Consultation response form

Your response

Question	Your response
Question 1: Functioning of the net neutrality framework **(a) Which aspects of the current net neutrality framework do you consider work well and should be maintained? Please provide details including any supporting evidence and analysis.** **(b) Which aspects, if any, of the current net neutrality framework do you consider work less well and what impact has this had? What, if any, steps to you think could be taken to address this and what impact could this have? Please provide details including the rule or guidance your response relates to and any supporting evidence or analysis.**	Confidential? –N Our full submission is contained in this single answer. **Summary** • Vital public services are moving online. This is especially true in education, accelerated by the pandemic • Up to nearly one million children can only access the internet through 3/4G, according to Ofcom, and half a million children have no access at all. This risks them being denied the universal basic right to education and other public services • Net Neutrality rules need to be updated to allow core educational content - and other public services - to be delivered online at no cost to the consumer. This must be centrally overseen and managed to make sure it is applied universally and not left up to individual networks. • The government has begun to address the device barrier to education for disadvantaged children with the distribution of free laptops. It is up to Ofcom, internet providers and the government, to address the data barrier for these children **Move towards online public services** The general principle of net neutrality is a cornerstone of the internet. It was established to ensure all content is equally available and not skewed by the intermediary providing it. It worked well when digital was a “nice to have”. When vital public services initially moved online, they were delivered by other means too. However, the Covid-19 pandemic has accelerated the process of vital public services moving exclusively online or “digital first” while, simultaneously, laying bare stark disparities in internet access in our country. When families could choose whether to access an essential public service in-person, on paper or online, digital poverty was not such a pressing issue. These

choices are fast diminishing with “digital first” now the predominant way many services are provided. For example, universal credit is administered solely online. It means those households who cannot afford reliable connectivity are falling further into exclusion and isolation, or poverty as they substitute spending on other essentials to pay for it.

Net Neutrality needs to reflect that education is moving inexorably online

This was particularly evident in education during Covid. Data show when learning shifted to remote education, digital poverty meant the most disadvantaged pupils suffered most. As a result the learning gap between rich and poor has widened, according to the most recent research conducted by the Education Policy Institute for the Department for Education. (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1029841/Understanding_progress_in_the_2020-21_academic_year_Report_4_October2021.pdf)

By April 2021 average learning losses for primary students were 3.4 months for maths, and 2.2 months for reading. But for disadvantaged pupils, the average was 4.2 months of maths and 2.7 for reading. A similar effect was found for secondary students.

This shift to digital learning within education is permanent. Now that teachers have upskilled, a process that accelerated during the pandemic, and are familiar with the technology, they realise its potential and are using it to deliver core activity. Ofsted, the schools inspector, has said the shift to remote learning during the pandemic has many benefits for the future of learning, including supporting anxious or excluded students, revision, snow days, extended pupil illness and homework.(https://www.gov.uk/government/publications/remote-education-research/remote-education-research#future-benefits-to-remote-education) The Education Policy Institute said in its latest report on education recovery that “online learning and digital platforms can provide new solutions for long-standing problems such as inclusion, parental engagement and even improvements to assessment techniques”. (https://epi.org.uk/wp-content/uploads/2021/10/EPI-Education-Recovery-Report-2__.pdf)

The latest (October 2021) Oak National Academy figures show the online classroom has up to 175,000 weekly users during term time. It is no longer the case that every pupil has access

to core education on the same terms if they do not have an internet connected laptop/desktop device. We are in danger of disadvantaged children being shut out of a full education.

Provision of devices to disadvantaged children is one aspect of closing this divide and the government has started to address this with provision of free laptops. But devices are useless without connectivity. It is this which Ofcom has rightly grown concerned about. The current system of net neutrality not only gives internet providers **no incentive at all** to zero-rate vital public services, it makes it legally difficult if not impossible. It took extraordinary efforts on the part of Oak National Academy to secure temporary zero-rating for our educational content during the pandemic, which has now largely ended.

Impact of Net Neutrality on Oak National Academy

Oak National Academy (Oak) is a national online classroom that was initially launched in April 2020 as a pandemic response, to provide free online lessons for children in lockdown. By September 2020, 10,000 free Oak lessons were available covering the entire curriculum from early years to Y11, with an additional offering for children with special educational needs. From day one it received the backing of, and then funding from, the Department for Education and acted as a core pillar in the government's schools Covid-19 contingency plans. Pupils have taken part in 130 million Oak lessons since it launched and over half (56 per cent) of teachers in the country use the site. (https://www.thenational.academy/annual-report-2020-21)
Following the return to schools for all pupils, Oak has continued, with teachers using the site as a national resource for lesson materials (videos, slides, worksheets, quizzes etc) whilst pupils directly access the online lessons for homework, revision, and as part of their core learning. In October 2021 over 170,000 pupils accessed the site each week. It is, in short, a new, universal public service.

During the height of the pandemic, in the autumn of 2020, Oak began to discuss with internet providers the possibility of zero-rating its educational content so children with no broadband access at home and using a mobile phone could access the platform without it counting against their data allowance.
Ofcom's own figures show, up to nearly one million children can only access the internet through 3/4G, and half a million children have no access at all. One in five children use a mobile to access Oak.

	(https://www.ofcom.org.uk/__data/assets/pdf_file/0037/194878/technology-tracker-2020-uk-data-tables.pdf) In December 2020 an Ofcom survey on the affordability of telecoms costs found that 1 in 5 families were struggling – equivalent to 4.7million households – and 1 in 20 were cutting back on food and clothes to pay for it. (https://www.ofcom.org.uk/phones-telecoms-and-internet/information-for-industry/policy/affordability-of-communications-services) Each lesson varies, but one Oak lesson can use up to 250MB of data to stream. That means if a pupil is unable to attend for a week, such as due to an exclusion, or longer-term sickness,, accessing four lessons a day would use up to 5GB of data. A similar amount of data would be used for 5 hours worth of online homework a week, over a month. This quickly uses up any data allowance a family may have - especially those poorest families accessing via a mobile phone and/or on a pay as you go contract. After weeks of protracted negotiation which appeared to reach a dead-end, Oak launched a high-profile media campaign to put pressure on the internet providers to zero-rate our content. Eventually they agreed in principle, on condition all content and requests were served from a subdomain of thenational.academy. This was a considerable task. Most websites and applications contain requests to third party domains, and Oak's 10,000 different lessons featured embedded activities, quizzes, Google Forms and Slides, analytics tools and videos which were all served by third parties. Oak's small tech team is fortunate to have some of the most able digital engineers in the country, along with access to others in the commercial sector, so they undertook to rebuild significant parts of the Oak site so all traffic was served from its own domain. Oak was then able to provide 11 operators with a guarantee all content was routed through one apex domain where all its subdomains could be zero-rated. BT also zero-rated BBC bitesize. At the time Ofcom waived the rules on net neutrality to allow this to proceed, but only on the basis that it was an emergency pandemic response. Without this the networks would not have proceeded. This is despite many MNOs using zero-rating widely in their marketing activities to recruit and retain customers, which Ofcom has the power to approve. For example, EE gave all customers unlimited free data on Apple Music.

Now that all schools have returned, some networks are now proposing to turn off the zero-rating of Oak, citing net neutrality as an inhibiting factor. This would have hugely negative impacts for the most disadvantaged families.

Net Neutrality and Education beyond the pandemic

Aside from Covid disruption Oak and other digital platforms are widely used by children at home for homework, revision and catch-up. This trend towards digital in education predates Covid-19. As mentioned above, Ofsted and the Education Policy Institute say there are considerable advantages for greater use of technology in education. A survey by Teacher Tapp conducted in October 2021 shows it has accelerated markedly March 2021. It found 55 per cent of teachers say following the pandemic they have shifted to setting and collecting homework online and 39 per cent to marking and giving feedback online. Oak's own qualitative research conducted directly with children in September 2021 found revision was one of main uses of the platform, both directed by teachers and pupils finding their own revision resources on the site. Clearly this trend places pupils with limited or no reliable access to data at further educational disadvantage.

A long-term solution to access to online education is therefore needed to prevent a new fundamental access-to-education problem emerging as different aspects of learning migrate online. The government has begun to address the problem of ensuring children from low-income families and other disadvantaged backgrounds have devices, distributing 1.3 million laptops during the school shutdowns and announcing a further 500,000 in October 2021. (https://www.gov.uk/government/news/care-leavers-and-disadvantaged-pupils-to-benefit-from-126-million-investment-in-new-laptops-and-tablets)

It is up to Ofcom with the internet providers, along with the government, to address the data barrier for these children, or risk them being denied access to a full education.

The zero-rating of Oak during the pandemic has been hugely effective as it is universal and catches all families without any need for interventions or additional process and burden on schools. Other schemes were not a success. BT's WiFi voucher scheme was discontinued by the Government in January as it was "unreliable and inconsistent".

	Given the network provider's caution and patchwork response on this to date, Ofcom should lead efforts to develop a universal solution that makes sure all young people can access basic educational services online for free. Given its universal and unbureaucratic nature, we believe this should start with a move towards sites which provide core educational content being zero-rated permanently. Given the breadth of resources schools use and ask their pupils to engage with, this would need to cover a range of sites. It also needs to be applied consistently across all networks, and so must be led by Ofcom. There is a complex challenge to agree which sites meet the criteria for zero-rating. One potential solution could be to consider zero-rating like a free-phone 0800 number. There could be a process where: • Government and Ofcom agree a set of criteria that edtech providers need to meet to be considered as core educational content • Providers then apply to be approved • Those successful are then zero-rated by all networks by default on all provider plans • The cost of this could then be split between government (for providing access to core educational content) and the mobile networks. • All MNOs and VMNOs must apply to Ofcom to be a telecoms operator in the UK, so this agreement could be built into licence renewal to become a certified telecoms operator. It could be phased in for existing providers on renewal and apply to all new operators. It could then be built into the cost model for providers who ultimately pass it on to the paying customers equitably as overhead. • Providers (such as Oak) could potentially also contribute (in the same way a provider pays for a license to have an 0800 number) - with the cost depending on the amount of data a provider uses, so as not to block out innovation or smaller providers. Significant work would be required to develop this idea, and the criteria for what is classed as core educational content. The team at Oak National Academy are ready and willing to work together with the networks, government, Ofcom

	and other providers (eg through BESA) to explore and develop this and other ideas. Ends
Question 2: Use cases, technologies, and other market developments **(a) What, if any, specific current or future use cases, technologies or other market developments have raised, or may raise, particular concerns or issues under the net neutrality framework?** **(b) What, if any, steps do you think could be taken to address these concerns or issues and what impact could this have? Please provide details of the use case, technology or market development and the rule or guidance your response relates to, as well as any supporting evidence and analysis.**	n/a
Question 3: Value chain **Are there particular business models or aspects of the internet or other value chains that you think we should consider as part of our review? Please explain why, providing details including any supporting evidence or analysis.**	n/a
Question 4: International cases studies **Are there any international case studies or approaches to net neutrality that you think we could usefully consider? Please include details of any analysis or assessments.**	n/a
Question 5: Guidance and approach to compliance and enforcement **Are there specific challenges with the existing guidance that we should be aware of (e.g. ambiguity, gaps)? Assuming the rules stay broadly the same, which areas could Ofcom usefully provide additional clarity or guidance on? Please provide details.**	n/a

Question 6: Annual report **Do you find Ofcom's annual monitoring report useful or are there any changes you think we could usefully make either to the content or how we communicate this?**	n/a
Question 7: Other **Is there any other evidence or analysis that you are aware of and/or could provide to aid our review?**	All evidence that has contributed to our submission is contained within it, in hyperlinks for ease of use.