

Your response

Zero-rating

Question	Your response
Question 1: Do you agree with our assessment of zero-rating offers and our proposed	Confidential? – N
approach?	techUK welcomes Ofcom's broad clarification of how net neutrality rules impact the operation of communications networks. techUK supports the goals of this review, including the effort to ensure net neutrality rules deliver the best outcomes for innovation, network efficiency and consumers. This is especially welcome in the light of changes since net neutrality legislation was introduced in 2016. These include not just changes in telecoms infrastructure technology, but data demand and the regulatory competency Ofcom now bears responsibility for after Brexit. This review, of course, focuses on the existing net neutrality legislation, and so we are committed to responding to this consultation in the spirit with which it has been undertaken.
	Answer to Q1: techUK welcomes Ofcom efforts to refine its approach to zero-rating in its consultation. The exceptional circumstances as a consequence of the Covid-19 pandemic, when ISPs zero-rated certain public and educational websites, showed that – technically – operators may have been in breach of the existing regulations. That no ruling was made by Ofcom was a pragmatic and commendable response by the regulator.
	We support Ofcom clarifying its guidance on complying with the net neutrality rules and zero-rating. Given the increase in size of data allowances now available to customers, zero- rating access to certain content (i.e. it is of social benefit and from non-commercial bodies like the UK Government) has lower risk of consumer harm – and indeed, offers greater social benefit. Zero-rating offers can also support connectivity for individuals who cannot

	afford data consistently all of the time - such as someone with economic insecurity purchasing prepaid data packages. techUK members are satisfied with the proposed approach by Ofcom, as it acknowledges that zero-rating offers can provide substantial benefits to consumers, and it will continue to permit what many members believe, that zero rating can be a useful marketing and tariffing tool, while allowing Ofcom to ensure that appropriate safeguards are in place to treat all traffic and providers fairly, including the power to intervene against agreements and commercial practices which may lead to end-user choice materially reduced. Certain members see a concern with zero- rating of selective content in that it has the risk of misleading consumers. For example, embedded within Government or health- related web pages may be content from third parties, for example from a video platform, that may not be zero rated (because the entire video platform itself is not zero rated). Therefore, consumers who are particularly vulnerable to data consumption shocks may find that content that they assumed was zero
Question 2: Do you agree with the criteria we	rated, is in fact not. Type One
use to define Type One, Type Two and Type Three zero-rating offers and our proposed approach to such offers?	As above in our answer to Q1, techUK supports Ofcom's approach to zero-rating of public benefit type content and websites, determined in the consultation as the Type One zero-rating offer. Some members have also proposed extending type one criteria to certain not-for- profits including charities, and it would be helpful if Ofcom could consider whether and how this may be implemented in ways which uphold the tenets of net neutrality.
	In the context of those consumers who are "under-connected" to the internet and who need to be connected for essential purposes (health, government information, and so on) the proposed approach offers a consistency and fairness which is welcome. techUK notes Paragraph 5.52 c, that "due to the type of content, there is no competing supplier that

provides, or is capable of providing, a comparable alternative to the information or services being zero-rated" which is also a welcome clarification to Ofcom's guidance.

Type Two

techUK welcomes the further clarification of zero-rating outside the public sector that would be considered acceptable, as we generally agree that the rules need clarification. The holistic approach adopted by Ofcom in assessment of whether a zero-rating offer is Type Two is also welcome, especially as some members expressed the need to be mindful of the wider context of highly competitive retail markets for connectivity. Ofcom's approach will allow space for creativity and innovation while ensuring consumers are making informed and beneficial choices about the data packages offered to them that they wish to consume.

Several members regard this class-based form of zero-rating as preserving equality of access and fair treatment for content and application providers (CAPs). However, other members have put forward the view that applications and services often belong to several 'classes', and that this (and the need to work with CAPs) could make such offers impractical. Similarly, consumer confusion and detriment would arise when content such as video is embedded into different classes but not zero rated (as per the concern raised under Question 1).

Members agreed though that communication would be required to establish 'classes' for Type Two open zero-rated offers. Additional technical guidance from Ofcom as to how an application or service's "class" would be judged would itself be welcome to facilitate communication and transparency regarding zero-rating offers between CAPs, ISPs, and the wider public.

Type Three

As noted, techUK members have expressed a desire for clarified regulations, which means Ofcom's outline of how Type Three zero-rating offers will be assessed is welcome.

	techUK also welcomes the fact that Type Three offers will be scrutinised on their individual merit, rather than instituting a blanket ban. Taking an ex post, holistic view of these offers, where no single factor on its own is determinative, which will give space for innovation and the provision of specialised connectivity services consumers wish to use while protecting service users.
	Some members have expressed a desire for Ofcom to retain flexibility with how zero-rating offers are assessed, and this guidance allows Ofcom to make a judgement based on the effect of any zero-rating offer. However, techUK cautions that regulations requiring subjective judgement can occasionally lead to inconsistency and disagreement. We would therefore welcome Ofcom ensuring full transparency in its decision making and welcome the outlining of assessment criteria for Type Three offers. Generally, this would benefit from further consultation with industry to prevent a degradation of the principles of technological neutrality and to ensure that the Type Three offer remains conducive to consumers benefiting from sufficient choice of content, applications, and services in future. We also suggest that the details of such deals are made public so that CAPs are able to judge whether they are getting a fair deal.
Question 3: Do you agree with the approach in our guidance in Annex 5 in relation to zero- rating?	techUK's members have outlined the importance of communication in establishing zero-rating offers' adherence to net neutrality rules. The guidance facilitates necessary dialogue and makes necessary communication easier between ISPs, CAPs and the regulator. The attempt to expand the yearly Ofcom report on net neutrality to include zero rating increases the utility of a document members have already outlined as providing a great help. This would help provide clarity on Ofcom's proposed case-by-case approach; demonstrate the necessity of rating offers compared to the normal best-efforts network delivery when appropriate; and enhance transparency about these zero-rating programmes and how they are open to CAPs in the relevant category. Ofcom should particularly examine the potential negative effects of zero-rating on

	competition between providers in relevant markets, including digital services and applications.
	Some members have expressed the view that consumers have the freedom to choose different packages and data rates that best suit them, while other members have expressed concern that communication, even if improved between communications providers, CAPs and consumers would remain too great a barrier to effective zero-rating. There is little way to know if this is the case without testing the guidance in practice.
	Some members wish to be mindful about the weight placed on the opinion of regulators abroad, especially the European regulators' group BEREC, as the historical role of BEREC guidance no longer applies to future regulation. However, techUK recognises that BEREC guidance in this instance was used to help Ofcom ensure that the net neutrality guidance outlined is in full accordance with the legislation of the UK only and philosophy of UK net neutrality.
Question 4: What are your views on whether zero-rated content should be able to be accessed once a customer's data allowance	techUK welcomes the clarification of which sites can be accessed when a general data allowance has expired. Members have
has been used up?	allowance has expired. Members have
	expressed concern that a stoppage of zero- rating could lead to consumers being unable to maintain connectivity through data purchases and could even leave consumers vulnerable through interrupted or blocked access to the emergency services. The guidance's provisions that state this will not be the case are therefore welcome for ensuring continued connectivity and the protection of public safety.
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resources. Thus, to reflect these additional benefits, some members recommend Ofcom explores expanding the list of circumstances where it is unlikely to consider enforcement a priority.

Please provide any further evidence you have to support your responses.

Traffic management

Question	Your response
Question 5: Do you agree with our assessment	Confidential? – N
of retail offers with different quality levels and our proposed approach?	Members welcome Ofcom's objective to encourage innovation across the value chain, and its acknowledgement that CAPs and ISPs have worked together on traffic management issues as well as the clarity and flexibility on the assessment of retail offers. Retail offers are used in other markets and provide the consumer with greater choice, both between providers and from one provider, to select a retail offer that works for them. However, we agree with Ofcom that it is important that consumers receive sufficiently transparent information about any offers involving different quality of service levels, so that they can make informed choices and ensure offers stay consistent with net neutrality protections. Members also welcomed the space for innovation retail offers allow and want to see more signals that innovation-based approaches to future offers are appropriate. It would therefore be helpful for these signals to be detailed in further guidance, that would explain notably how Ofcom will assess the potential of unintended consequences as 'innovative' retail packages may inadvertently pose risks to innovation across the value chain, to user choice and diversity, in particular for smaller platforms who cannot afford to fast-lane their applications. Concurrently, we urge that any network management practices should continue to be non-discriminatory, based on objective technical considerations, and should be tailored to achieving a legitimate network management purpose.

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?	techUK welcomes the monitoring of these offers to ensure consumers are able to make informed choices based on fair competition, network management and network performance. However, there are concerns from members about ensuring the monitoring regime isn't too onerous on both Ofcom and network operators. Further clarity as to the exact nature of these monitoring regimes would be of benefit to all parties involved, to ensure meaningful transparency is afforded to consumers, with a dialogue between Ofcom and the stakeholder community encouraged. Increased transparency for consumers, and regular Ofcom reports on network performance and network management by ISPs, will help consumer and industry stakeholders to identify emerging issues that need to be addressed.
Question 7: What are your views on a more permissive approach towards retail offers where different quality levels are content and service specific?	techUK supports the encouragement of innovation that benefits people, the economy, and society. Retail offers, which are non- discriminatory and where the level of quality of service is independent of the content and services accessed, can provide a nimble way for network operators to react quickly to the changing demands of the consumer and provide more choice. It will be important for Ofcom to ensure that as this approach develops, consumers are able to effectively navigate these offers and determine what is most appropriate to their needs and their affordability.
	Some members have concerns about retail offers where different quality levels are content and service specific because of the potential discriminatory consequences for certain CAPs, but also because it risks adding complexity to the market, and undermining consumers' ability to navigate the offers available. Ofcom itself recognised in its review in Para 4.17 that "as Internet services become more sophisticated over time, we expect that ISPs will continue to have a strong information advantage over consumers" and that this may "undermine consumer choice". (Para 4.18). This would lead to a detriment to consumers and to the long-term viability of open Internet offers. This problem would be particularly acute for vulnerable consumers. It is therefore crucial in

	these members' view, that Ofcom takes these significant risks into consideration as it finalises its guidance on the availability and safeguards for retail offers.
Question 8: Do you agree with our assessment of how traffic management can be used to address congestion and our proposed approach?	techUK members recognise that traffic management is already part of network management.
арргоасит	While some techUK members welcome the equal treatment of traffic under the guidance, other members make the case for certain forms of discrimination.
	It is generally well established and accepted that traffic management (to maintain network integrity) is permitted for technical reasons, including to allow for dimensioning networks for increases in capacity. We highlight the importance of effective and efficient traffic management as a tool to protect both the reliability of services and ensure networks are secure. Communication providers must have the ability to intervene and prevent or deter network usage that threatens the overall consumer experience for all users, which is already a part of that traffic management essential for network management. Given, however, the potential for misuse, this would need to be considered carefully, and necessary safeguards in place with Ofcom before proceeding.
	techUK also welcomes the exclusion of specialised services from these rules. This will serve to improve investment in specialised services, such as private networks, and allow their potential for users to be maximised through appropriate tailoring where such services are demonstrated to satisfy the specialised service protections implemented by Ofcom.
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	We agree on the need for transparency in the implementation of any traffic measurement measures. Some members also wished to highlight the Singapore case study in Annex 7 as an example of how service quality can support deregulation.

use of traffic management and the impact on service quality?	Some techUK members point out that being required to deepen their network capacities carries a significant opportunity cost, and that traffic management has the advantage of reducing the need for capacity increases. Other members point out that this reduction of incentive may prevent necessary upgrades and incentivise scarcity. The guidance could benefit from greater clarity on traffic management in relation to technical requirements, namely the prioritisation of services that require a higher bandwidth and how Ofcom proposes to measure congestion.
	Some members are concerned though to ensure guidance does not come at the expense of discrimination of certain classes of traffic or users through traffic management.
	The guidance is welcome in providing clarity on exceptional circumstances for traffic management and allowing temporary measures to be used to maintain network integrity, comply with the law, and protect public safety.
	The existence of these guidelines will, regarding enforcement, improve both the ability of Ofcom and ISPs to ensure compliance with the rules. In this respect, Ofcom should aim to take a sympathetic approach to any traffic management enforcement, without the fundamental principles of non-discrimination and ensuring the best-efforts internet being undermined. The complexities of balancing the different needs of users and the need to keep the public safe while maintaining overall user experience should not be overlooked.
Question 10: What are your views on a more focused approach to traffic management to address congestion?	The more focused approach to traffic management outlined by Ofcom seems to revolve around geographic specificity through specific network parts or areas. A5.67 'Traffic management as described above can be applied to a particular part of the network (i.e., any specific link, node or combination of them)'. The guidance outlined provides sufficient measures to ensure that any consistent areas of network overload receive upgrades.

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Please provide any further evidence you have to support your responses.

Specialised services

Question	Your response
Question 11: Do you agree with our assessment of specialised services and our proposed approach?	Confidential? – N Some members would prefer an approach nearer to a statement of intent, instead of prescriptive guidance. Other members though welcome prescriptive guidance as ensuring that net neutrality is not undermined by specialised services, and appreciate the overall clarity and flexibility of the regulations in supporting innovation while also protecting a dynamic, best efforts Internet through an evidence- based approach. We also recommend Ofcom makes the Guidance as included in Annex 5 more explicit that "services other than internet access services which are optimised for specific content, applications or services" are exempt from the net neutrality regulations, to provide additional clarity and certainty to communications providers.
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?	techUK members have welcomed Ofcom's guidance to allow for specialised services, with safeguards such as not unduly compromising the normal quality of internet access and being transparent, with publicly available disclosures showing objectively the necessity for an application to be delivered using a different QoS on a specialised service rather than over the best-efforts internet. Until such evidence is presented, the presumption should be that a service can and should be supported by the best-efforts internet. techUK members have expressed concern regarding where the responsibility for deciding what constitutes, according to article 3(5), 'i)

optimisation...necessary in order to meet requirements of the content, applications or services for a specific level of quality.' Ofcom's clarification that ISPs are expected to provide a reasonable expectation of the need for optimisation (A5.83) is welcome. Further clarity on the negative side of this, that a service's quality requirements 'cannot be met consistently by the ISP's internet access services during normal operation', could be of benefit with regards to features such as corporate video calling.

Some members have expressed concern regarding the fact that any specialised service will have some kind of impact on public internet access services, and that in the long term, they may detract consumers from using the open internet and its diverse choice of applications and services, thus resulting in consumer and societal detriment. On the other hand, other members believe that the finite nature of radio spectrum, which may cause difficulties in reconciling specialised and general access services during peak usage times. Ofcom's setting out of guidance on when a specialised service will be considered detrimental to the general quality of internet access services also serves to clarify this point of concern. UK MNOs have a strong motivation to maintain good quality general access and ensure that specialist services do not impinge on general access.

With respect to any specialised services implemented in the future, consistent with Ofcom's net neutrality protections, some members have stressed the importance of Ofcom implementing monitoring and regular assessments to ensure that the best-efforts internet does not stagnate but continues to evolve to support innovative services for consumers going forward.

Please provide any further evidence you have to support your responses.

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

Question	Your response
Question 13: Do you agree with our assessment of the terminal equipment rules and our proposed approach?	Confidential? – N Some members wish to emphasise that terminal equipment can be treated according to class, with certain kinds of kit being prioritised based on network and/or terminal needs. However, other members point out that terminal equipment should be treated neutrally. Consumers may use one class of terminal to fulfil different functions, such as browsing streaming services on a games console, and may find their internet usage options dictated by certain data allowances for terminals. A5.24 states 'ISPs should not therefore include commercial terms, including in fair usage policies, which restrict the terminal equipment which can be used to access the internet via their internet access services.' Further clarity would be appreciated on the term 'restrict'. Some members have expressed a desire to offer faster speeds to certain devices as an additional feature, and it would be worth clarifying this regulation to provide greater understanding on this.
Question 14: Do you agree with our assessment of internet access services provided on aeroplanes, trains, buses and coaches and our proposed approach?	The guidance seems only to refer to people on transport or in vehicles. Members would like guidance on how to provide connectivity to vehicles, especially regarding the need for optimised traffic flows to autonomous vehicles.
Question 15: Do you agree with our proposed approach to emergency 999 communications services and that we should consider amending the GCs to achieve this?	techUK members have raised concerns that the regulations could lead to consumers finding themselves disconnected from essential emergency services. techUK thus welcomes Ofcom's decision to revisit this aspect of the regulations and likely refrain from enforcing action on ISPs who zero-rate and prioritise these services.
Question 16: Do you agree that ISPs should be allowed to block scams and fraudulent content	techUK welcomes the continued policy in this area, which will keep consumers secure. Spam

and provide in-network parental controls and content filters?	filters set by the consumer remain another form of consumer choice and should continue
	to be supported. We support Ofcom and ISPs maintaining mechanisms for CSPs to flag and appeal over-blocking of their content by ISPs' content filters.

Please provide any further evidence you have to support your responses.