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Consultation: Copper retirement – conditions under which copper regulation could be completely withdrawn in ultrafast exchanges

Supplementary consultation to the Wholesale Fixed Telecoms Market Review

CONSULTATION:

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Contents

Section

1. Overview 1
2. Background 2
3. Withdrawing remaining copper regulation 6

Annex

A1. Responding to this consultation 22
A2. Ofcom's consultation principles 24
A3. Consultation coversheet 25
A4. Consultation questions 26
A5. Summary of the gradual withdrawal of copper regulation 27
A6. Migration to voice over IP – measures we expect telecoms providers to implement 30
A7. Draft legal instrument 32

1. Overview

Retirement of copper services is an important part of the business case for the roll-out of fibre networks. Openreach plans to upgrade its copper network to fibre on an exchange-by-exchange basis. As each exchange is upgraded, Openreach plans to migrate customers to the new network and then withdraw copper services.

We set out our proposed policy on copper retirement as part of the Wholesale Fixed Telecoms Market Review consultation published in January this year (the "WFTMR"). In it, we said the aim of our copper retirement proposals is to promote fibre investment by shifting the focus of regulation from copper to fibre, to support the migration to fibre services. We also aim to ensure that, wherever possible, no homes and businesses are left behind without ultrafast coverage. At the same time, providers should make sure they migrate customers smoothly and without disruption to services. Customers in vulnerable circumstances should also be given particular protection.

Our WFTMR proposals included a period of regulatory transition after which, when Openreach has completed ultrafast coverage of an exchange area, we would remove the constraint on Openreach to increase the prices of copper services at premises where fibre is available. We did not propose to allow Openreach to withdraw existing copper services during the market review period (2021-2026).

Since publishing our WFTMR consultation, Openreach has notified 168 exchanges (in addition to the trial Salisbury exchange) at which it expects to provide ultrafast services to 75% of premises in each exchange area. Subject to us confirming our proposals in the WFTMR Statement, Openreach will then be able to stop selling new copper services in those exchanges during 2021. Under our WFTMR proposals, in those notified exchanges, where it has completed ultrafast coverage, Openreach would also be able to increase prices for copper services, where fibre is available, during 2023.

Given the speed at which Openreach's fibre roll out is progressing, we now believe that where there are a limited number of customers remaining on copper services, and there are fibre services available to them, it may be reasonable to allow Openreach to withdraw copper services in some cases during the WFTMR market review period.

What we are proposing

In this consultation, we propose to revise our WFTMR proposals to allow for the withdrawal of copper regulation where fibre services are available, where certain conditions in completed exchanges are met. Withdrawal of copper regulation would apply two years after Openreach gives notification that it has completed ultrafast coverage of an exchange area. Notification could be published when or after take-up of copper services is less than 10% of relevant premises in a completed exchange, and only where measures are put in place to support vulnerable consumers. Our proposals would not apply to Critical National Infrastructures.

Next steps

1.1 This consultation closes on 26 November 2020. We intend to publish our final decisions as part of our WFTMR statement in Q4 2020/21.

2. Background

2.1 In this section we outline the context for copper retirement and our approach to regulating the transition from copper to fibre services.

Strategic context

2.2 Our work to promote competition and investment in fibre[1] networks supports our strategic priority of achieving "Better broadband and mobile – wherever you are".

2.3 Our strategic priority is in line with the UK Government's objective of providing gigabit-capable broadband nationwide. In support of this, the Government allocated £5bn of public funding to support infrastructure rollout in the most challenging 20% of the UK.

2.4 As required by section 2B (2) of the Communications Act 2003[2], we have had regard to the UK Government's Statement of Strategic Priorities (SSP) for telecoms, management of radio spectrum and postal services.[3] In particular, we have had regard to the following priority areas covered by the SSP: world-class digital infrastructure and furthering the interests of telecoms consumers.[4]

2.5 There has been significant progress towards the UK Government's objective. In our Spring 2020 Connected Nations update, we reported that full fibre broadband has increased to over 3.5 million homes, up from 3 million since our last update.[5] This year, in July, BT announced that Openreach had now passed 3 million premises[6] and in August, in addition to its existing gigabit-capable coverage, Virgin Media announced that its Project Lightning network expansion had passed 2.3m premises.[7]

2.6 In addition, Openreach has stated that it plans to deploy fibre to 4.5 million premises by March 2021, and 20 million premises by the mid to late 2020s. Openreach also committed to building fibre to 3.2 million premises in Area 3[8] by 2025/26, subject to regulatory enablers.[9] In March, CityFibre confirmed plans to build fibre to a total of 62 areas with a £4bn investment.[10] A number of other alternative network builders ("altnets") announced further fibre deployment during the summer.[11]

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[1] 'Fibre' in this document refers to Fibre to the Premises (FTTP), which has sometimes been previously referred to as 'full fibre'.
[2] HM Government, 2003. *Communications Act 2003*.
[3] DCMS, 2019. *Statement of Strategic Priorities (SSP) for telecommunications, the management of radio spectrum, and postal services* [accessed 12 October 2020].
[4] Section 1.5, paragraphs 26-28 of the SSP sets out our priorities pertaining to the switchover process, need to protect the interests of consumers, safeguard competition, and ensure that switching processes are easy, reliable, and transparent.
[5] Ofcom, 2020. Connected Nations Update: Spring 2020 [accessed 12 October 2020].
[6] BT, 7 May 2020. *Fourth quarter and year to 31 March 2020, financial results* [accessed 12 October 2020].
[7] Liberty Global, 3 August 2020. *Q2 2020 Fixed Income Release* [accessed 12 October 2020].
[8] We explain our approach to Geographic Areas 2 and 3 in paragraphs 2.3 and 2.5, Ofcom, 2020. *Pricing wholesale local access services in Geographic Area 3 with a BT Commitment to deploy a fibre network* [accessed 12 October 2020].
[9] BT, 31 July 2020. *First quarter to 30 June 2020 - financial results* [accessed 12 October 2020].
[10] ISPReview, 6 March 2020. *Cityfibre confirm 62 UK areas for £4bn FTTH broadband rollout* [accessed 12 October 2020].
[11] For example, between August and June, Beacons Telecoms, CommunityFibre, B4RN, Fibrus, Swish Fibre, and Gigaclear.

2.7 Investment in fibre is part of a wider transformation of the UK's telecoms infrastructure. This transformation has two major parts:

a) Migration of voice services to Internet Protocol (IP) technology and the withdrawal of traditional analogue telephony. This is known as 'PSTN Switch-off'.

b) Fibre rollout and subsequent withdrawal of copper-based services. This is known as 'copper retirement'.

2.8 In most cases, Openreach plans to deploy fibre on an exchange by exchange basis, migrating customers to fibre in each exchange area and then withdraw copper services in that area. In 2018, Openreach said that it did not intend to retire copper until it had also switched-off PSTN in December 2025.[12] Since then, Openreach has proposed that Ofcom introduce a new threshold to allow for the withdrawal of existing copper-based services, where fibre is available, which would take effect two years after the charge control on copper-based services has been lifted.[13]

2.9 Given the speed at which Openreach is progressing its fibre deployment, and the lag of several years between fibre deployment and copper retirement, for the majority of the UK's 30 million premises, migration to IP and the subsequent PSTN switch-off is likely to progress at a faster pace than copper retirement, and for most areas the complete retirement of copper services will take place some years after PSTN switch-off.

2.10 In practice, Openreach has announced that it plans to stop selling[14] Wholesale Line Rental (WLR) and ISDN services in 2023, and withdraw WLR and ISDN services in 2025,[15] so it will no longer offer traditional time division multiplexing (TDM) telephony from that point. In contrast, wholesale copper services such as Metallic Path Facilities (MPF) and SOGEA-FTTC[16] that support standard and superfast broadband will be available in many places for some years beyond that.[17] Following BT's TDM switch-off, voice services over the Openreach network will be carried over a broadband connection using a suitable IP-based voice service provided by a retail provider.[18] Many consumers and businesses will therefore be able to use copper services for their voice and broadband products for many years to come.

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[12] Openreach, 15 May 2018. Industry consultation, *Upgrading the Access Network: the withdrawal of WLR products and the smooth transition to IP voice service*, page 6, (Openreach log in required) [accessed 12 October 2020).

[13] Openreach, 7 September 2020. Consultation response, *Response to Copper retirement – process for determining when copper regulation can be removed*, paragraphs 4, 9, 12 and 15-16 [accessed 12 October 2020].

[14] We explain our proposals for stop sell in more detail below. The stop sell means that Openreach would be allowed to stop selling new copper services, when a customer moves premises, changes service or switches provider.

[15] ISDN services are digital telephone services that support telephone and switched data services. WLR services are those which support the provision of analogue telephony.

[16] Single Order Generic Ethernet Access – Fibre to the Cabinet (SOGEA-FTTC) enables the provision of wholesale FTTC broadband without the need for MPF (or another copper voice service) to support it.

[17] Except for circumstances where the stop sell applies and Openreach is allowed to offer only fibre connections.

[18] Openreach has stated that it does not intend to provide an IP-based voice service following the TDM switch-off.

Ofcom approach to copper retirement

2.11 Our copper retirement proposals aim to promote fibre investment by shifting the focus of regulation from copper to fibre, to support the migration to fibre services.

2.12 In January, in the WFTMR consultation, we said that the faster that customers migrate from copper to fibre, the stronger the business case for investment in fibre network becomes. In Openreach's case this is because it can avoid the costs of operating both copper and fibre networks in parallel.

2.13 At the same time, we also want to ensure copper regulation is not removed too quickly to ensure consumers are not put at risk of harm, either because of loss of choice or competition, or the removal of services relied upon by vulnerable customers or critical national infrastructure ("CNI"). As part of this aim, we also want to ensure that Openreach is incentivised to complete ultrafast[19] coverage in exchanges where it builds fibre, to ensure that, where possible, no premises within an exchange are left behind.

2.14 To support these aims, we set out our proposals for the migration from copper to fibre networks for the next market review period in our WFTMR consultation.[20] Separately, we also concluded our decisions on facilitating the trials that Openreach is currently conducting in Salisbury and Mildenhall. These trials, and the early progression of the broader stop sell at the notified exchanges, will provide valuable lessons for migration to fibre and copper retirement, and IP migration, that can then be applied more broadly across the country.

2.15 Finally, we set out our principles for ensuring a smooth migration to IP and fibre in our Future of Fixed Telephone Services statement and our statement on the Salisbury and Mildenhall trials respectively.[21, 22] These principles also broadly apply to copper retirement more generally. We also expect industry to develop processes to protect vulnerable consumers during the migration as part of existing industry working groups.

Impact Assessment and Equality Impact Assessment

2.16 The further analysis presented in this document constitutes an impact assessment as defined in Section 7 of the Communications Act 2003. Impact assessments provide a valuable way of assessing the options for regulation and showing why the chosen option was preferred. They form part of best practice policymaking. This is reflected in section 7 of the Act, which means that, generally, we have to carry out impact assessments in cases where our conclusions would be likely to have a significant effect on businesses or the

[19] 'Ultrafast' includes services provided using fibre or G.fast where this can provide a line speed of 300 Mbit/s download.
[20] Ofcom, January 2020. Consultation - *Promoting competition and investment in fibre networks: Wholesale Fixed Telecoms Market Review 2021-26: Volume 3: Non-pricing remedies* ('WFTMR January 2020 consultation'), Chapter 2 [accessed 12 October 2020].
[21] Ofcom, February 2019. Statement - *The future of fixed telephone services: Policy position statement* [accessed 12 October 2020].
[22] Ofcom, July 2019. Consultation - *Promoting competition and investment in fibre networks – measures to support Openreach's proposed trial in Salisbury* [accessed 12 October 2020].

general public, or where there is a major change in Ofcom's activities. However, as a matter of policy Ofcom is committed to carrying out impact assessments in relation to the great majority of our policy decisions.

2.17 Ofcom is required by statute to assess the potential impact of all our functions, policies, projects and practices on equality. Equality Impact Assessments (EIAs) also assist us in making sure that we are meeting our principal duty of furthering the interests of citizens and consumers. Annex 10 of the WFTMR Consultation sets out our EIA in relation to our proposals including copper retirement. We do not consider that our EIA is altered by the revised proposals set out in this consultation.

3. Withdrawing remaining copper regulation

3.1 In this section we set out our copper retirement proposals as published in the WFTMR consultation in January. We then set out our rationale for revising our WFTMR proposal in relation to the obligation on Openreach to provide network access on reasonable request to existing copper services in the Wholesale Local Access (WLA) market. Finally, we explain our revised proposals and the potential impacts of those proposals in more detail.

The WFTMR proposals

Overview of our proposed copper retirement policy

3.2 In Chapter 2, Volume 3, of the WFTMR consultation, we set out our proposed copper retirement policy which aims to promote fibre investment by shifting the focus of regulation from copper to fibre, to support the migration of broadband services from copper to fibre connections.

3.3 These proposals also aim to incentivise Openreach to provide ultrafast services to all premises in an exchange area except in defined limited circumstances[23], and to address our competition concern that Openreach could deter competitor investment by only partly covering an exchange.[24]

3.4 In summary, we proposed:

- that once ultrafast coverage reaches 75% in an exchange area, and where fibre is available at the premises, Openreach should be allowed to stop selling copper services when a customer moves premises, changes service or switches provider (the "stop sell");
- to put in place a regime of notifications, including a requirement on Openreach to notify 12 months in advance of when it would expect to reach the 75% coverage threshold and of when it would expect to complete ultrafast coverage of the exchange (which cannot be earlier than two years after the exchange is 75% ultrafast);[25]
- to allow a period of parallel regulation — or a transition period — of a minimum of two years from the stop sell, where a charge control would apply to the 40/10 service whether delivered over either copper or fibre. As part of our charge control proposals,

[23] We proposed in our WFTMR supplementary consultation Copper retirement – process for determining when copper regulation can be removed, published on 25 June 2020, that we would define any exceptions after the start of the next market review period, when we have more information on the challenges of fibre deployment.
[24] Openreach could selectively deploy fibre where there is a competing network in an area, or just provide enough 300 Mbit/s coverage to deter competitor investment. Openreach could also subsequently shift resources to another area and thus cumulatively deter competitor investment across a wider area. In those scenarios, Openreach would have little incentive to go back to deploy fibre services to remaining premises, to the detriment of customers who would be unable to access fibre services.
[25] As well as publishing a notification a year in advance of when it expects to reach 75% coverage, Openreach also has to notify publicly when it reaches 75% coverage, one year from its expected exchange completion date, and when exchange coverage is complete.

we set out that any charge control on FTTP 40/10 rental would be set at a premium to the charge control rental for FTTC 40/10; and

- to lift the charge control for the FTTC 40/10 service where fibre is available after a minimum of two years from the stop sell, and once ultrafast deployment is completed in an exchange.

3.5 Our WFTMR proposals therefore involve a two-stage regulatory transition from copper to fibre services: the first triggers a "stop sell" of new copper services, and the second lifts the copper charge control in respect of a completed exchange. The latter means that when ultrafast coverage in an exchange is complete, Openreach would have pricing freedom on copper services where fibre is available. This would also include geographic pricing, where we would remove the prohibition on geographic discounts, to the extent that they apply to copper services.[26]

3.6 Our proposals are based on exchanges where ultrafast services is available. The definition of ultrafast is a service providing a download speed of 300 Mbit/s or above. This means that, in some circumstances, Openreach may be able to use G.fast to support ultrafast services for some customers. We consider that allowing ultrafast G.fast to be included when assessing whether exchange coverage is complete would benefit consumers while retaining the regulatory focus on fibre deployment.

3.7 Where the provision of fibre is not practical, G.fast may be an alternative to ensure consumers and businesses still benefit from an ultrafast service. We have considered the potential risk that Openreach may use G.fast instead of fibre to complete an exchange. However, in practice, we do not currently expect Openreach to build a significant number of new G.fast connections, given the scale of Openreach's commitment to fibre deployment.[27] In addition, not all G.fast services can reach ultrafast speeds, and therefore G.fast may only be an alternative to fibre in some circumstances.

3.8 We are considering the responses to our WFTMR consultation and our subsequent supplementary consultation 'Copper retirement – process for determining when copper regulation can be removed', which we published in June this year (the "June consultation").[28] Our decisions in relation to those consultations will be published in the WFTMR Statement early next year. To the extent relevant, we have taken account of those responses in formulating our proposals set out in this consultation.

Access obligations for existing services under the WFTMR proposals

3.9 In the WFTMR consultation, we did not propose to remove the general and specific network access obligations on Openreach that apply to existing copper services. This was because Openreach had said that the earliest it would withdraw legacy copper services would be April 2026, industry discussions on the migration process had only started, and

[26] As set out in Volume 3 of the WFTMR January 2020 consultation and condition 4.4.
[27] ISPreview, 24 June 2020, *Openreach Confirm G.fast Broadband Rollout Paused Until 2021*, [accessed 12 October 2020].
[28] Ofcom, June 2020. Consultation - *Copper retirement – process for determining when copper regulation can be removed* ('copper retirement June 2020 consultation'), [accessed 12 October 2020].

we believed that it was too early to lift the copper-based network access obligations, which provide a backstop protection for communication providers, vulnerable consumers and CNI. We also said that we did not anticipate that retaining the access obligations on existing services would be a constraint to fibre migration in practice.

3.10 By existing services, we mean the services purchased by customers prior to the stop sell coming into effect, and from which customers did not switch away. In other words, customers with existing services are those who have not upgraded their service, switched providers or moved premises since the stop sell took effect.

3.11 Only two respondents commented on our proposal to retain network access requirements for existing services. Notably, Openreach suggested in its response to our June consultation that there should be an additional threshold, three years after the stop sell, and two years after the withdrawal of the copper charge control, after which network access requirements should be lifted. Openreach explained that it believes "it is important to give industry clear signals to help operators prepare in a timely manner for the inevitable switchover to the new full fibre platform."[29] The Communications Managers Association also commented that we should have a plan to stop provisioning of copper services.[30]

Rationale for our proposals

3.12 We now propose to revise the WFTMR proposals to propose conditions under which the obligation on Openreach to provide copper-based network access can be removed, to take into account recent developments and further support fibre investment.

Providing regulatory certainty given the pace of fibre deployment

3.13 We believe it is important to provide regulatory certainty on the conditions under which we would allow for complete copper retirement given the current momentum behind fibre deployment. While copper retirement is likely to be a process that will continue well beyond the WFTMR market review period, eventually fibre deployment will lead to the retirement of the copper network. Recent developments suggest fibre migration could be complete in some exchanges before the end of the market review period in March 2026.

3.14 As noted above, on 29 June 2020, Openreach notified stop sell in respect of 117 exchanges (in addition to the trial exchange in Salisbury), with the stop sell coming into effect from 29 June 2021, covering about 1.2 million premises.[31] On 5 October 2020, Openreach notified 51 additional exchanges, with the stop sell coming into effect from 5 October 2021,

[29] Openreach, 7 September 2020. *Response to Copper retirement – process for determining when copper regulation can be removed*, paragraph 15, [accessed 12 October 2020].
[30] Communications Managers Association, 7 September 2020. *Response to Copper retirement – process for determining when copper regulation can be removed*, page 1 [accessed 12 October 2020].
[31] ISPreview, 13 May 2020, *Openreach to Stop Selling Copper Phone in 118 Areas – Go FTTP* [accessed 12 October 2020]; Openreach, 29 June 2020. *GEN042/20 Notification of product stop sells in an additional 117 FTTP upgrade exchanges*, [accessed 12 October 2020].

covering some half a million additional premises.[32] As we noted in our June consultation, we expect Openreach to achieve 75% ultrafast coverage well in advance of June 2021 in those 117 notified exchanges. We similarly expect Openreach to achieve 75% ultrafast coverage in the additional 51 exchanges well in advance of October 2021, given half of those exchanges have already achieved or exceeded the 75% threshold. However, this stop sell is subject to us confirming our proposals in the WFTMR Statement.

3.15 If fibre deployment continues at pace in those 168 notified exchanges (plus the trial Salisbury exchange), and complete ultrafast coverage is reached by the required minimum two years after the stop sell, the copper charge control could be withdrawn in 117 of those exchanges in June 2023, and withdrawn in the additional 51 exchanges in October 2023.

3.16 More generally, given Openreach's fibre deployment announcements, there could be a significant number of exchanges where Openreach is able to notify and implement the stop sell before the end of the market review period. Openreach is planning to notify the stop sell of new copper services in additional exchanges quarterly.

3.17 In parallel, more retail providers have recently announced the launch of fibre services over the Openreach network. All the main retail providers on the Openreach platform (BT, Sky, TalkTalk, Vodafone and Zen) have now started to offer some form of fibre services to residential customers.[33] In Salisbury, where Openreach is trialling copper retirement, the pace of fibre take up has now started to increase, ahead of the stop sell which will take effect from December 2020. While fibre rollout is only in an early stage and the Salisbury exchange is a trial area, this could be encouraging for the future pace of fibre migration.

3.18 Given those developments, we believe it is important to give clarity in this market review period on the conditions under which we envisage copper regulation could be removed.

Further support to fibre migration

3.19 As we set out in the WFTMR consultation, we aim to put in place regulation that will promote fibre investment both from Openreach and other operators, in order to further the interests of citizens and consumers who will benefit from more reliable, faster broadband services.

3.20 Our copper retirement proposals support this overall objective of promoting fibre investment by shifting the focus of regulation from copper to fibre, to support the migration to fibre services. As we set out in the WFTMR consultation and above, the faster customers migrate from copper to fibre, the stronger the business case for investment is, as Openreach can avoid the costs of operating both copper and fibre networks in parallel.

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[32] Openreach, 5 October 2020. *GEN078/20 Notification of product stop sells in an additional 51 FTTP upgrade exchanges*, [accessed 12 October 2020].

[33] Availability appears to vary depending on the provider. In some locations, TalkTalk and Vodafone also offer packages over the CityFibre fibre network. See https://www.ispreview.co.uk/index.php/2020/07/isp-talktalk-uk-soft-launch-openreach-fttp-broadband-plans.html and https://www.ispreview.co.uk/index.php/2020/08/isp-vodafone-uk-unveil-openreach-fttp-home-broadband-plans.html [accessed 12 October 2020].

3.21 It is too early to anticipate whether our proposed conditions will be met and all remaining copper regulation removed in some exchanges before the end of the market review. However, providing additional clarity on those conditions enables Openreach to plan for copper retirement, provides more clarity to Openreach's customers on the importance of engaging in migration, and strengthens Openreach's business case, supporting its commitment to deploy fibre to 20 million homes by the mid-2020s, including 3.2 million premises in Area 3.

3.22 Furthermore, we consider that our proposed additional third threshold and consequent deregulation provides an additional incentive for Openreach to complete ultrafast coverage in an exchange area, as the value to Openreach of reaching 'complete' becomes greater. This supports the second objective of our copper retirement policy to ensure that, wherever possible, no homes and businesses are left behind.

3.23 Under our WFTMR proposals, exchange completion is the trigger for the withdrawal of the copper charge control. The same coverage condition must be met, under our current proposals, before all remaining copper regulation is withdrawn at premises where fibre is available. However, the additional benefits to Openreach of regulatory withdrawal would be brought forward, in particular avoiding the costs of maintaining remaining copper lines.

3.24 Finally, as explained in the WFTMR consultation, without a requirement to complete exchanges, we are concerned that Openreach may have the incentive to deploy fibre in a way that deters competitor investment: by either targeting just those parts of an exchange area where competitors are present, or by deploying ultrafast in part of an area just sufficient to deter competitor investment in that area in the short term and then redeploying resources to provide coverage elsewhere. This could cumulatively deter competitor investment across a wider area. If this were to result in less network competition, Openreach would then have less incentive to return and complete ultrafast coverage in an area.

Proposals to set conditions under which remaining copper regulation could be withdrawn

3.25 In relation to the WLA market[34] (Area 2 and Area 3), we are now proposing to revise our WFTMR proposals to set conditions under which remaining copper regulation could be withdrawn.

3.26 Where an exchange has been declared complete, i.e. an exchange where Openreach has reached full ultrafast coverage (less any excluded premises), and provided that fibre is available to the premises, in summary, we propose that:

- A third threshold notification may be published where:

[34] Defined in Volume 2: Market Assessment, paragraph 6.99 of the WFTMR January 2020 consultation.

  - no more than 10 percent of premises are still supplied with a copper-based service;[35] and Openreach has put in place reasonable measures to support the migration of vulnerable customers from copper to fibre services.

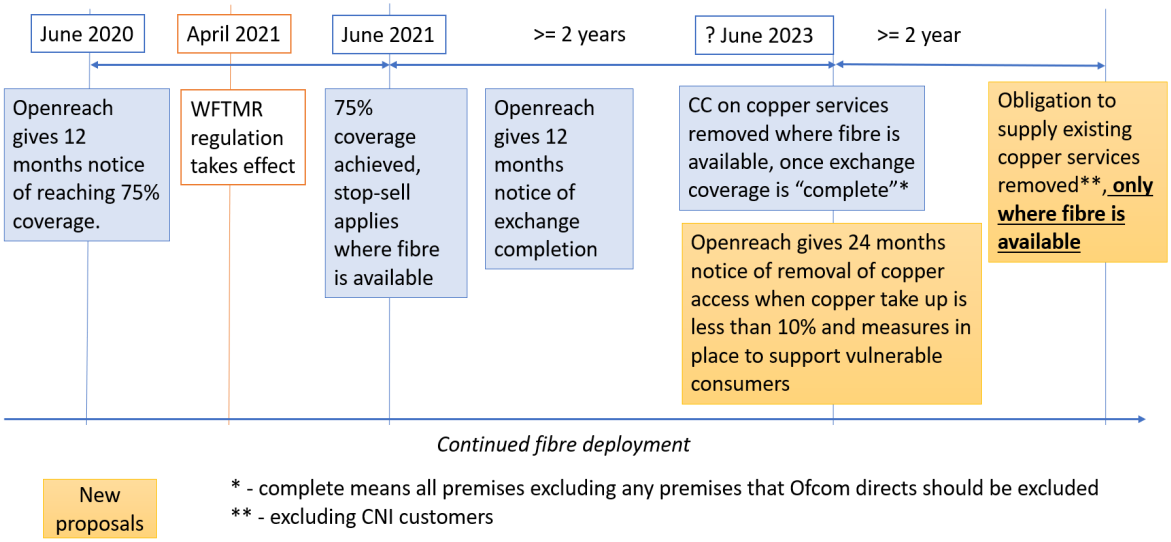
- The publication of a third threshold notification by Openreach will have the effect of withdrawing copper regulation in the relevant exchange area two years after its publication.

3.27 We are also proposing to exclude services that support the provision of CNI from those copper services that Openreach will no longer have to provide access to. Therefore, for services used to support CNI, Openreach will have pricing freedom on the 40/10 copper service, once an exchange is declared complete, but the proposal of the withdrawal of remaining copper regulation would not apply to those services, even in exchanges where there are at most 10% of premises still taking up copper services. We explain this proposed exception further below.

3.28 In line with our WFTMR proposals on copper retirement, we propose that only where fibre is available to the premises, and our above noted conditions have been met, can Openreach withdraw remaining copper services. For the avoidance of doubt, for those premises without fibre available to them, the general and specific network access obligations on Openreach in respect of copper-based services as may be set in the WFTMR Statement will continue to apply to Openreach. This is to ensure that retail providers using the Openreach network are able to continue to serve premises where Openreach fibre services are not available.

[35] Copper-based network access means the wholesale provision of network access by Openreach over its electronic communications network where the physical connection between the local access node and the Network Termination Point comprises copper wires either in whole or in part. This includes WLR, ISDN, MPF/SMPF, SLU, FTTC, G.fast, SOGEA, and SOG.fast.

Figure 1: Revised timeline for regulatory transition from copper to fibre – example of the first 117 exchanges



A minimum of two years to migrate remaining copper customers

3.29 Under our WFTMR proposals, when Openreach has completed ultrafast coverage in an exchange area, we proposed that we would lift the existing charge control on the anchor copper service, for those premises where fibre is available. In our WFTMR proposals we also said that an exchange would be declared complete when all premises in an exchange area, save for limited exclusions, have access to an Openreach ultrafast service. In our June consultation, we proposed that we would set any limited circumstances under which a premises may be excluded from a completed exchange by direction.[36]

3.30 By the time an exchange has been completed, Openreach would have had a minimum of three years building fibre services in that exchange (see Figure 1), one year before the stop sell applies, and an additional transition period of at least two years after the stop sell starts applying. Following completion, and as the charge control is lifted, Openreach would then be able to increase the price for its copper-based anchor service (MPF + FTTC or SOGEA 40/10 service) at premises where fibre is available. At that point only the charge control on the FTTP 40/10 anchor service would apply in respect of premises where fibre is available.

3.31 We expect that retail providers purchasing Openreach's services would use the period of regulatory transition to seek to migrate their customers, ahead of the point at which Openreach can raise the price of the copper-based anchor product. In practice, this could mean that, when Openreach's pricing freedom starts applying, there would be a limited

[36] Copper retirement June 2020 consultation.

number of customers, at premises where fibre services are available to them, who are still being supplied with a copper-based service.

3.32 However, the pace of customer migration may vary, and we are therefore proposing that before a third threshold notification is allowed, the number of premises that continue to use copper services must fall to a level such that a maximum of 10% of premises remain on copper-based services.

3.33 We recognise that there are likely to be instances where customers are unwilling or unable to migrate during the transition period, for instance where they have more complex services or have difficulties engaging with the switching process.

3.34 To ensure sufficient time to migrate those customers, in addition to the 12-month advanced stop sell notification and the regulatory transition period of at least two years, we propose that the remaining copper regulation should only be withdrawn two years after Openreach has published a third threshold notification that it has met the conditions to issue such a notice.[37] As noted above, this notification may only be published once an exchange has been declared complete, no more than 10% of premises in the exchange area are still supplied with a copper-based service, and Openreach has put in place reasonable measures to support the migration of vulnerable customers from copper to fibre services.

3.35 In particular, the two-year notification period would help to cater for customers who only had ultrafast services available at the end of the transition period or those with complex service needs. While we fully expect retail providers to prepare their customers for migration in ultrafast exchanges, we believe that an advance notice of two years would give retail providers additional time to prepare their customers for the switch, i.e. give notifications of service changes and offer new contracts.

3.36 A two-year notification period also helps the migration of customers with more complex needs, including services provided to support CNI. As noted above, we propose that Openreach can give notification of future service withdrawal when at most 10% of premises remain on copper services. Any CNI premises that continue to use copper services are included in this 10%, although for CNI, Openreach will continue to have an obligation to provide copper-based network access, even where fibre is available.

3.37 While fibre deployment is progressing at pace, fibre migration is only starting and therefore there is a degree of uncertainty as to the speed at which customers will migrate from copper to fibre, and the adoption of fibre services may be faster or slower than expected. As noted above, while our objective is to promote investment in fibre, we also want to support a smooth migration to fibre.

3.38 We therefore propose to allow for Ofcom to have the flexibility to vary the percentage threshold of customers which remain on copper-based services, which is a necessary pre-

[37] Out of the countries considered by our desk research (Italy, Norway, Portugal, Spain, Sweden, New Zealand and France), we note that different countries have adopted different models for copper retirement, but that there always seem to be a notice or transition period.

condition of Openreach publishing a third threshold notice, if this is needed to implement our policy objectives. Assuming we continue to hold our provisional view once we have made our decision in the WFTMR, we do not currently envisage that we would need to change the threshold. However, given the uncertainties with fibre rollout, we believe some regulatory flexibility is necessary because, as rollout progresses, further information on fibre take-up and on the challenges behind take-up figures may emerge. This information may indicate that there is a credible threat to our objectives to support copper retirement and ensure that reasonable measures are in place to protect customers, making it necessary for us to revisit the threshold.

3.39 We propose to calculate the percentage of remaining premises still on copper services by reference to the number of premises in the completed exchange. This would include premises where fibre is available, premises where G.fast services which can attain a speed of 300Mbit/s or more are available and, where applicable, premises defined as exceptions where Openreach has not been able to deploy ultrafast services despite all reasonable efforts. This is to encourage Openreach to continue to seek solutions to connect premises defined as exceptions.

3.40 As G.fast is a copper-based service, in exchanges where Openreach has a significant number of G.fast connections,[38] then those premises would count towards the percentage of premises which remain on copper-based services. While it is therefore possible that in exchanges with significant G.fast coverage, more than 10% of premises may remain on copper-based services and that therefore Openreach may not meet the threshold, at this stage we expect the number of those exchanges to be limited. We believe this is consistent with our objective of incentivising fibre deployment where possible.

3.41 The number of premises in a completed exchange would be based on the number of premises that exist at the time of the start of the fibre roll-out (i.e. when Openreach notifies a stop sell). Premises built since then, or premises which no longer exist, would not count towards the total coverage number. This is for simplicity and consistency with our proposals in the January WFTMR consultation. As we noted in the WFTMR, for those premises built after the start of fibre deployment where Openreach provides network, we expect network providers in most cases to deploy fibre.

Measures to protect customers

Vulnerable consumers

3.42 Before it can publish a third threshold notice in relation to a particular exchange, we are proposing that Openreach must have put in place reasonable measures to support the migration of vulnerable end-users from copper to fibre services. By vulnerable end-users we mean customers who, due to their personal circumstances, are especially susceptible to harm.

[38] Including where G.fast is delivered over a Single Order G.fast (SOGFAST).

3.43 We consider that this requirement is likely to be satisfied where Openreach has a clear migration path to suitable wholesale replacement services and measures in place, agreed with industry, to ensure vulnerable customers are protected.

3.44 We continue to expect industry to take all reasonable steps to protect vulnerable consumers and CNI. We recognise that the definition and identification of vulnerable customers, and the development of processes to protect them, is the responsibility of the whole industry. As part of the industry-wide development of measures to migrate vulnerable customers safely or otherwise protect their access to essential services, Openreach has a key role to play. We expect Openreach to have a leading role in helping industry develop the detailed measures necessary to support vulnerable customers.

3.45 As mentioned above, we set out the measures that we expect telecoms providers and Openreach to implement in respect of the migration to voice over IP services in February 2019 (see Annex 6). Broadly, the challenges with migration to IP that we set out in February 2019 and in relation to migration to fibre that we set out in the Salisbury consultation apply to the broader copper retirement, although fibre migration will likely require additional processes to be in place (for instance, in relation to engineer visits).

3.46 In relation to wholesale replacement services, we expect Openreach to continue to engage with its customers to ensure the needs of residential consumers are met. Openreach has already announced replacement services for residential consumers. Broadband customers can move to different bandwidths of fibre services, and voice-only customers can move to Openreach's low-bandwidth fibre service.[39] Where retail providers identify a need for a new service or for amending the terms of the service, there is an established process to discuss their requirements with Openreach.

3.47 In the case of healthcare devices supported by copper lines, we expect Openreach and retail providers to have procedures available to ensure those customers remain protected. Telecare providers are working with Openreach to test healthcare devices, to ensure that those devices continue to operate effectively over the new fibre connections. However, in cases where a care alarm or similar device cannot be supported by the fibre line or a replacement found, an alternative way to protect customers may include retaining or re-connecting their copper line.[40]

3.48 Generally, we would expect Openreach to have taken reasonable measures to support vulnerable customers where its behaviour is consistent with the best practice guide currently being developed by industry through working groups run by the Office of the Telecoms Adjudicator (OTA2) and Openreach.[41] This work includes the definition and identification of vulnerable consumers, protections for users of care alarms, issues around critical national infrastructure and communications/common messaging. The first version

[39] Openreach, 21 February 2020. *NGA009/20 GEA-FTTP and SOGEA 0.5/0.5 Mbps launch date and price notification* [accessed 12 October 2020].
[40] In line with the principles we proposed in our consultation on enabling the Salisbury trial.
[41] OTA2, 23 September 2020. *Trial Best practice guide WLR Withdrawal – Trial sites Salisbury and Mildenhall* [accessed 12 October 2020].

of the guide is due to be published by December 2020 and then refined as services roll out and lessons are learned from the migration trials underway in Salisbury and Mildenhall.

3.49 Ofcom is supportive of the development of such a good practice guide and we have written to the OTA2 setting out our expectations for this work in terms of scope, engagement with providers and the timing of outputs. We will continue to work with industry to ensure appropriate safeguards are in place to protect vulnerable consumers and to deliver a smooth transition.

Critical National Infrastructures

3.50 While regulation may be withdrawn in an exchange if all the other conditions are met, we propose that this withdrawal should not apply to Openreach products used by customers to support CNI services, such as utilities or emergency services.

3.51 We are aware that CNI organisations may have complex communications needs and that retail providers and Openreach may need further time from the start of fibre deployment in an exchange to identify suitable replacement services. In those circumstances, it is possible that price increases enabled by the removal of the copper charge control may not provide sufficient incentives for some CNIs to migrate services before all copper regulation is removed in an exchange.

3.52 We acknowledge that continuing to provide suitable communications services to CNIs is not only the responsibility of Openreach. This is a shared responsibility with retail providers and the end-customer, and eventually some services may no longer rely on an Openreach connection; the copper bearer may no longer be needed, may be replaced by a mobile or wireless connection, or may be replaced by a service provided by a competitor. Nonetheless, Openreach is key to continuing to support CNIs until replacement services are available.

Transparency and monitoring

3.53 To increase transparency to industry and customers on when changes in regulation take place as a result of copper retirement, in our WFTMR consultation, we proposed to impose further obligations on Openreach to provide additional notifications.[42]

3.54 We proposed to put in place a regime of notifications to make Openreach subject to an obligation to notify publicly, in writing, giving 12 months' notice of when it expects to reach the thresholds of 75%, and when it expects to complete ultrafast coverage. These expected dates would then represent the earliest dates that Openreach could make changes to prices and service availability. In the case of complete ultrafast coverage, the earliest expected date must be no less than two years after the commencement of 'stop sell' in that exchange.[43]

[42] WFTMR January 2020 consultation, Section 2, Volume 3.
[43] This obligation is in addition to the obligation to notify set out in the general access obligation that requires Openreach to give notice of 90 days for changes to prices, terms and conditions relating to existing WLA services.

3.55 We also proposed that Openreach publishes a notification in respect of an exchange when it reaches 75% ultrafast coverage and (after a minimum of two years) completes coverage in that exchange.

3.56 In relation to our proposal to allow Openreach to publish a third threshold notice in respect of an exchange, under the proposed WFTMR conditions, we propose to require Openreach to publish a notice only where all conditions for such a notice have been fulfilled. The third threshold notice will take effect two years later in respect of that exchange. As we explain in our WFTMR, our proposals to require Openreach to provide transparency of when it expects to reach the coverage thresholds that trigger changes in regulation should allow competing networks to also plan their commercial activities to attract retail or wholesale customers onto their network during the migration to fibre.

3.57 As set out above, we are proposing a longer advance notice for when copper regulation can be removed in an exchange to give retail providers additional time to prepare their customers for the switch, i.e. give notifications of service changes and offer new contracts.

3.58 To reflect our proposal of adding a third threshold notice to the regime of notification, we propose a minor revision to the proposed WFTMR condition 8.2, to make it explicit that the requirement on Openreach to publish a 12 months' notice in advance of publishing a threshold notice does not apply to the third threshold notice.

3.59 In section 3, Volume 2 of the WFTMR consultation document, we set out our proposals to implement the proposed transparency measures. In our June consultation, we also set out our plans to monitor the number of premises where ultrafast services are not available, and seek information from Openreach on the final percentage of premises where ultrafast is available, as well as the number of premises served by fibre services.[44] We propose to take a similar approach towards the third threshold.

3.60 We therefore plan to seek information from Openreach on the number and proportion of their customers remaining on copper-based services in each exchange, including information on whether any of those services in that exchange support CNI.

Impact of our proposal to introduce a third threshold

3.61 Our proposals to allow Openreach to withdraw existing copper-based services, subject to strict conditions and protections, and for a limited time towards the end of the WTMR market the review period, bring forward measures which we would have to consider as part of the next market review period in any event. Therefore, the main impact of our proposals is the potential of accelerating both the benefits and the risks associated with the retirement of the copper network. Generally, earlier migration benefits residential consumers by promoting and supporting fibre investment. In this section, we consider the associated risks and mitigations.

[44] Copper retirement June 2020 consultation.

Impact on consumers

3.62 Under our proposals, assuming that fibre rollout progresses at pace, the earliest that Openreach will be able to publish a third threshold notice in respect of an exchange, and thus withdraw exiting copper-based services two years later, is June 2023, i.e. at those 117 exchanges that Openreach notified in June 2020.

3.63 As we have explained above, the third threshold notification can only be published in respect of an exchange where the conditions for publishing such a notice are met, i.e. that ultrafast coverage is complete, fewer than 10% of premises in that exchange are still being supplied using copper services, and Openreach must have put in place reasonable measures to support the migration of vulnerable end users in that exchange from copper to fibre services. Once Openreach has notified it has reached the conditions for the third threshold, copper services could cease in these areas two years later. During the subsequent two years, issues that might prevent customers remaining on copper services from migrating to alternative ultrafast services can then be addressed.

3.64 It is clearly essential that consumers whose health and safety depend on devices such as care alarms remain able to access them, and that consumers needing additional support can switch smoothly (e.g. a consumer with dexterity or visual impairments needing assistance with installation).

3.65 As mentioned earlier, industry is already developing best practice guidelines to address the issues these customers face. The experience from early migrations and the trials in Mildenhall and Salisbury will allow the approach to the migration challenges to be developed further, with risks of harm to these consumers mitigated by retail providers having in place reasonable measures to support vulnerable consumers.

3.66 At the point that Openreach notifies its intention to withdraw copper services in an area, the majority of its customers will be using fibre services in that area. We anticipate that competition between retailers offering fibre services will deliver choice, value and quality of service for these consumers, and that our charge control of the fibre anchor product (FTTP 40/10), which includes a proposed prohibition on Openreach from imposing a connection charge where it already provides a copper service, will protect consumers.

3.67 As noted above, we only propose complete deregulation of copper services at premises where a fibre connection is available. Where there is no fibre connection, all copper regulation – including the charge control on copper services – would continue to apply.

3.68 There could be a risk that retail competition for those consumers remaining on copper services who purchase standard broadband may diminish over time. In exchange areas where Openreach has deployed fibre to most but not all premises, where fibre is not available, Openreach will be required to continue to provide copper services on regulated terms. However, retail providers may compete less actively and some may ultimately cease to provide copper services if the number of remaining standard broadband customers in an area falls to a level where it is uneconomic to continue to provide services.

3.69 However, our WFTMR proposals are intended to provide Openreach with the incentive to complete ultrafast coverage in an exchange area, and the potential risk of diminished retail competition would only apply to a small number of consumers, who may also have alternatives on the Openreach networks or other networks.

Impact on businesses and CNIs

3.70 Businesses and CNIs will need to prepare for the switch to fibre and engage with their retail providers to benefit from services that will suit their needs. We expect industry to have put in place solutions for more complex applications and, where fibre is not available, as for residential consumers, businesses and copper lines which support CNI will remain regulated.

3.71 We acknowledge above that the needs of CNI customers are complex and that copper services that support CNI will need to be retained if CNI customers' retail providers do not have replacement services ahead of the withdrawal of copper regulation. We therefore propose above that copper regulation would continue to apply to services that support CNI in this market review period.

Impact on competition

3.72 We do not expect our proposal for a third threshold notice which allows for the withdrawal of copper regulation to have an additional impact on retail providers over and above the impact of our wider copper retirement proposals in the WFTMR consultation. Retail providers will have had to prepare for stop sell and the end of the copper charge control, before any remaining copper regulation is lifted. Therefore, by then, they will have processes in place to migrate customers to fibre, including communicating changes in terms and conditions of service.

3.73 Our proposal continues to support network competition by providing the incentive to Openreach to complete coverage in an area.[45] We require ultrafast coverage in an exchange area to be complete (with scope for certain premises to be excepted) as a prerequisite for the removal of the copper charge control and subsequent notification of the removal of copper services. This is to address our concern that, absent this proposed obligation, Openreach would not have an incentive to complete exchanges and would be better able to target strategic overbuild where altnets are currently building networks.

3.74 There have been concerns that the lack of a cross-platform switching process to migrate customers on Openreach's copper network to an alternative fibre network can slow down or hamper the take up of services on the alternative fibre network. As mentioned in the January WFTMR consultation, the European Electronic Communications Code (EECC) specifies new requirements for all types of switches including where customers switch full-

[45] We explain how our proposals support network competition in paragraph 2.31 of *Volume 3: Pricing remedies* of the WFTMR January 2020 consultation.

fibre services and between different physical networks. Work is underway to implement these EECC requirements.[46]

Legal tests

3.75 Our proposed changes to the SMP conditions from the WFTMR consultation are set out in Annex 7.

3.76 When imposing SMP obligations, we need to demonstrate that the obligations in question are based on the nature of the problem identified, proportionate and justified in light of the policy objectives as set out in Article 8 of the Framework Directive. Section 8, Volume 3, of the WFMTR consultation, sets out how our WFTMR proposals, including our copper retirement proposals, meet the relevant legal tests set by the Communications Act 2003 (the "Act"). For the reasons set out in that section and for the reasons set out in this consultation document, we consider that each amended SMP condition which we are proposing continues to be:

a) objectively justifiable in relation to networks, services or facilities to which it relates;

b) not such to discriminate unduly against particular persons or against particular description of persons;

c) proportionate to what the condition or modification is intended to achieve; and

d) transparent in relation to what it is intended to achieve.

3.77 For the reasons set out in Volume 1 of the WFTMR consultation, we consider the proposed package of SMP conditions with the changes proposed in Annex 7 continues to both individually and together meet our duties in sections 3 and 4 of the Act.

Consultation questions

Question 1: Do you agree with our proposals to set conditions under which remaining regulation of existing copper-based services would be withdrawn?

Question 2: Do you agree with our proposal that those conditions should take effect two years after Openreach has given notification, in respect of an exchange, notifying that fewer than 10% of relevant premises remain on copper-based services in the completed exchange, and only where measures are in place to support vulnerable consumers?

Question 3: Do you support the exclusion of services that support CNI from our proposals allowing for full copper deregulation?

Please set out your reasons and supporting evidence for your response.

[46] Ofcom, December 2019. Consultation - *Fair treatment and easier switching for mobile and broadband customers: Proposals to implement the new European Electronic Communications Code*, Section 7 (Switching and porting) [accessed 12 October 2020].

The overview section in this document is a simplified high-level summary only. The proposals we are consulting on and our reasoning are set out in the full document.

A1. Responding to this consultation

How to respond

A1.1 Ofcom would like to receive views and comments on the issues raised in this document, by 5pm on 26 November 2020.

A1.2 You can download a response form from https://www.ofcom.org.uk/consultations-and-statements/category-2/copper-regulation-withdrawal-conditions. You can return this by email to the address provided in the response form.

A1.3 If your response is a large file, or has supporting charts, tables or other data, please email it to wftmr@ofcom.org.uk, as an attachment in Microsoft Word format, together with the cover sheet.

A1.4 We welcome responses in formats other than print, for example an audio recording or a British Sign Language video. To respond in BSL:

- Send us a recording of you signing your response. This should be no longer than 5 minutes. Suitable file formats are DVDs, wmv or QuickTime files. Or
- Upload a video of you signing your response directly to YouTube (or another hosting site) and send us the link.

A1.5 We will publish a transcript of any audio or video responses we receive (unless your response is confidential)

A1.6 We do not need a paper copy of your response as well as an electronic version. We will acknowledge receipt if your response is submitted via the online web form, but not otherwise.

A1.7 You do not have to answer all the questions in the consultation if you do not have a view; a short response on just one point is fine. We also welcome joint responses.

A1.8 It would be helpful if your response could include direct answers to the questions asked in the consultation document. The questions are listed at Annex 4. It would also help if you could explain why you hold your views, and what you think the effect of Ofcom's proposals would be.

A1.9 If you want to discuss the issues and questions raised in this consultation, please email WFTMR@ofcom.org.uk.

Confidentiality

A1.10 Consultations are more effective if we publish the responses before the consultation period closes. In particular, this can help people and organisations with limited resources or familiarity with the issues to respond in a more informed way. So, in the interests of transparency and good regulatory practice, and because we believe it is important that everyone who is interested in an issue can see other respondents' views, we usually publish all responses on the Ofcom website as soon as we receive them.

A1.11 If you think your response should be kept confidential, please specify which part(s) this applies to, and explain why. Please send any confidential sections as a separate annex. If you want your name, address, other contact details or job title to remain confidential, please provide them only in the cover sheet, so that we don't have to edit your response.

A1.12 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and try to respect it. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.

A1.13 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's intellectual property rights are explained further in our Terms of Use.

Next steps

A1.14 Following this consultation period, Ofcom plans to publish the consultation outcomes as part of the 2021 WFTMR statement.

A1.15 If you wish, you can register to receive mail updates alerting you to new Ofcom publications.

Ofcom's consultation processes

A1.16 Ofcom aims to make responding to a consultation as easy as possible. For more information, please see our consultation principles in Annex 2.

A1.17 If you have any comments or suggestions on how we manage our consultations, please email us at consult@ofcom.org.uk. We particularly welcome ideas on how Ofcom could more effectively seek the views of groups or individuals, such as small businesses and residential consumers, who are less likely to give their opinions through a formal consultation.

A1.18 If you would like to discuss these issues, or Ofcom's consultation processes more generally, please contact the corporation secretary: corporationsecretary@ofcom.org.uk

A2. Ofcom's consultation principles

Ofcom has seven principles that it follows for every public written consultation:

Before the consultation

A2.1 Wherever possible, we will hold informal talks with people and organisations before announcing a big consultation, to find out whether we are thinking along the right lines. If we do not have enough time to do this, we will hold an open meeting to explain our proposals, shortly after announcing the consultation.

During the consultation

A2.2 We will be clear about whom we are consulting, why, on what questions and for how long.

A2.3 We will make the consultation document as short and simple as possible, with a summary of no more than two pages. We will try to make it as easy as possible for people to give us a written response. If the consultation is complicated, we may provide a short Plain English / Cymraeg Clir guide, to help smaller organisations or individuals who would not otherwise be able to spare the time to share their views.

A2.4 We will consult for up to ten weeks, depending on the potential impact of our proposals.

A2.5 A person within Ofcom will be in charge of making sure we follow our own guidelines and aim to reach the largest possible number of people and organisations who may be interested in the outcome of our decisions. Ofcom's Consultation Champion is the main person to contact if you have views on the way we run our consultations.

A2.6 If we are not able to follow any of these seven principles, we will explain why.

After the consultation

A2.7 We think it is important that everyone who is interested in an issue can see other people's views, so we usually publish all the responses on our website as soon as we receive them. After the consultation we will make our decisions and publish a statement explaining what we are going to do, and why, showing how respondents' views helped to shape these decisions.

A3. Consultation coversheet

BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

Please tick below what part of your response you consider is confidential, giving your reasons why

Nothing ☐

Name/contact details/job title ☐

Whole response ☐

Organisation ☐

Part of the response ☐

If there is no separate annex, which parts? _____

_____

If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

DECLARATION

I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.

Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here.

Name Signed (if hard copy)

A4. Consultation questions

Question 1: Do you agree with our proposals to set conditions under which remaining regulation of existing copper-based services would be withdrawn?

Question 2: Do you agree with our proposal that those conditions should take effect two years after Openreach has given notification, in respect of an exchange, notifying that fewer than 10% of relevant premises remain on copper-based services in the completed exchange, and only where measures are in place to support vulnerable consumers?

Question 3: Do you support the exclusion of services that support CNI from our proposals allowing for full copper deregulation?

A5. Summary of the gradual withdrawal of copper regulation

Table 2.2: Summary of proposals where regulatory obligations will change with copper retirement

Scenario:	**Start of regulation**	**First threshold - 75% ultrafast**		**Second threshold - 100% ultrafast/exemption**			**Third threshold + min 24-month notice**		
	Existing services at start of market review period	Premises where FTTP is not available	Premises where FTTP is available	Exempted premises with no form of ultrafast	Premises where FTTP is not available	Premises where FTTP is available	Exempted premises with no form of ultrafast	Premises where FTTP is not available	Premises where FTTP is available
MPF and SLU products									
"requests for new forms of copper access"	No NA: migration No CC	No NA: migration No CC	Stop sell	No NA: migration No CC	No NA: migration No CC	Stop sell	No NA: migration No CC	No NA: migration No CC	No NA
MPF	NA CC	NA CC	Stop Sell CC	NA CC	NA CC	Stop sell No CC F&R: terms	NA CC	NA CC	No NA No CC
SLU	NA No CC	NA No CC	Stop sell No CC	NA No CC	NA No CC	Stop sell No CC F&R: terms	NA No CC	NA No CC	No NA No CC

VULA copper products									
"requests for new forms of copper access"	No NA: migration No CC	No NA: migration No CC	Stop sell	No NA: migration No CC	No NA: migration No CC	Stop sell	No NA: migration No CC	No NA: migration No CC	No NA
40/10 FTTC; SOGEA; G.fast; and SOG.fast	NA: FTTC/Gfast NA: SOGEA/SOG.fast CC: FTTC/SOGEA	NA: FTTC/Gfast NA: SOGEA/SOG.fast CC: FTTC/SOGEA	Stop sell CC:FTTC/SOGEA	NA: FTTC/G.fast NA: SOGEA/SOG.fast CC: FTTC/SOGEA	NA: FTTC/G.fast NA: SOGEA/SOG.fast CC: FTTC/SOGEA	Stop sell No CC F&R: terms	NA: FTTC/G.fast NA: SOGEA/SOG.fast CC: FTTC/SOGEA	NA: FTTC/G.fast NA: SOGEA/SOG.fast CC: FTTC/SOGEA	No NA No CC
Other FTTC; SOGEA; G.fast; and SOG.fast	NA: FTTC/G.fast NA: SOGEA/SOG.fast No CC	NA: FTTC/G.fast NA: SOGEA/SOG.fast No CC	Stop sell No CC	NA: FTTC/G.fast NA: SOGEA/SOG.fast No CC	NA: FTTC/G.fast NA: SOGEA/SOG.fast No CC	Stop sell No CC F&R: terms	NA: FTTC/G.fast NA: SOGEA/SOG.fast No CC	NA: FTTC/G.fast NA: SOGEA/SOG.fast No CC	No NA No CC
VULA fibre products									
"new forms of access"				NA No CC					
FTTP 40/10				NA CC: variant					
FTTP other				NA No CC					

Key to Table 2.2

NA - Network access obligation applies, which includes fair and reasonable terms, conditions and (unless there is a charge control) charges

NA: FTTC/G.fast - Network access obligation applies to FTTC or G.fast. Fair and reasonable terms, conditions and charges when CC does not apply. Fair and reasonable terms and conditions but not charges when CC applies.

NA: SOGEA/SOG.fast - Openreach can provide SOGEA/SOG.fast instead if requested by an access seeker, but cannot refuse access to FTTC/G.fast. Where Openreach does not provide SOGEA/SOG.fast, this can be subject to an access request under the general access obligation.

No NA: migration - No general or specific network access obligation in relation to copper, except for new copper services enabling FTTP and SOG.fast migration which is provided on fair and reasonable terms, conditions and charges

No NA - No general or specific network access requirement

Stop Sell - Stop sell on new requests (no change to existing services)

CC - Charge control applies

CC: FTTC/SOGEA - Charge control applies on FTTC/SOGEA or, if not available, on G.fast/SOG.fast

CC: variant - Charge control applies where network access to VULA copper not available or not required

No CC - No charge control

F&R: terms – For existing services, F&R applies to terms and conditions but not to charges

A6. Migration to voice over IP – measures we expect telecoms providers to implement

A6.1 In our February 2019 policy positioning statement on the future of fixed telephone services we set out the following measures that we expect telecoms providers to implement in respect of the migration to voice over IP. The measures state that, at a minimum, telecoms providers, either directly, or, where relevant, via their trade association, should:

Downstream services

- Share knowledge of the key downstream services impacted by the migration and examples of good practice/successful communication strategies, for example, by participating in Ofcom's and industry's All IP Working Groups;
- Develop a strategy to identify and engage with downstream service providers that utilise their landline services, in a timely fashion, to ensure they are aware of the change and the potential implications;
- Where relevant, make downstream service providers aware of any available testing facilities or facilitate access to the facilities offered by access network providers, so they can determine whether their services will work effectively over an IP network;
- Identify customers who use critical downstream services (such as a telecare device), develop appropriate communications plans and put in extra protection measures. For example, this could include delaying a customer's migration until satisfied that their downstream service is compatible with VoIP;
- Develop effective processes to support customers who inform them that their downstream services do not function as planned after migration. This could include returning them to a PSTN service if it remains available where the failure creates a risk of significant harm.

Supporting migrating customers

- Give adequate notice of service changes, noting that both residential and business customers may need time to acquire and configure new equipment;
- Ensure that all communications regarding the migration are clear and timely, in a format that reflects the needs of the customer, and include information about the potential impact on equipment that uses the PSTN;
- Assess customers' needs and offer help with migration (for example, a home visit to install a router) if necessary;
- Offer advice and assistance for all migrating customers, including those who use downstream services, and co-operate with providers of these services, to minimise disruption;

- Put ongoing protections in place to respond appropriately to later changes in end-users' circumstances, for example, customers that migrate to a VoIP service and then purchase a security alarm or telecare device.

A7. Draft legal instrument

A7.1 We have published the draft legal instrument alongside the consultation, with our proposed additions underlined and highlighted. However, the draft legal instrument may not be fully accessible, including to those with screen readers. We have therefore published a second, clean version – incorporating the proposed changes without these being marked up – on the webpage for this consultation.