalable solution to the post RTI power restoration problems described above (see our more detailed comments on DNO engagement, which are provided separately). Accordingly, we are engaging in the ICE process such that Ofgem might intervene / engage with this issue to help all parties reach a sensible conclusion, for the good of the growing number of superfast fibre broadband customers.

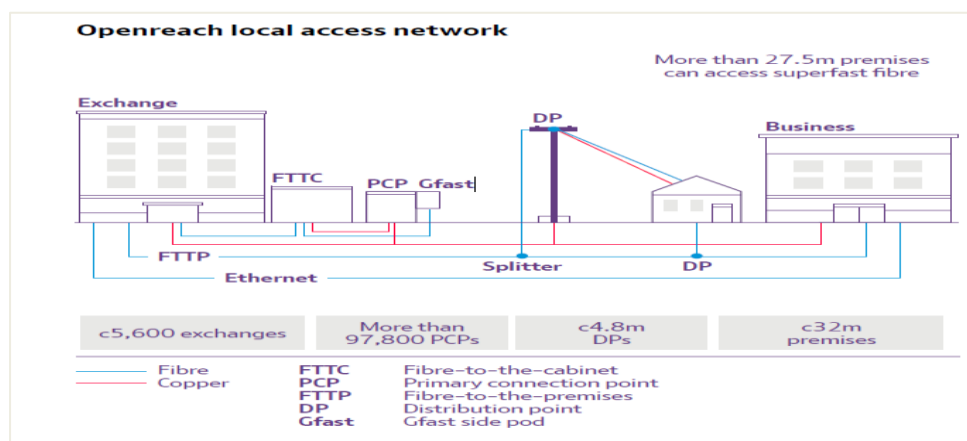
## 2. About Openreach

13. Openreach is a legally and functionally separate line of business within BT and we run Britain's digital network business. Openreach connects homes, mobile phone masts, schools, shops, banks, hospitals, libraries, broadcasters, governments and businesses – large and small – to the world. It's our mission to build the best possible network with the highest quality of service, and make sure that everyone in Britain can be connected.
14. Openreach is a wholesaler and we have more than 30,000 people who work on behalf of more than 600 CPs including Sky, TalkTalk, Vodafone, Virgin Media and BT.
15. Our fibre broadband network is the largest in the UK, covering over 27 million homes and business premises. Our technology is the platform for Britain's thriving digital economy.
16. We're owned by BT Group, but independently operated by Openreach Limited. Openreach trades through British Telecommunications plc. Our business is highly regulated, and more than 90% of our revenues come from services that are subject to some form of regulatory price obligation overseen by Ofcom, the UK communications regulator.
17. Providing excellent service to our customers is at the heart of Openreach's strategy, and as part of this, we are highly transparent in how we report on our performance to stakeholders such as communication providers, Ofcom and the public.
18. Openreach is also heavily regulated in relation to the quality of service (QoS) it offers for the provision and repair of its key products, with Ofcom imposing a range of QoS remedies including requirements to offer proactive service level guarantees, requirement to report on a detailed range of key performance indicators and requirements to meet minimum service levels.
19. Connecting Britain to the future by expanding our superfast and ultrafast fibre networks, plus delivering a great customer experience by offering world-class service are two of Openreach's top priorities. Our customers rightly demand excellent service, and we are determined to meet their requirements, for the good of the market.
20. Finally please note that a significant amount of day to day engagement with DNOs is managed via the contractors that Openreach uses for civils work e.g. Telent and Morrison.

### 3. Road Traffic incidents and impacts on service

21. The majority of Openreach's local access network (see figure 1, below) is outdoors. This means that the network is subject to the elements, and to other risk factors such as accidental damage and vandalism.

*Figure 1 – Openreach local access network*



22. Openreach invests heavily to ensure that its network is resilient and is delivered to the highest engineering standards, so as to minimise any downtime caused by environmental factors.<sup>4</sup>
23. However, events that are not within Openreach's direct control such as damage caused by RTIs can still occur and when they do, this can impact the service to customers that are served by the FTTC cabinet that has been damaged or destroyed as a result of the RTI.<sup>5</sup>
24. The FTTC cabinets that are used as local distribution points for superfast fibre broadband services can serve up to 384 residential and business premises, and this will rise to 512 premises as next generation technology is rolled out.
25. The superfast fibre broadband services that the FTTC cabinets support are increasingly viewed by the end customers that purchase them as essential for their day-to-day activities.<sup>6</sup> When these services are unavailable, or are running sub-optimally (for example where intermittent faults are occurring) the end customers rightly have high expectations in relation to how quickly service should be restored to normal (fully functioning) levels.
26. When RTIs occur, Openreach aims to minimise the impacts on end customers by running efficient recovery processes that seek to restore services as quickly as possible. These processes include notifying relevant authorities of the RTI and co-ordinating supplier arrangements to ensure (a) safety of the site and (b) rapid restoration of the site and any associated services.
27. FTTC cabinets require power in order to function, and so when FTTC services are impacted due to an RTI, restoration of the power supply is a critical part of the end to end restoration activities.

<sup>4</sup> For example Openreach stores high capacity batteries and uses disaster recovery trailers to help mitigate the impacts of RTIs.

<sup>5</sup> Openreach analysis suggests that around 50% of reported RTIs are service affecting.

<sup>6</sup> This is because of the increasing number of applications that customers rely on their superfast fibre broadband services to support.

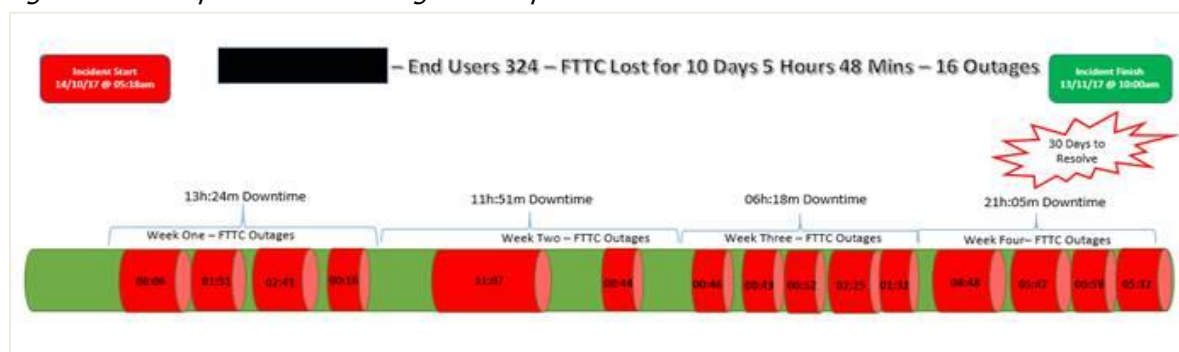
28. Openreach is efficient at kicking off restoration activities, and at replacing the damaged FTTC cabinets (typically the cabinet is stood up and ready to be returned to service by the next working day following the RTI).
29. It should also be noted that in relation to making the site safe by capping power, the DNOs are also very efficient, with power normally capped within 3 hours of the RTI being reported to them 24 hours a day, 7 days per week, 365 days per year.
30. However, there is currently no meaningful SLA between Openreach and the DNOs for restoring power. DNOs currently treat such restoration activities as 'new connections' – which are subject to a very weak and loose SLA (industry standard is 25+ days), which is simply not appropriate for post RTI restoration scenarios.<sup>7</sup>
31. In practice, DNOs give the same formal priority to power supply in FTTC cabinet restoration situations as they would to offering power to a street lamp. Given that FTTC cabinets serve multiple end customers (currently up to 384, and in future up to 512) that rely on superfast fibre broadband services, this is a totally unacceptable situation. Further comments on the inadequacy of the current arrangements are set out in section 5 of this response, and also in our further comments on engagement with specific DNOs, which are provided separately.

### **Impacts on superfast fibre broadband end customers**

32. When there are extended lead times for power restoration, this has significant negative impacts on the service experienced by the superfast fibre broadband end customers served by the affected FTTC cabinet. In such cases, not only can end customers experience significant downtime for their superfast broadband services, but they also (given we are totally in the hands of the DNOs to effect power restoration) face significant uncertainty as to when services will be restored to normal levels.
33. In such cases, Openreach will try and mitigate the impacts on end customers by replacing the batteries that sit within the FTTC cabinets.
34. However, this is an inadequate alternative to the uninterrupted service that end customers expect. This is because batteries will only last for a very limited period of time, and so need to be regularly replaced; while each replacement cycle will necessarily lead to a period of downtime for superfast fibre broadband services. From an end customer perspective, this means that the superfast fibre broadband service that they rely on only works intermittently, meaning that the service experience, while superior to total loss of service (the alternative), is a very poor one and provides an unacceptable experience for affected end customers.
35. It should also be noted that the need to regularly replace batteries is itself an inefficient and expensive operational burden that Openreach is required to bear, and that could be avoided if DNO power restoration was significantly quicker, and more consistent.

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<sup>7</sup> By way of comparison, the repair SLA that Openreach offers within tariff for superfast fibre broadband is for the fix to be completed by end of next working day following fault report, Monday to Saturday.

*Figure 2 – Example of an RTI outage and impacts on end customers*

36. Figure 2, above, illustrates how acute problems can become when full restoration of service is held up by DNOs failing to re-supply power in acceptable timescales. In this instance, it took 30 calendar days in total from the RTI to power being resupplied (14 October 2017 to 13 November 2017), while during that time there were multiple occasions when end customers faced periods of downtime followed by temporary service restoration as Openreach sought to reduce overall downtime through battery swap-outs.
37. When these incidents occur, Openreach's reputation is negatively impacted, notwithstanding that it is not Openreach that is holding up the service restoration. As figure 3, below, eloquently sets out, end customers become very angry when their superfast fibre broadband services do not work for extended periods, and are unimpressed at the apparently primitive solution to the problem that Openreach is required to follow. It is also noteworthy that end customers that experience these types of extended interruption tend to involve other stakeholders, such as press, senior Ofcom management and MPs, leading to further pressure and reputational impacts for Openreach to manage.

*Figure 3 – Mail online article dated 10 November 2017<sup>8</sup>*

38. In the 12 month period between April 2017 and March 2018 inclusive Openreach and its customers have encountered damage by vehicles to 308 FTTC cabinets, and over 100 of these

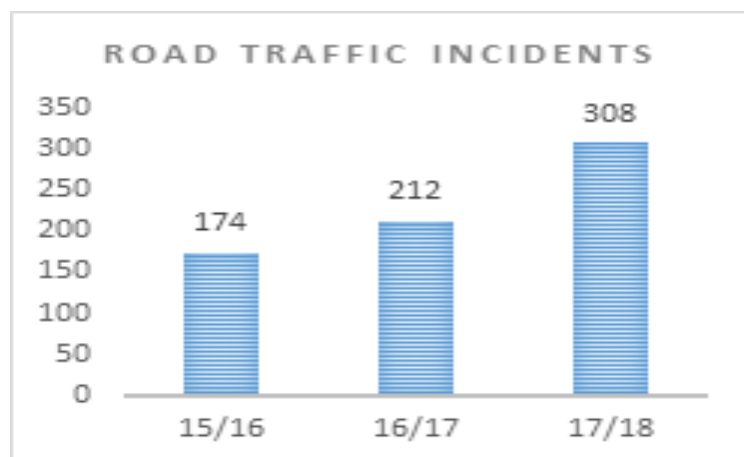
<sup>8</sup> See <http://www.dailymail.co.uk/news/article-5069783/BT-slammed-car-crash-damages-village-s-broadband.html>



incidents had end customer outages, with 12 FTTC cabinets encountering delays exceeding 7 calendar days.

39. Service interruption as a result of traffic accidents involving FTTC cabinets resulted in a total of 478,221 minutes or 332 days 2 hours 21 minutes (i.e. nearly one year) of end customer outages over the last 12 months.
40. After Openreach has restored service, the time taken by DNOs to reconnect the electricity supplies results in Openreach having to maintain service for an average of at least 7 calendar days (with 3 battery changes per day) which is significantly stretching our operational resources and (most importantly) leading to a terrible end customer experience.
41. This is a growing problem. As Openreach's superfast fibre broadband network expands to meet customer need and governmental ambition, so does the number of RTIs, as shown in figure 4, below. Given this, there is an imperative now for DNOs to significantly improve the speed and consistency of their power restoration offering in circumstances where FTTC cabinets have been damaged by RTIs.

Figure 4 – Road Traffic Incidents<sup>9</sup>



42. In addition to being a growing problem, this issue will result in Openreach and Communications Providers incurring additional cost in the form of proactive service credits to end customers.
43. This is because, as part of its wider push to improve service outcomes for end customers, Ofcom is introducing obligations on retail Communications Providers to make automatic and proactive payments to their end customers when certain service SLAs are not met, and this will include fault repair for superfast fibre broadband, even in circumstances where faults are subject to a *force majeure* type provision, such as would exist with RTIs.<sup>10</sup>
44. These obligations come into effect from late February 2019, and will mean further pressure on Communications Providers (and Openreach, given that we will also be making payments to Communications Providers in such scenarios) to ensure that service restoration of superfast fibre broadband services following RTIs is completed promptly.

<sup>9</sup> The years shown are financial years running 1 April to 31 March inclusive.

<sup>10</sup> *Automatic Compensation protecting Consumers from service quality problems*. Ofcom Statement November 2017. See [https://www.ofcom.org.uk/data/assets/pdf\\_file/0026/107693/Statement-automatic-compensation.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0026/107693/Statement-automatic-compensation.pdf) Payments relate to total loss of service.

## Performance across the Distribution Network Operators

45. Openreach is a large customer of the DNOs, and has developed working relationships with each organisation over time.
46. We have discussed our issues about power restoration performance following RTIs with all DNOs, and have secured some minor improvements with some of the DNOs.
47. However, even where improvements have been secured, this tends to be based on escalations, and informal “back-door” working arrangements. This is not scalable, and provides Openreach with no assurance that improvements will be delivered consistently or on a sustainable basis.
48. Furthermore, even when there has been some good co-operation, **none** of the DNOs will commit to any form of binding and improved SLA for power restoration following an RTI. Openreach firmly believes that an improved, and proactive SLA scheme for power restoration is required to ensure continuity of acceptable performance going forward.
49. Figure 5, below, sets out some analysis conducted by Openreach on the range of performance delivered by the DNOs in restoring service to an FTTC cabinet following an RTI. This shows (noting the variable sample sizes), that (a) performance has been quite variable, and (b) it is quite normal for a significant proportion of end customers to wait more than 5 calendar days for power to be restored following an RTI and (c) in some cases customers are required to wait very extended timescales for power to be restored. The analysis covers the period January 2017 to January 2018.

Figure 5 – Performance analysis across the DNOs<sup>11</sup>

	Up to 5 Days	Up to 10 Days	Up to 20 Days	Up to 30 Days	Up to 50 Days	Up to 100 Days	Sample Size Jan 17 to Jan 18	Outages experienced by Customers
POWER COMPANIES AVERAGE	57.14%	71.42%	79.76%	89.29%	97.62%	100.00%	84	446
DNO 01	100.00%						1	1
DNO 02	66.66%	100.00%					6	10
DNO 03	65.38%	84.62%	88.46%	100.00%			26	99
DNO 04	52.94%	58.82%	64.70%	70.59%	100.00%		17	142
DNO 05	44.44%	61.11%	83.33%	100.00%			21	119
DNO 06	38.46%	53.85%	61.54%	76.92%	84.62%	100.00%	13	75

50. Openreach provides more detailed comments on individual DNOs in its separate submission, using the template provided by Ofgem.
51. In general we did note the following general points in relation to the backward and forward looking reports provided by the DNOs, all of which we reviewed ahead of responding to Ofgem’s consultation:
- None of the DNOs makes any reference whatsoever to the issue identified here;
  - There is a failure across all DNOs to recognise the importance of the UK-wide telecommunications infrastructure that is connected to the low voltage network.

<sup>11</sup> Note that in this analysis outages are measured between the cabinet restoration work being completed by Openreach and the DNO power restoration being completed.

## 4. Openreach's 'ask'

52. As noted above, when FTTC cabinets are subject to an RTI, this often impacts the superfast fibre broadband services used by the end customers (whether residential or business) served by the affected cabinet.
53. The lack of a consistent and acceptable SLA for power restoration can and does lead to some end customers experiencing totally unacceptable timescales for the superfast fibre broadband service restoration. This then leads to Openreach incurring reputational damage, along with operational costs associated with running inefficient battery swap-out processes, which themselves offer a poor service experience for affected end customers.
54. Openreach seeks an SLA from the DNOs that supports a 21<sup>st</sup> century level of service. We consider that the SLA should include the following features:
- Power restoration by the end of the next working day after the RTI is reported.<sup>12</sup>
  - Proactive service credits based on a reasonable pre-estimate of loss payable by the DNO for each day beyond the SLA.
55. In order to provide superfast fibre broadband end customers across the country with a consistent, and acceptable, service experience, the same SLA should be uniformly offered by all of the DNOs.
56. Implementing such an SLA would not be unduly burdensome on the DNOs.
- On average, it takes 1 DNO engineer 60 minutes to restore power to an FTTC cabinet and the power restoration work could be scheduled at the same time as the request to cap the power is actioned by the DNO.
  - The current process by which the DNOs invoice Openreach and wait for payment to be received before carrying out the work would need to be changed to accommodate shorter lead-times however this should not be a show stopper.
  - There would also be benefits for the DNOs returning when Openreach is still onsite as we can work together on the same Council Permissions and access to the FTTC cabinet and excavation site will be much easier.
57. Furthermore, Openreach would be willing to pay a fair and reasonable charge for an improved SLA scheme.
58. In summary, Openreach considers that the current DNO arrangements for power restoration following an RTI are inadequate, and wholly inappropriate given the end customer detriment that occurs when an FTTC cabinet is subject to a service affecting incident.
59. Although some DNOs / individuals within some DNOs have been relatively helpful in responding to individual RTI incidents, this has been based on informal local processes, and is neither scalable nor predictable.

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<sup>12</sup> Openreach itself offers a repair SLA for FTTC services of fix by end of next working day, Monday to Saturday. When this SLA is not met, Openreach proactively makes service level guarantee payments to the CP that purchases the service.

60. None of the DNOs has shown willingness to seriously consider implementing a new SLA for power restoration following end customer-affecting incidents, and we are very concerned that without regulatory pressure, this will remain the case in future. Further detail on this matter is provided in the separate submissions on engagement with individual DNOs.
61. We request that Ofgem raises this matter directly with the DNOs, and requires that they enter into serious discussions immediately with Openreach to set up an SLA scheme that is fit for purpose. There should also be a regulatory backstop to ensure that discussions are not allowed to continue in perpetuity.
62. Openreach wishes that a new SLA arrangement with all DNOs is in place by September 2018, and considers that, provided the DNOs are incentivised to progress this matter, this is quite feasible.
63. Openreach would welcome further discussion with Ofgem on this matter, and can supply further detail if this would be helpful to Ofgem's review.