



Openreach supplementary response to Ofcom's
consultation on Business Connectivity Market
Review: *"update on the proposed leased lines
charge controls"*

QoS uplift to meet the proposed Ethernet MSLs

Non Confidential

23 December 2015

Comments on this response should be sent to:
Alan Lazarus, Openreach Regulatory Affairs, via email at alan.lazarus@openreach.co.uk

1. As indicated in BT's response to Ofcom's second Leased Line Charge Control (LLCC) consultation dated 15 December 2015, Openreach has reviewed the level of expenditure required to meet Ofcom's proposed Ethernet Minimum Service Levels (MSLs) over the charge control period and now believes an additional cost uplift is required over and above the amount currently included in the charge control proposals.¹
2. This additional request results from a detailed bottom-up review of all activities required to meet Ofcom's proposed MSLs as we currently understand them. This reflects (and fully costs) all the process improvement projects and other initiatives set in train within the business to ensure compliance with the proposed MSLs, notwithstanding the concerns we have set out in our previous responses over the achievability of some of these targets, and is incremental to the investment already made in recruitment to support the current Ethernet service improvement plan. This investment, which included the significant recruitment of over 300 extra engineers, is bearing fruit in terms of improved throughput and performance metrics, but we have now confirmed that extra expenditure is required to meet the complexity and challenge of Ofcom's proposed targets which cover both certainty and lead-times and are highly stretching.
3. In summary, this additional request covers £49.3m of expenditure, of which £38.3m is capex and £11m opex. This translates to an impact on the charge control of an extra £17.5m cost uplift in 2018/19. The supporting financial analysis is set out in annexes 1 and 2 of this submission.²
4. This supplementary request covers essential improvements to support better mean time to provide (MTTP) and delivery certainty and is broken down in the following key areas of work:
 - **Immediate priorities** (£30m capex; £30m opex) – additional recruitment to ensure resource levels are sufficient to meet the MSLs against the backdrop of high peaks in demand, often un-forecast; extra programme management resources to manage essential transformation activities and reducing delays relating to traffic management through extra night work and driving better service levels from contractors.
 - **Transformation of systems and processes** (£30m capex) - systems development work incremental to our planned development roadmap. This is essential to improve the management of demand volatility and the fluidity of provision orders.
 - **Third party management** (£30m capex; £30m opex) – improved systems, additional contractor and third party costs, primarily in relation to civils.
 - **Evolving existing resource** (£30m capex; £30m opex) – costs associated with improving/increasing the capability of the existing workforce, recognising the changing mix and increasing complexity of jobs.

¹ Please also see our previous evidence to the effect that the cost uplift required to meet our current Ethernet service improvement plans has been incorrectly modelled and should be £16m higher in the final year of the controls than Ofcom has estimated. The expenditure set out in this further submission is in addition to this corrected amount.

² To make this submission easier for Ofcom to process, the costs in annex 2 are presented in the same format as the response to Q6 in the 29th LLCC S135 request, 30.

5. Further information on each of these areas is set out below and we would welcome discussing the matters raised in this document in more detail with Ofcom ahead of the final positions being adopted in the BCMR/LLCC.

5.1 Immediate priorities

Addressing volatility of demand

We have previously evidenced to Ofcom the impact of high and unexpected levels of demand on Openreach performance. The market is dynamic and unpredictable with actual demand in 2015/16 well above forecast, and this has undermined Openreach's progress in relation to delivering improved Quality of Service (QoS). Accurate forecasting is important so Openreach can 'right-size' its organisation to meet demand at reasonable service-levels and is crucial to meeting the proposed MSLs. We have previously submitted that Ofcom has not properly considered exogenous factors (including forecasting) in its MSL proposals and asked that Ofcom consider removing from its MSL assessment orders that are un-forecast and that push industry level forecast above certain parameters.

In the absence of any allowance for unexpected/inaccurate forecasting within the MSLs, Openreach believes it is only prudent to ensure there is sufficient resource to in order to deal with this high volatility in demand. We have estimated that this will require an extra 30 desk based and 30 field based FTE to deal with peaks in demand of +/- 15%. This resource will ideally need to be in place at the start of 2016/17 and we plan to use external contractors to cover any delays in recruitment.

Reducing traffic management delays

Traffic management is a major cause of delay and often requires working at night in order to minimise the extent of delay caused. We plan to increase the amount of night work and contract for better service levels from our contractor, Aplant, who manage Traffic Management Authority (TMA) applications on our behalf, to reduce delays.

5.2 Transformation of systems and processes

There are three key areas where transformation of our systems and processes are required to meet the MSLs:

Identifying dependencies upfront

- Providing survey officers with tablets and applications so they can process surveys remote from the office and in addition providing training to allow survey officers to do additional tasks (e.g. reviewing traffic management requirements).
- Implementing process changes on COSMOSS and EMP to ensure the data management approach aligns with Ofcom's MTTP and certainty targets.

Eliminating delays and reducing dwell times

- Process re-engineering to remove delays and reduce dwell times from the jointing, cabling, repair and stores processes.
- Providing devices to the field (an expert structured journey) which will guide the engineers on how to resolve process issues without delaying the job or referring back to desk based support people to resolve issues.

- Introduce an inventory management system (logical inventory of cables and flexibility points) to correct inaccurate records and make it easy for engineers to put records right in real time.
- Other initiatives: automate planning of simple jobs to improve planning time; restructuring the organisation to improve workflow by creating a customer management team to manage all the customer interactions such as appointments; and improvements to the repair diagnostics suite of programmes specifically in support of the repair MSLs.

Improved parallel working on circuit dependencies (task allocation and order management)

- Introduce production management systems and processes to provide a modular work flow to maximise fluidity ('dynamic work allocation'), improved visibility of workstack to improve resource planning and auto allocation of work to remove manual interventions when allocating work to the field.
- Introduce a full Customer Interaction Design on EMP to enable customers to interface directly with the process and reduce dwell time.
- Introduce systems changes that will allow planning job packs to be put together by the system rather than manually and for the job packs to be digitised for distribution and reference.
- Introduce an application which allows engineers to automatically notify that there is a civils requirement (e.g. submit A55s electronically).

5.2 Third party management

Openreach relies heavily on the performance of contractors, especially for civils work, and working with landlords and local authorities on complex provision orders where network is required (e.g. Category 2b/3 orders). The following initiatives are needed to underpin better outputs in these areas to improve MTTP and certainty of delivery dates in order to meet the MSLs.

- Introduce an additional layer of management to drive third party performance on a regional basis (≈ FTE per SOM patch). The improved relationship and management will remove dwell times with key third party stakeholders, such as landlords (wayleaves) and local authorities (traffic management).
- Introduce better systems to track work with our civils contractor, CT, to increase visibility of progress and circuit management. This would allow Openreach to be able to better track progress of civils work at a local level and take corrective action in a timely manner when intervention is needed.
- In-source more civils work from third party contractors, which will require extra equipment and extra FTE, so that Openreach has more control over the execution of this work.

5.3 Evolving existing resources

We have geographical patches where we may have sufficient resources but the workforce does not have the right skills to do the types of work that currently needs to be carried out, recognising the changing mix and increased complexity of jobs, . We aim to address this and increase geographical mobility by implementing a programme of multi-skilling engineers.

This requires equipment, so that the engineers are kitted out to carry out a wider range of engineering tasks, and training costs, including time to attend training courses.

Annex 1 – Summary of extra expenditure required

IMMEDIATE PRIORITIES	Capex £m	Opex £m	Year
Address the high volatility in demand (+/- 15%) in order to maintain service at acceptable levels. Requirement is an extra ✂ desk based FTE and ✂ field based FTE.	✂	✂	✂
Increase the amount of night work and contract for better service levels from Aplant to reduce delays due to traffic management issues.	✂	✂	✂
Additional transformation resources required to support volume of systems and process work required to support this plan		✂	✂
Sub total	✂	✂	
TRANSFORMATION OF SYSTEMS & PROCESSES			
	Capex £m	Opex £m	Year
Identify dependencies upfront			
Provide survey officers with tablets and apps for remote working and provide training to allow survey officers to do additional tasks.	✂		✂
Implementing process changes on COSMOSS and EMP to ensure date management approach aligns with Ofcom's MTTP and certainty targets.	✂		✂
Eliminate delays and reduce dwell times			
Process re-engineering to remove delays and dwell times from the jointing, cabling, repair and stores processes	✂		✂
Provide expert system devices to field to resolve process issues without delaying the job or referring back to desk based support.	✂		✂
Introduce a logical inventory management system for cables and flex points to make it easier for engineers to put records right in real time.	✂		✂
Others: automate planning of simple jobs; create a customer management team to manage all the customer interactions such as appointments; and improve the repair diagnostics suite in support of repair MSLs.	✂		✂
Improved parallel working on circuit dependencies			
Introduce production management systems and process to provide a modular work flow to maximise fluidity ('dynamic work allocation'), improved visibility of workstack and auto allocation of work to remove manual interventions.	✂		✂
Introduce a full Customer Interaction Design on EMP to enable customers to interface directly with the process and reduce dwell time	✂		✂
Introduce systems changes that will allow planning job packs to be put together automatically and for the job packs to be digitised for distribution and reference	✂		✂
Introduce an app which allows engineers to notify automatically that there is a civils requirement (e.g. submit A55's electronically).	✂		✂
Sub total	✂		
Less planned development spend	✂		
Sub total	✂		

	Capex £m	Opex £m	Year
3RD PARTY MANAGEMENT			
Introduce an additional layer of management to drive 3rd party performance on a regional basis (✂ FTE per SOM patch) to remove dwell times with key 3rd parties.		✂	✂
Introduce better systems to track work with CT (Civils) to increase visibility of progress and circuit management to take more timely corrective actions.	✂	✂	✂
In-source more civils work from 3rd party contractors so that Openreach has more control over the execution of this work	✂		✂
Sub total	✂	✂	
	Capex £m	Opex £m	Year
EVOLVING EXISTING RESOURCES			
Increase geographical mobility to support sustained demand via implementing a programme of multi-skilling engineers.	✂	✂	✂
Sub total	✂	✂	
GRAND TOTAL	38.3	11.0	

Annex 2 – Costs presented in the same excel format as the response to Q6 in the 29th LLCC S135 request.

[Openreach supplementary response to Ofcom annex2.xlsx](#)

