

## Ofcom Call to Discuss the Approach to Future Regulations (24 July 2018)

Coordinator Good morning, ladies and gentlemen, and welcome to the Ofcom Call to Discuss the Approach to Future Regulation. The call is being hosted by Sharon White, Ofcom Chief Executive. My name is Adrian and I am your event manager. During the presentation your lines will remain on listen-only. [Operator instructions.] I'd like to advise all parties this conference is being recorded for replay purposes, which will be available later on together with a transcript of the call on the Ofcom website.

Now, I'd like to hand over to Sharon. Please go ahead.

Sharon White Adrian, thanks very much, indeed. This is Sharon White. Thank you to everybody who's joined us this morning. With me I have Jonathan Oxley who is our Group Director of Competition who will be known to many of you, as well as Clive Carter who is our Director of Strategy.

I hope everybody's managed to download the presentation that we're going to be speaking to this morning. If not it's on the analyst relations section of the Ofcom website. We're going to take about 15 or 20 minutes to run through this morning's announcement taking the presentation as our guide. We will then have lots and lots of time for any questions that the analysts have at the back end of this call. So, I hope that works for everybody.

I'm on Page 2 of the slide deck. I want to really just set the scene and the context for today's new set of plans for how we're going to support full fibre implementation for the coming period.

The backdrop is, obviously, we set out in the DCR now two years ago a strategy which was designed to encourage significantly enhanced investment in Ultrafast network space and full fibre. The strategy very much based on competition, drive, and investment, and today is very much about continuing on that path, responding to the feedback we've had from industry, from analysts, and the investor community about what more we can do at a practical level to provide greater regulatory certainty given the lengthy and risky nature of the investments that we're talking about, very much focused on greater clarity about pricing, Jonathan and Clive will talk more about, as well as the variation by geography.

Just to note, today is very much a direction setting document, the in-depth policies you'd expect will then be set out in our subsequent market reviews, and I will, at the very end of our presentation, say a little bit about the timetable and particularly the consultations that we're planning in the autumn.

You will obviously have seen the government future infrastructure telecoms review yesterday and we have been working hand in glove with the government in terms of trying to bring together both

regulatory and central government policy to promote full fibre. You'll hear a bit some of the common themes coming out of yesterday's review, but also then the details, the regulatory decisions that flow from that, that we'll talk a bit about today.

On slide 3, actions so far, I think I can be quite brief. I think analysts will—you'll be very familiar, legal separation of Openreach from BT, I would say we are pretty positive, actually, even more than a year in, about how that's working, about the change in culture particularly under the management of Clive and Mike at Openreach. You will have seen today's announcement of the new volume pricing by Openreach. I think we would see that as a rather positive move very much in keeping with Openreach as a legally separate entity really trying to boost demand for higher bandwidth as a prelude to a fuller full fibre rollout.

As well as legal separation of Openreach, we have also put our weight behind transforming the economics of laying fibre and my personal view is that duct and pole access, which we are working in a very, very assertive way with Openreach and the industry, is the single biggest potential to transform the economics of fibre. And again, we can talk a bit more about that this morning.

Pricing freedom of the high-speed products, you'll note in the wholesale local access review, that we now have in place over the next three years, full price flexibility for Ultrafast, the highest bandwidth, while putting in place an anchor for 40/10 to ensure that we have good consumer protection without dis-incentivising investment. A number of you will have been aware that culminated in a very, very, I thought, positive industry summit which we hosted jointly with Matt Hancock and DCMS with a number of industry leaders and investors in April.

I would say momentum is building, again as compared to 12, 18 months ago. We now have a number of concrete commitments to fibre build. We now, of course, have yesterday's target from the government for 15 million premises by 2025, and certainly funding does not appear to be a constraint to investments.

Finally for me on Slide 4, I just want to give a bit of an overview of the elements in today's plan which Jonathan and Clive will talk to you in more detail. Firstly, it's about bringing together, in a holistic way, business and residential markets, having done a separate review though the WLA residential markets, with a BCMR of business markets, we understand that if you are a commercial investor or an operator these boundaries no longer make sense and we're looking at how we can bring those together in our regulatory approach.

There's more we want to do on duct and pole access to make it unrestricted, again, between business and residential markets. We are looking, as I've mentioned before, about how we can target our

approach by geography given there will be degrees of competition across the UK. Longer market review cycles, new legal changes in Brussels make this easier, but in any case, we have been seeking for some time to extend the periodicity from the current three years to at least five years and, hopefully, more.

We will talk more about the transition from copper to full-fibre network, the theme also picked up in the government's review yesterday, and then obviously, there's been a lot of debate about what in practice the fair bet means in terms of future charge controls and the preservation of investment incentives, and we want to set out a bit more this morning certainly what the principles will be that we approach.

So, I'm going to now hand on to my colleagues and I'll come in, as I say, at the end on the timeline.

Clive Carter

Thanks, Sharon. It's Clive Carter here. I was just going to pick up, as Sharon said, how the document sets out the long-term framework for regulation looking forwards into full-fibre. Within that Jonathan and I will touch upon two broad aspects. One is the framework and the relevant market reviews, and the second is the transition from copper to fibre networks over time.

Taking the first, and I'm now on slide 5, in terms of the framework, as we see fibre investment increase we will see more multi-functional networks delivering a range of services to a set of end users, as Sharon said. In that light it's important that we consider those things holistically and in the round.

The first part of that consideration for us, as Sharon said, is the importance of duct and pole access. As we set out in the Wholesale Local Access Market Review, Openreach's control of the main telecoms network gives it significant advantage over all other operators in the cost, and the timing, and the ability to deploy services networks that can meet a range of end users' needs.

We have looked to address that and level the playing field by giving open and clear access to duct and pole on Openreach's networks. But, within the Wholesale Local Access Market Review that had some usage restrictions attached to it. For example, operators had to demonstrate a clear intent, sufficient intent to be aimed to deploy broadband services in order to be able to use duct and pole for a range of other uses.

Our concern is that that creates uncertainty and a lack of flexibility that is not present for Openreach. It means there is still a differential between an access seeker and Openreach when they use that duct and pole network. To this end we are looking to introduce proposals in the autumn that will actually bring forward unrestricted duct and pole access to Openreach's network wherever we find market power.

Today, of course, Openreach is the key provider with market power at that level of the value chain.

Moving on, the rollout of multi-functional fibre networks and more network investments also changes the competitive dynamics of downstream services. That's absolutely the intent of the strategy is to increase the amount of the competition and the number of parties who can offer networks to end users, both consumers and businesses. That means that the downstream regulatory approach will also need to adapt.

Moving to slide 6, the key elements of that adaptation will be around geography and geographic variations within regulations.

So, as we see networks built and competition emerging we believe we will start to see the emergence of three broad geographic types from a regulatory framework perspective, and those will require differential approaches over time.

The first of those competitive areas, pretty simple, where we see networks being deployed, being used, including duct and pole, but also own build, we will look to deregulate. Where effective competition is the right protection both for investments, innovation, and consumers. That's absolutely where we want to get to.

In advance of those competitive areas fully emerging there's a set of potentially competitive areas. These are the areas where people are looking to address with network investments, and they are critical, again, to the regulatory approach.

These are places where there will still be market power, where Openreach will still have market power, but faces that prospect to market entry or, indeed, some early market entry. In these areas we think the right approach is building on what we set out in the Wholesale Local Access Market Review, it it's something, an approach which builds on anchor product pricing but which is limited to 40/10 services with continued and long-term pricing flexibility for services of higher value and higher quality going forward.

But, importantly, in order to incentivise investment, in setting prices for any anchor it's important that we consider the competitive drivers for investment both by Openreach and third parties. And that means looking at things like third party costs, and it also means considering what value there may be that can be attributed to fibre services in terms of the quality and reliability of service over and above what copper can deliver. Both of those, I think, are elements of our pricing decisions that we will look to take going forward.

Finally, there'll be areas which are not competitive. Areas where even with the introduction of duct and pole access it's very unlikely that third parties will be able to make an economic case for fibre investment. That's not to say that Openreach won't be there in these

areas, and some places will be commercially viable for Openreach, and other areas will require public intervention or public support to deliver full fibre.

But, in these areas I think we will then, in terms of our regulation principles, look to adopt the next most upstream intervention possible to promote innovation and competition. In some cases that could be dark fibre, and in other cases that will be products such as virtual unbundled local access.

That is an overview of the geographic. I'll now hand over to Jonathan who'll take you through the remainder of the slides.

Jonathan Oxley

Thanks, Clive. Good morning. Jonathan Oxley here. I thought I'd just talk a little bit more about the business nature of fibre and some other components on how we're trying to make that more compelling for investors. Sharon's already talked about duct and pole access and we've talked a lot about the price freedom that we've allowed on higher speed services.

The next thing I think is very important for investors to understand is our approach to the fair bet. What is Ofcom's approach to full-fibre investment? I think, first of all, from the outset, we do recognise that investment in full-fibre is risky. There are some pretty challenging engineering complexities that need to be overcome and there's also uncertain demand.

So, we do recognise that and we recognise that it would be totally inappropriate to cap returns at cost of capital. We understand that there are, and we will understand that there are different ranges of outcomes if you did a sensitivity around the business case, of what returns you might make currently investing in fibre. We would take them into account in allowing investors to make—and particularly BT when it's investing in fibre—to make returns above its cost of capital that are commensurate with the risk.

Now I believe we have a track record in doing this. If we look in the chart here, you can see the approach we adopted in relation to BT's investments in GEA and its fibre to the curb network. There's a clear demonstration there that we committed them to have complete pricing flexibility over those services for a period of ten years. We estimated their fair bet that they needed to get in terms of return, in terms of honouring the fair bet, was something in the range of 12% to 14% returns. They actually achieved, we think cumulatively, to the point where we're introducing the 40/10 anchor regulated price, they will make returns of 15%.

So, I think we have there a very tangible demonstration of how we approach the fair bet and how we've given and had a track record of giving a provider like BT incentives to invest.

Now, we will consider additional clarity over the coming months that we think we might provide in terms of the appropriate cost of capital that we'll use. We'll also look at some of the up front—evaluate some of the up-front cost risks involved with successive tranches of investment.

I think it's worth recognising that there are limits to the amount of, the extent to which we can be prescriptive because the risk profile of successive tranches of investment will obviously vary enormously. With Fibre To The Cabinet what we saw was a lot of risk associated with the initial tranche of investment. As the deployment risks were understood and as demand was more certain, successive tranches of investment were obviously, less risky.

Now, that could be the case in Fibre To The Premise. It could equally be the case that even after several tranches of investment some of the supply side risks remain and some of the demand remains uncertain. In which case, we would want to preserve flexibility to not be bound by a very set of prescriptive rules.

However, I think it's almost—we didn't price regulate the higher bandwidth services for ten years on this FTTC network. I think it's safe to assume that there would be no price regulation of higher bandwidth services on full fibre for at least ten years.

So, that's the fair bet. Moving on to, I think, the other aspect of de-risking the business case for full fibre, and that is the switchover from copper to fibre. I've spoken to our investor relations manager this morning. He thought the city were unsure whether Ofcom supported copper switch off. Just to be clear we are absolutely in favour of copper switch off in a managed way which protects consumers.

We recognise that there are huge cost savings to realise if we can close down the PSTN and copper network. It would be foolish for us to think otherwise. Having two duplicate networks makes no sense at all. So, we fully support the need for a copper to fibre transition and, ultimately, the decommissioning of the copper network.

However, that does need to be managed and that managed transition is something that we will work, together with government and with the industry, Openreach, and the various providers who use Openreach's network. We will, above all, provide certainty through, and I think the most likely way this will come about is a pre-agreed set of rules for governing switchover.

The sort of pre-agreed set of rules that might apply is advanced notification that an area is going to be switched over, some protection for customers while their communication provider migrates them in terms of price regulation, and then progressively less regulation on the copper network. First of all, potentially, the elimination of any price regulation to allow the price mechanism to move any remaining

customers through onto fibre and ultimately the removal, deregulation of any obligations to supply on the copper network.

We'll need to consult industry carefully on those issues and, above all, we'll be seeking to protect vulnerable customers. Clearly, there are customers who are not necessarily engaged with the internet. For example, we have a set of customers who are landline only, who use voice services, and we will need to ensure during the transition that these sorts of customers are adequately protected.

So, there are a number of policies that sit underneath this transition. First of all, and we've listed here under the fourth bullet here, some of those considerations. First of all, quality of service. We're not going to allow any degradation of the copper services during this transition, so the customers that remain on it still receive a decent quality of service. Quality of service regulation will remain, but we do recognise that that requires investment, so we will give a great deal of consideration to any stranded assets that that implies as the full fibre network comes on stream.

Similarly, and this speaks to the point that Clive said earlier about pricing consistency. We will be looking to maintain consistent prices through the transition taking inflation into account. Now, there are a number of things, and I think I underlined the point that Clive made, one of the things we want to do is to take into account competitor costs in potentially competitive geographies and as well as the kind of scale economics that may, by then, be present on the GEA network.

I think the final thing I would say, turning to page 9, is a nod to competitor investments. This is not just about Openreach. We're committed to seeing investment from a number of different players, notably Virgin, but also new entrants like CityFibre. We are also acutely aware that they are at the early stages of building their networks. Their business cases are fragile and we are very alert, and monitoring very carefully the behaviour of Openreach.

If we see a pattern of strategic behaviour which appears to be targeting new entrant fibre competitors then we will take enforcement action as we think is necessary. I should say that based on our monitoring, to date, we haven't seen such a pattern of behaviour.

I think that's all I wanted to say. I'm going to pass it back to Sharon to talk about the timetable.

Sharon White

I just wanted to pick up the timetable. The key point here is that what we now have in place is a very practical plan over the coming months to get it to a place where we're moving from policy intent to regulatory certainty and regulatory actions.

If you have the last slide in front of you marked roadmap for regulation, I want to start at either end. I think you will know that currently we have got BCMR temporary conditions in place which run through to spring 2019, obviously, the WLA also in place which runs through, on the pricing side, through to 2021. We are then working ourselves to a position where we can bring in a combined residential and business market review which will run, as colleagues have said, we hope for at least five years. I think we'd love that to be even longer, coming into being in 2021. So, you've got bookended BCMR temporary conditions, and the WLA, and then working our way to a five-plus year market review from 2021.

In the meantime, so what the blocks in the middle are is a bridging BCMR which is the red blob in the middle which essentially bridges the BCMR temporary conditions and the holistic combined residential/business market review in 2021. We're also keen not to wait until the 2021 market review to bring into place unconstrained duct and pole access. We're hoping, which is what this timetable sets out, that we might be able to get that in place by the back end of by Q4 2019, 2020.

What this does mean that this coming autumn we will then have as Clive's just said started to consult on the BCMR, on unconstrained duct and pole access, and also on the very important set of enablers on facilitating investments, be that the fair bet, be that copper switch over.

So, you will see from us over the coming months a lot of consultation and practical proposals which sit beneath this global headline timetable. So, that is essentially designed to get us from the current set of market reviews into a holistic longer term set of decisions in 2021.

That's the end of the presentation. I think we now have lots of time for any questions that you may have.

Coordinator Ladies and gentlemen, your question and answer session will now begin. Your first question comes from the line of Nick Lyall of SocGen. Please go ahead.

Nick Lyall Good morning. It's Nick Lyall at SocGen. Could I just ask one on DPA please? Could you tell us what the uptake is at the moment if you have those numbers and how that's changed with your recent comments in WLA reviews and focus on DPA? And do you intend to set a target on it? What are you expecting that to change by given the move to emphasis—emphasise more backhaul and business only services? Thanks.

Sharon White Thanks, Nick. I might just start with that. It's quite early days on DPA because the changes came through in the WLA in spring this year. We are at thousands of kilometres and what's been very positive, I have



to say is that we found a number of operators, including Virgin, who are now looking at how they design in DPA as part of their rollout. So, we would—I think we're reasonably confident the uptake will grow. Obviously, what we're setting out today in terms of unconstrained access to DPA is designed to put a bit of a rocket boost to DPA. But so far the signs are pretty positive.

Nick Lyall Thank you. And no numbers at all? You don't have anything to update us on in terms of actual uptake or anything else, because BT's quite—or Openreach is quite tight-lipped about it.

Sharon White As I say, we're at thousands of kilometres, but it's very—we're in July so we're not many months out. We haven't set a specific uptake target but we are working extremely hard to get this out and into use.

Jonathan Oxley Just to add to Sharon's comments, we're seeing a lot of interest in the industry working groups that we've set up. Keep in mind that the actual reference offer is only due to be published by Openreach at the end of this month, I think. So, we're still in the actual implementation period. But, I think we're pretty bullish about the interest we've seen. We're seeing it from operators that we hadn't anticipated would be interested in duct and pole, so we're very positive about the early signs of success for it.

Nick Lyall That's great. Thank you.

Coordinator Your next question comes from the line of James Ratzer of New Street Research. Please go ahead.

James Ratzer Good morning. Thank you very much indeed for doing the call. Two questions please. Firstly, all your regulation here seems largely focused on Openreach. I'd be interested to get your thoughts around the role of Virgin Media for providing Ultrafast broadband. Do you envisage trying to impose any regulation on their network to open up competition?

And secondly, just to dig in a bit more on the thoughts around the transition from copper to fibre. I think in Openreach's consultation they put forward last year was discussing the cut over model whereby when FTTP is installed, essentially, the copper is instantly switched off, and customers are forcibly migrated over. Is that kind of structure something you are open to or are you proposing a more gradual transition from copper to fibre? Thank you.

Sharon White I will pick up very briefly and then Johnathan and Clive can come in in more detail both on the Virgin point, but also on transition. I just wanted to say on Virgin we are—I think one of the most positive things in this country in recent years has been serious investment in cable and the numbers are looking good and more positive for Project Lightning.

Certainly in the way in which we're looking at geographies we do not yet see Virgin in a position where they are adding sufficient competitive pressure to BT that we would be countenance in opening up Virgin Media's network. So, great that they're expanding, we're very supportive. We're very supportive of their Ultrafast rollout now, 50/50 split between copper and full fibre, but no, we don't yet see the rollout yet presents any issues in terms of Openreach's dominant position.

I'll bring Clive in first and then I'm going to bring in Jonathan just to round that out.

Clive Carter

In terms of the question of transition, as we set out in the document and I think the FTIR also said this is going to be something that needs to be done collaboratively both with the regulator and with industry. Indeed, a key part of it will be Openreach setting out its plans of how its intent around fibre build will marry up to its desire to switch off copper, in detail.

I think looking around elsewhere, some examples we have seen internationally or locally, these things are normally customer-led. It is about adoption. It's building adoption, and then when you hit a critical mass, then looking to remove the copper network in a managed, but as you say, potentially more direct manner.

I think that's what KCOM has done. They have some experience of it. That's what I would anticipate doing. I think that's what Telefonica was looking to do in Spain as well. Therefore, going forward, the question is what's the timeline for build customer adoption? What will be that critical mass of customers? And then, what have we learned in the past from our experiences of migration processes like digital switchover within television, but also actually in other circumstances in telecoms about how that process can be better managed to protect those most vulnerable customers who are least likely to commercially adopt fibre early on.

Jonathan Oxley

I don't have much to add to that. I agree with that. I think the important point is we want to provide certainty both to the builders of fibre to Openreach, but also to the various communications providers that use the current network.

The timetable here is quite long, so we would see that being a transitional period. But, to answer your question very bluntly, I think the assumption is that once an FTTP network is fully built out, we would expect the copper network to be closed down in relatively short order, but with lead times before that happens so that there is a period for people to adjust to that.

I would add one other point which I meant to mention earlier. We're actually quite open to working with Openreach on a trial. Obviously, it's still at the fairly early stages, their own fibre deployment, but we're

quite happy to start working on a particular city that's built out so we can start to test some of the transition issues that may arise.

James Ratzer Thank you. It's quite a kind of chicken and egg debate because I suppose BT's separate announcement today that they're going to be cutting their prices on their above 40 megabit speeds could actually encourage customers still to stay on the copper network.

Jonathan Oxley Well, right now there's not much full-fibre, so they don't have anywhere else to go. I think, actually, as Sharon said, it's completely positive that they move people up the bandwidth curve. That should lead to better customer/consumer experiences in terms of having access to higher speeds. It should also improve the business case because the wholesale ARPU should be a little higher if people are moving up the bandwidth curve on the GEA portfolio.

James Ratzer Great. Thank you.

Coordinator The next question is from Dhananjay Mirchandani of Bernstein. Please go ahead.

Dhananjay M. Thank you very much. My question is related to what at face value appears to be an inherent contradiction between unfettered access to Openreach's ducts and poles which are aimed at incentivising infrastructure competition and, hence, what looks like an artificial debate on a fair bet on fibre. Surely duct and pole access implies an utilisation risk for any Openreach fibre to the premise investment. Why are we then debating the elements of fair bet through pricing flexibility, cost of capital, etc., if your regulatory paradigm is so heavily focused on incentivising infrastructure competition?

Jonathan Oxley The first thing I would tell you is I think the whole point about duct and pole is it reduces the cost of deploying full-fibre networks. We think it reduces the cash cost 50%. Is that right, Clive? Up-front cost is about 50%. So, actually the break-even point on deploying fibre networks is massively improved.

We're not giving up on competition. We think competition will drive the right outcomes. And I should say Virgin is—although, Virgin we're hoping will use duct and pole, they are at the moment building their own network, so we have end-to-end competition from Virgin on that as well. I don't know if you wanted to add anything.

Clive Carter What I would add is in some ways, if this model is looking at the UK across the whole UK, we need to acknowledge the fact that there are geographic variations and differences in competitive outcome that we're anticipating. Indeed, I think you correctly identified if duct and pole—where duct and pole is successful at promoting market entry, actually, the fair bet doesn't matter because there won't be any access regulation. We'll be looking for a competitive market outcome.

We're really clear that there are parts of the country where even with the best will in the world, even where duct and pole is the most effective, the economic case just will not stack up necessary for new entry to the degree that you can deregulate. In that circumstance where Openreach, most likely the prominent investor in many of those circumstances does invest, they need to understand that when regulation comes in they will be offered a fair bet because that means that that investment is, as well, risky. And those are the two things that we are dealing with in simultaneous, in parallel, through this new regulation framework.

Sharon White

I think we just really want to emphasise Clive's last point. I wouldn't underestimate the shift that we're making and the shift that we're signalling today in taking a geographically differentiated approach because of the fibre spreads. With DPA, in the contested areas with some light safety nets for vulnerable customers who may be left behind. Maybe our entire armoury there and the question about how the fair bet plays out may be, will probably be, linked entirely to the areas which we're defining as prospectively competitive.

So, I think we're very happy to follow-up after today's discussion, but I think taking us all through the journey of how different elements of our armoury will be relevant in different parts of the UK, and we haven't picked up dark fibre yet. Dark fibre we see as being something that's very much most relevant in the non-competitive areas, I think is a very important shift that we're signalling today.

Jonathan Oxley

Operator, can we have the next question, please?

Coordinator

The next question comes from the line of Maurice Patrick of Barclays. Please go ahead.

Maurice Patrick

Good morning, guys, and thanks for doing the call this morning, it's appreciated. The question relates to how you'll police any anti-competitor build by Openreach. You've indicated it's your intent to make sure there is no anti-competitive behaviour. I've heard it mentioned that Openreach, the way that this could happen is Openreach might submit its rollout plans confidentially to Ofcom so you can monitor to see if they start to overtly overbuild others who are building. Can you confirm that's the method you see going forwards?

And also, in a scenario where an alternative operator was to build and Openreach was not, how would the copper switch-off process work? Would you still mandate a copper switch off and all connections go onto the alternative network or would you still, in that situation, maintain an Openreach copper network? Thank you.

Johnathan Oxley

In answer to your first question, it's not that they submit, they do share information with us, but we have information gathering powers. So, we are able to, at any time, request under our statutory powers,

information about what Openreach is doing. So, we do have a good insight into how that—what their plans are.

And, actually, what's more important is the criteria that they use to select cities. That's where we're looking for the strategic behaviour that I talked about before. We're not trying to avoid competition here.

What was the second question again? Yes, if the CP builds in an area would we—it's not us that's mandating the copper switch-off. This is all about BT's investment incentives. BT where they build fibre have said to us, I think they've said publically that they want support with turning off the copper network. In areas where they haven't built but a competitor builds then you'd have to ask them what their behaviour would be, but I suspect they would attempt to compete with their copper network using the GEA portfolio to compete with the new entrant.

Maurice Patrick Thank you for that. A quick follow-up. You talked about a 50% savings for use of the DPA product, so for alternative builder using PIA DP—they'd get a 50% savings on the upfront cost. Is that in areas where they can fully utilise the passive infrastructure, or is there some assumption for non-useable ducts? I guess in an area where you were looking to build and you may not be able to use a percentage of the Openreach passive infrastructure, so just really understanding what was in that 50% number. Thank you.

Jonathan Oxley I don't want to mislead you. I don't know off the top of my head the answer to that question. It's assuming a reasonably significant proportion, but not 100% of the build is using ducts. We'd assume in most cases that new entrants would still do some of their own dig.

Sharon White The upfront cost saving is an aggregate from £500 to £250. That's the broad assessment of usability Openreach has done, is guide with 70%, so its broadly comparable to the sort of the usage figures—not usage, but the usability figures that you've seen in a Spain or a Portugal, but we'd be happy to share more detailed assumptions if that's helpful.

Maurice Patrick Thanks so much.

Coordinator The next question comes from the line of Sam McHugh of Exane. Please go ahead.

Sam McHugh Morning and thanks for the call, guys. A couple of questions on the business markets if I can. Just firstly in terms of DPA I see you changed tact a little bit including B2B into those proposals. Can you explain maybe why that has changed? Who is lobbying for what maybe?

And then secondly, on the BCMR market review, just to clarify on timing, are you saying the new charge controls or whatever, will be implemented in Q1 '20?

And then lastly on dark fibre, maybe a little update on where you are. I note that the FTIR did mention dark fibre and suggested that Ofcom think carefully about how you implement DPA and dark fibre together. So, any thoughts on that would be helpful too. Thanks very much.

Sharon White

I'll pick up the easy bit to your question, BCMR and dark fibre I'll ask Jonathan and Clive to pick up more broadly.

On the BCMR I think colleagues will know that following a loss of the judgment in Competition and Appeals Tribunal what we have in place at the moment are temporary emergency conditions which have an expiration date of March 2019. So, we will need to put in place new charge control from April next year and what we've tried to set out in the slide is the idea is that will be what we would call the bridging BCMR to get us to the holistic business/residential single market review, in other words, by 2021.

And on dark fibre, obviously, we've been aware and have understood where the government strategic policy intent, I guess, I would call yesterday's statement from them. What we set out today is that we do see dark fibre having a role. We are putting our weight behind DPA as the driver of competition which is why what we set out today is dark fibre essentially as an important and upstream remedy in the non-competitive areas.

I can ask Clive to perhaps say a little bit more broadly about the thinking on business.

Clive Carter

Sitting behind it, it's actually not really a change to where we were at in the Wholesale Local Access Market Review where we were looking to allow people to use duct and poles for a range of end uses. What it is though is changing the focus in terms of how you achieve that.

What we have observed is increasingly, people who are looking to build fibre, and thankfully we are seeing more and more people looking to build fibre, want to be able to use those new fibre networks for multiple end purposes and those end purposes both include mass market broadband, but also dedicated business services and, indeed, mobile backhaul and services to other communications providers.

We want to facilitate that sort of business plan, business model, one because we think it makes entry into fibre investment easier, but two, because it actually levels the playing field with what Openreach itself can already do because Openreach has that opportunity and ability to use its ducts and poles for all of those purposes.

So, actually what we're looking to do is change the approach to say we're looking to encourage network investment for a range of end uses and that's why ducts and pole access then becomes relevant, also

for business service as well as the backhaul, mobile backhaul and carrier services, as it does to mass market broadband.

Sam McHugh Great. Thank you very much.

Sharon White I think we've reached a natural end. I just wanted to say thank you very much to everybody on the call and particularly given quite short notice after the statement this morning. Thanks, very much to everybody who's asked questions because it's obviously the start of what's going to be quite an in-depth engagement over the coming months and we certainly would like to continue to engage and to discuss with you particularly as we start to reach some autumn milestones. So, thank you very much, indeed.

Coordinator Thank you, Sharon. Ladies and gentlemen, that concludes your conference call for today. You may now disconnect. Thank you for joining and have a very good day.

*[END OF CALL]*