

BBC Response to Ofcom Consultation: Net Neutrality Review

13 January 2023

#### **Executive summary**

- 1. The BBC is supportive of the current net neutrality framework, which we believe should be maintained. The rules are rooted in key principles, and function well to ensure an open internet in the UK.
- 2. Net neutrality allows consumers equal access to content of their choice, preventing the networks, gatekeepers to this content, from unfairly restricting content flowing through the network.
- 3. This openness has maintained freedom of choice for internet users and maintained competition between content providers big and small. As well as allowing new services, the open internet has contributed to an increase in the quality of service in the home (such as video streaming services), giving consumers more choice and improving their experience. Ofcom research from August 2022 showed that 81% of BBC iPlayer users were satisfied with the service.<sup>1</sup>
- 4. An open internet is key for the BBC allowing us to innovate in the delivery of public service content over the internet, and to reach the widest range of audiences, in line with our commitment to universality. We need an open internet to allow us to deliver the benefits of IP distribution connecting more deeply with audiences and providing them with better services and choice.
- 5. It is important that there is clear guidance in place, to ensure that all parties are clear on what is and is not permitted under the rules, and to promote innovation. However, guidance should not be used as a proxy for a relaxation in the rules. The rules are flexible, as has been shown over recent years (for example, with the launch of specialised services such as BT's and Virgin's Internet Protocol TV services). Although clarity is welcome, any amendments to guidance should not reduce the protections available.
- 6. A number of the proposals in the consultation are targeted at products that do not yet exist, or to solve predicted future problems. Relaxations in guidance at this stage could lead to changes in a market which is working well 94% of people in the UK now have access to the internet at home, with news and governmental public services among the most visited services<sup>2</sup>. In some areas (details below) we would suggest guidance should be amended in future, if and when there is clear evidence of problems developing.
- 7. In terms of the specific proposals:

<sup>&</sup>lt;sup>1</sup> Media Nations 2022

<sup>&</sup>lt;sup>2</sup> Ofcom Online Nations 2022

- The approach on charging is welcome a prohibition on Internet Service Providers (ISPs) charging content, application or service providers (CAPs) for access to the network is a cornerstone of net neutrality and crucial for distribution planning and investment decisions by CAPs. We would note however that the guidance is silent on charging Content Delivery Networks (CDNs) or interconnections. Any such charges could impact competition in the CDN market, and would be passed on to CAPs. This could prove a loophole for ISPs in introducing charging to the market.
- Ofcom's proposed approach on zero rating is welcome, although Type 3 offers must not be allowed to distort competition.
  Emergency broadcast and other emergency information services should be classified as Type 1.
- The proposals on traffic management in retail offers have the potential to harm consumers and limit innovation by driving down average quality levels across the board.
- There is not enough evidence to justify allowing ISPs greater flexibility in management of traffic at times of congestion.
- We do not support any legislative changes to allow a more permissive approach to traffic management.
- The position of specialised services is welcome it is important to create an environment in which ISPs feel safe to innovate. It is important that increased flexibility doesn't force services which could be delivered over the internet to be specialised services.
- Consumers should benefit from the protections of an open internet, regardless of the device they are using.
- The BBC is supportive of a safe internet guidance should be flexible enough to allow ISPs to facilitate parental controls and introduce measures to deal with scams.
- 8. We are aware that Ofcom is not consulting on changes to the net neutrality framework, which would be a matter for Parliament. However, the consultation does touch upon areas for potential future legislative change. Given the effective functioning of the rules, and Ofcom's proposals to clarify guidance in this area, we can see no need for Parliament to consider legislating to make changes to the existing framework. Any perceived risk of legislative change would create uncertainty for a well-functioning industry.

#### Introduction

- 9. The BBC welcomes the opportunity to respond to Ofcom's consultation on its net neutrality review, including through responding to the initial call for evidence.
- 10.As explained in our response<sup>3</sup> to the call for evidence in November 2021, the net neutrality rules have ensured and should continue to ensure an open internet in the UK. An open internet means all users can access the services they choose to via their ISP. And they can do so at the same speed and quality as with any similar services, regardless of the device used or the provider of the service consumed. In other words, the rules have ensured that ISPs are not able to give priority to, or slow down access speeds for, particular content providers to serve their own interests. This openness has maintained freedom of choice for internet users and maintained competition between content providers big and small. It has also ensured that the same internet services are available to all users regardless of ISP.
- 11. The open internet is based on key principles which have ensured that rules remain flexible and fit for purpose. As set out in our response to Ofcom's initial call for evidence, these principles include:
  - Preservation of the internet as a tool for 'innovation without permission' connecting end-users with content and services without gatekeeper actors.
  - The rights of end-users to access and distribute (lawful) content, applications and services without discrimination, via their internet access service ("IAS").
  - Equal treatment of traffic, irrespective of its sender or receiver, content, application or service, or terminal equipment (subject to specific defined exceptions lawfulness, network security, preventing congestion).
  - The application of transparent, non-discriminatory and proportionate reasonable traffic management measures which are not based on commercial considerations.
  - The ability of providers of IAS to offer specialised services with specific levels of quality requirements, as long as this doesn't impede the quality of IAS
- 12.It is crucial that these principles are preserved, to prevent the reemergence of poor outcomes for end-users prior to implementation of the

<sup>&</sup>lt;sup>3</sup> https://www.ofcom.org.uk/\_\_data/assets/pdf\_file/0022/229522/bbc.pdf

rules, such as a worsened viewing experience due to throttling (limiting download speed) of BBC iPlayer<sup>4</sup>.

- 13.As noted above, a significant majority of people in the UK have access to the internet at home. We have seen increased take up of public service video content<sup>5</sup>. We know that consumers value internet access, and that this provides wider economic and societal benefits across the UK. It is important that consumers remain protected, and these benefits are not eroded through restrictions on an open internet.
- 14.It is important that any relaxation of the rules does not upset the effective functioning of the open internet, in which end-user demand for content successfully drives UK growth. Any evidence of harm caused by the current rules would have to be weighed against potential harm caused by overhauling the rules. The latter could be far greater, as is set out in detail later in this response.
- 15.We understand that Ofcom are not consulting on changes to the net neutrality rules, which are a matter for Parliament. Nonetheless, we would like to take this opportunity to caution against any opening up of legislation. Such revisions, even if intended to make changes which would protect consumers, risk leading to further changes, which could undermine the open internet. A risk of legislative change would create uncertainty for a well-functioning industry.
- 16. Clarity in guidance is always welcome, and we are supportive of amendments which will help drive innovation, by providing reassurance to networks on what action is permitted under the rules. This clarity will also be beneficial to CAPs, in planning development of their services. However, clarification of guidance should not lead to a relaxation in the regime, reducing protections for consumers – for example, leading to consumers on lower incomes having poorer quality services which do not allow them to access a full range of content available via the internet (as explained in more detail below).
- 17.We would also welcome greater clarity on the status of the BEREC Guidelines, in light of Ofcom's updated guidance.
- 18.A number of Ofcom's proposals appear to relate to products and use cases that don't yet exist (most notably in relation to differential service levels in retail offers). Although we understand the need to be forward looking, and promote innovation, this is a risky approach, which could damage

<sup>&</sup>lt;sup>4</sup> See http://news.bbc.co.uk/1/hi/technology/8077839.stm

<sup>&</sup>lt;sup>5</sup> Ofcom Media Nations UK 2022

consumers, in order to respond to threats and services which may never arise.

19. This response includes the BBC's answers to the questions asked in the consultation. It also sets out our position on charging.

### Charging

- 20. The question of whether CAPs should have to make a financial contribution to ISP network costs is an issue of debate in a number of jurisdictions, and has been raised as part of Ofcom's work.
- 21.We agree with the analysis in the consultation response. The charging issue is fundamental to the net neutrality framework, and any changes could have a significant impact on CAPs and consumers.
- 22.We believe there would be a number of risks in allowing ISPs to charge CAPs for access. This view is supported by BEREC, which in a recent preliminary finding found that there was no evidence that a charging mechanism was justified, and that such a mechanism could create risks for the wider internet ecosystem<sup>6</sup>.
- 23.As Ofcom makes clear in the consultation, the broadband market is driven by consumer demand. There is a symbiotic relationship between ISPs and CAPs, in which high quality content, produced and funded by CAPs, including PSBs, drives increased consumer demand for networks, encouraging consumers to invest in higher speed packages, and thus driving business demand for ISPs.
- 24.As noted in a recent Analysys Mason report<sup>7</sup> "proposals for mandating network usage fees rely on arguments that falter under scrutiny. Proponents of these fees tend to mischaracterize the relationship between traffic delivery and cost, while understating ongoing investments by CAPs in internet infrastructure". As highlighted in Ofcom's consultation, CAPs take considerable steps to ensure that traffic is managed efficiently, especially for major events (for example, the FIFA World Cup), which drive predictable increases in demand. These steps include investment in caches and CDNs, and working collaboratively with ISPs to manage traffic and demand.
- 25.As noted in the consultation, traffic demand is driven by requests from retail consumers, rather than CAPs themselves, but nonetheless, CAPs

<sup>&</sup>lt;sup>6</sup> https://www.berec.europa.eu/system/files/2022-

<sup>10/</sup>BEREC%20BoR%20%2822%29%20137%20BEREC\_preliminary-assessment-payments-CAPs-to-ISPs\_0.pdf <sup>7</sup> The impact of tech companies' network investment on the economics of broadband ISPs October 2022 https://www.analysysmason.com/consulting-redirect/reports/internet-content-application-providers-infrastructure-investment-2022

proactively address any issues with network congestion. Obstacles to accessing content damage us, and our relationship with consumers. Given the steps taken by CAPs, costs already incurred to manage traffic, and mitigations to accommodate the lack of control over demand, there is no justification for the introduction of a charging regime.

- 26.Unlike end-users, CAPs cannot easily threaten to switch away from ISPs, because they hold a gatekeeper position. Refusing to supply our content to particular ISPs would mean that we reach fewer consumers, particularly problematic for the BBC, and our obligations to be universal. This means that CAPs cannot discipline ISP conduct or pricing.
- 27.A charging system could incentivise ISPs to charge monopoly prices to CAPs, or throttle traffic to incentivise payment. This would create a significant extra cost burden onto CAPs, and stifle innovation by creating barriers to entry for new CAPs. It is not certain that any profits from charging would be reinvested in network capacity, given that scarce capacity would be a driver of revenue for ISPs – this could ultimately lead to poorer service for the end-user.
- 28.We do not believe that any such regime would ultimately benefit consumers. Research shows that end-users are reluctant to switch broadband provider, due to perceptions that it is a complex process<sup>8</sup>. Consumers who were seeing the consequences of throttled traffic from CAPs which had not paid for ISP access may therefore be more likely to switch content provider than broadband provider, thus reducing the choice of content available to them.
- 29.CAPs that drive the highest traffic demand tend to be video content providers. A large number of these operate a paid subscription service, and so any cost incurred to access networks would ultimately be passed back to consumers. The BBC has a fixed licence fee income, and so could not directly pass on any cost. However, as our budget is fixed, any new costs would likely come from our content budgets or the quality of experience we provide to consumers (eg reduced bit rates). This would limit the public service content and services we are able to offer to licence fee payers. In addition, differential pricing could result in differences in service by ISP, eroding the universality of internet services.
- 30. There is no evidence that a charging regime would lower broadband costs for consumers. Mandated network usage fees also risk increasing costs for many ISPs, by reducing CAPs' incentives to invest in infrastructure and

<sup>&</sup>lt;sup>8</sup> 12 The UK ISP market is less competitive than the content market. There are only a small number of UK ISPs and switching between them is difficult due contractual lock-in and additional costs. Ofcom recently reported that 40% of people are deterred from switching due to complexity – see https://www.bbc.co.uk/news/technology-55918697

processes that help optimize traffic delivery for ISPs, such as caching content closer to end users<sup>9</sup>.

- 31. For these reasons, we were pleased to see that Ofcom has not recommended the introduction of a charging regime. However, the issue of charging for carriage remains an open one. The guidance looks at the relationship between ISPs and CAPs. It does not address the relationship between CAPs and CDNs.
- 32.All major CAPs will use CDNs to manage their traffic (whether their own or 3<sup>rd</sup> party), and will pay for this. A possible risk in the future is that ISPs could seek to charge CDNs for access, or priority access, to the networks through restrictions to interconnection capacity. A move towards 100% encryption would mean that ISPs could not identify which CAP the traffic originated from, but would be able to identify traffic originating from a CAP's own CDN, a simpler way of identifying traffic in order to charge.
- 33.If charging CDNs for access were permitted it would allow ISPs to influence the CDN market, and provide an indirect way for ISPs to charge CAPs for network access – and CAPs would likely pass this cost onto consumers, reducing fair and equitable network access, and creating poor consumer outcomes. Although we note that the relationship with CDNs falls outside of the net neutrality framework, we would welcome any signalling from Ofcom that this behaviour would not be in line with open internet principles.
- 34.We would welcome further consultation, if and when any future changes are considered in relation to the approach on charging.

### Zero-rating

Question 1: Do you agree with our assessment of zero-rating offers and our proposed approach?

Question 2: Do you agree with the criteria we use to define Type One, Type Two and Type Three zero-rating offers and our proposed approach to such offers?

Question 3: Do you agree with the approach in our guidance in Annex 5 in relation to zero-rating?

35. To the extent that zero-rating deals remain permissible in the UK under the net neutrality rules, a case by case assessment of such deals should continue to apply. It is important to continue to allow zero-rating under

<sup>&</sup>lt;sup>9</sup> Analysys Mason October 2022

exceptional circumstances, and we have seen that the current rules have worked well, for example allowing the BBC and others to work with ISPs on zero rating for education content during the Covid pandemic. However, some deals could impact competition in the market.

- 36.We recognise the need for greater clarity around zero-rating, and are broadly in agreement with the proposed approach. It is important, however, that changes to guidance are not used as a way of eroding net neutrality principles.
- 37. We agree with the criteria and approach taken for Type One. It will be important that emergency broadcast, and any other key services that the BBC may provide at times of emergency, or be required or called upon by Government to provide, should be zero rated (for example, the zero rating of BBC Bitesize during the covid pandemic). This will mean that we will be able to provide key services and communications universally (including to those on limited data packages), without the uncertainty or delay caused by the more detailed assessments of other types of zero rating offer.
- 38.We agree with the criteria and approach taken for Type Two. We note that for this type, the legal requirements must be sufficiently fair, reasonable and non-discriminatory to ensure that all CAPs of a particular class are able to access zero rating offers.
- 39.It is likely that video traffic will be offered as a Type Two offer. If all video traffic is zero rated, there will be little practical difference for consumers between a zero rating offer and unlimited data. Zero rating will act as an alternative marketing option for networks, rather than a real terms difference for consumers.
- 40.We do have some concerns about the approach to Type Three and would welcome more information about how this would work, and in what circumstances Type Three offers would be permitted.
- 41. A vertically integrated CAP, even one with a relatively small market share, could use zero rating to gain a dominant market position, or to entrench an already dominant market position (e.g. for a CAP which also manufactures devices). Even short term zero rating could allow a CAP to gain a competitive advantage. For example, a zero rated VOD platform could use the offer to build subscriber numbers, and could maintain these even once the zero rating offer had ended.
- 42. In the consultation, Ofcom refers to assessing Type Three offers on an individual basis. We would suggest that Ofcom assess more widely, considering what other offers the CAP is included in. A CAP with strong bargaining power could leverage this to offer zero rating offers on multiple ISPs at the same time, thus further entrenching market dominance.

43.It is worth noting that, as we move towards 100% encryption, it will be increasingly difficult for ISPs to identify where traffic originates from, making zero rating offers technically challenging. In order for zero rating offers to work in a world of 100% encryption, CAPs will have to take steps to make their content identifiable (e.g. through dedicated IPs, which can be a premium CDN service) to de-encrypt zero rated content. This will incur a cost, which will mean that zero rated offers are more accessible to large CAPs than small CAPs.

Question 4: What are your views on whether zero-rated content should be able to be accessed once a customer's data allowance has been used up?

44.We are supportive of the approach, especially for Type One. We do not believe there is a need to open up legislation. Clear guidance and a consistent approach to enforcement, as proposed in the consultation, is a better way of achieving the desired outcome.

#### Traffic management

#### Retail offers

Question 5: Do you agree with our assessment of retail offers with different quality levels and our proposed approach?

Question 6: Do you agree with the approach in our guidance in Annex 5 in relation to differentiated retail offers, including transparency requirements, improved regulatory monitoring and reporting of retail offers with different quality levels as well as the general quality of the internet access services?

- 45.We have some concerns about the proposals in relation to retail offers these may be harmful for individual consumers, as well as having an impact on innovation and developments across the broadband value chain.
- 46.Retail packages with differing service levels (on latency, packet loss and jitter) do not currently exist in the market our concerns are based on predictions of consumer behaviour, and assumptions about the packages, taken from detail set out in Ofcom's consultation. There is no evidence that the current position on retail offers is preventing ISPs from developing product innovations in this space.
- 47.We do not believe that the majority of consumers have a good understanding of concepts such as latency and packet loss. While the requirements for transparency are welcome, it seems likely that consumers, without understanding of these technical concepts, will opt for lower cost, lower quality packages. Other consumers may opt for packages

of a higher quality (and price) than that required by their usage patterns. We note that it is difficult for consumers to differentiate between service quality and the service they are being delivered, i.e. how will consumers understand whether they need to upgrade their package, or whether the ISP is not providing the advertised level of service?

- 48. Even where consumers do have understanding, differential qualities may lead to socioeconomic separation, with those on lower incomes locked out of higher quality services, and the benefits that come from these. The BBC, as a PSB, wants to ensure that we can serve all audience segments, and provide universally high quality PSB content over IP. Consumers on lower quality packages may not receive this high quality service, undermining our universality, and making them more likely to disengage from the BBC.
- 49. Consumers on lower quality packages would not be protected (as now) from poor service levels. For example, packet loss is a significant issue for broadcasters when delivering streaming services, depending on level, resulting in a reduced quality of service for the consumer (reduced resolution and increased re-buffering). Creating differential tiers for packet loss levels would in effect create a fast and slow lane for traffic, and risks turning the current standard lane into a slow lane, with customers required to upgrade to higher cost packages to access the level of service they have received to date.
- 50.As noted above, and by Ofcom in its consultation, there is a lack of understanding among consumers of the practical impact of differential service levels. It is likely, therefore, that the majority of consumers would opt for lower quality, lower priced packages.
- 51.A small audience on upper tiers would mean there wasn't sufficient audience or investment to deliver innovation. This would have a major impact on the viability of development and innovation, including around digital first (or for example the delivery of the World Cup via IP).
- 52. This proposal risks leading to a situation in which ISPs offer "full TV packages" at a higher cost than the standard package. In such a scenario, the standard package would not be sufficient to deliver full IPTV, restricting universal access to public service television in an all IP future.
- 53.Under current arrangements, consumers fundamentally have access to the same quality services (with variations only relating to speed). The provision of universal ubiquitous services means that as services improve, all consumers will receive higher quality, bringing the entire population up together. Encouraging separation would mean service improvements are locked off at a lower level, stifling development at upper tiers.

54.We de not believe that the measures in the guidance are sufficient to mitigate the risks above, and do not support a relaxation to allow differentiated offers, without further, more detailed guidance.

## Question 7: What are your views on a more permissive approach towards retail offers where different quality levels are content and service specific?

55.As noted elsewhere, the BBC does not believe that there should be legislative changes to the net neutrality framework. Allowing different quality levels for different content and services would go against the principles of an open internet. The risks to both consumers and competition highlighted in the consultation are real, legislative change cannot be justified. We would be especially concerned about any such change which led to traffic management measures being applied to PSB video content for those on lower quality packages – undermining universal access to the BBC for audiences who may potentially already be underserved.

Traffic management to deal with congestion

Question 8: Do you agree with our assessment of how traffic management can be used to address congestion and our proposed approach?

Question 9: Do you agree with the approach in our guidance in Annex 5 in relation to the use of traffic management to address congestion, including transparency requirements, improved regulatory monitoring and reporting of general network performance metrics, the use of traffic management and the impact on service quality?

- 56.As in A5.60 "... we expect that ISPs will build sufficient capacity to carry the traffic offered in the busiest period for each part of their network". Nevertheless, we understand that ISPs will sometimes need to take steps to manage traffic at times of congestion. It is important that any such management is proportionate and non-discriminatory, and we welcome the updates to guidance to clarify how congestion can be managed.
- 57.Broadly, and in the majority of circumstances, traffic management measures will only be needed when CAPs are not taking sufficient steps to manage their own traffic, and to work collaboratively with ISPs to handle peaks.
- 58. There is a clear incentive for CAPs to adequately manage traffic, to ensure that congestion does not impact consumers' ability to access our services.

As noted in Ofcom's analysis, to date, traffic peaks have not led to unmanageable network congestion.

- 59.As shown in evidence submitted, and in Ofcom's analysis, CAPs do take a wide range of steps to manage traffic, especially at times of congestion. Where everyone is behaving reasonably, it seems like there is little need for ISPs to take active traffic management measures. For example, we perform careful planning and forecasting for major events, in conjunction with the CDNs and ISPs, to ensure transparency of expected traffic, and the traffic levels at which congestion could become an issue. We then plan mitigations in the event that traffic levels exceed forecast or performance is below that expected. As a recent example, the FIFA World Cup 2022 was forecast as a very large event, and resulted in a higher than usual level of discussions with CDNs and ISPs in the planning stage. In addition, we planned real-time mitigation actions including caps on the number of consumers of our UHD streams, stream bit-rate reductions, and CDN weighting changes. In practice, despite the size of the event, none of these mitigations were required, and the event was delivered at high quality to consumers without traffic management being required.
- 60.We do not support guidance setting out the ISPs can apply traffic management measures for planned events, without engaging with the CAP in advance. We will always take steps to ensure we manage our own traffic for such events, and would not want to see traffic management measures pre-planned and therefore imposed where there is no need, and to the detriment of the consumer (reflecting badly on both ISP and CAP). We do not support allowing the pro-active application of traffic management measures at the point of interconnection, for the same reason.
- 61.Nonetheless, we accept there may be rare occasions where that is needed, and so have reviewed the guidance on that basis.

## Question 10: What are your views on a more focused approach to traffic management to address congestion?

- 62.As noted above, CAPs already take sufficient steps to manage their traffic, and we have not seen evidence of traffic spikes causing unmanageable congestion.
- 63.Any changes to the rules to allow ISPs to treat different types of traffic differently in order to apply traffic management measures would be contrary to the principles of the open internet. As we have said elsewhere, we do not believe that there is a justification for revisiting net neutrality legislation.

64.However, should any such changes be taken forward by government, it will be important that public service content, such as emergency broadcast via IP, is protected from such traffic management measures.

#### **Specialised services**

Question 11: Do you agree with our assessment of specialised services and our proposed approach?

Question 12: Do you agree with the approach in our guidance in Annex 5 in relation to specialised services, including transparency requirements, improved regulatory monitoring and reporting of the need for optimisation of a service, the general performance of internet access services and the impact of specialised services on the quality internet access?

- 65.We welcome clarity on application of specialised service rules it is important to create space for innovation, without fear of sanctions
- 66.It is positive to see guidance prioritising consumer benefit (ie general network capacity) in assessing whether specialised services are compliant with net neutrality rules.
- 67.However, we have some concerns about guidance (A5.84) suggesting that services which can be delivered via the open internet, albeit at a suboptimal level, can be designated as specialised services – this risks creating fast, medium and slow lanes, with slowed down traffic forcing CAPs into specialised services.
- 68. In addition, we would be grateful for more clarity on how the guidance might apply to future services such as 5g network slicing on public networks. It will be important to consider the issue of traffic prioritisation as well as network slicing itself, to ensure that Mobile Network Operators (MNOs) are able to offer network slicing over the top of existing network provision, even at times of increased capacity, without making such specialised services prohibitively expensive.

# Scope of the net neutrality rules, terminal equipment and public interest exceptions

Question 13: Do you agree with our assessment of the terminal equipment rules and our proposed approach?

69.Consumers should benefit from the protections of net neutrality rules, regardless of what device they are using. It is this principle that we

support, and we are agnostic on what steps are taken to achieve this objective

Question 14: Do you agree with our assessment of internet access services provided on aeroplanes, trains, buses and coaches and our proposed approach?

70. The BBC has no comments on the overall approach. However, we would like to raise the question of how caching and zero rating are treated on transport. A lack of adequate guidance in this area could lead to transport providers discriminating unfairly between CAPs. Trials have already begun in this area, and so Ofcom may wish to consider applying the general zero rating principles to transport.

Question 16: Do you agree that ISPs should be allowed to block scams and fraudulent content and provide in-network parental controls and content filters?

71. The BBC is supportive of a safe internet. We note that 100% encryption is likely to make the implementation of parental controls more challenging.