Your response

Question	Your response
Question 1: **a) Do you agree with our characterisation of the ways in which mobile calls enter the UK? Please give an explanation for your answer where appropriate.** **b) What do you think is the relative importance and / or significance of each of the different routes used for calls to enter the UK? Please provide evidence for your answer.** **c) If you provide mobile services to UK consumers, what international gateway provider(s) does your organisation use (including in-house services)? In addition, please explain the nature of the international gateway services you rely on.**	Confidential? – N iconectiv UK Limited agrees with Ofcom's characterisation of the ways in which mobile calls enter the UK. Since Ofcom has already taken steps to mitigate illegal spoofing by blocking international originated calls leveraging fixed UK numbers or numbers on a DNO list, scammers are exploiting an exception aimed at facilitating traveling UK consumers and are spoofing +447 mobile numbers. As stated in your comments, it is highly likely that international gateway providers today have exceptions that allow +447 to circumvent any blocking requirements as it is assumed the call is coming from a roaming UK consumer. International gateway providers often are a few "hops" from the originating party and originating provider, and thus cannot validate the legitimacy of that +447 when it reaches their gateway network. Carriers may have international commercial interconnection agreements to exchange traffic directly between the two partners. Ofcom's consultation says that operators would not be able to mitigate scam calls. That may be true as operators are not likely to have complete insight into all UK consumers actively roaming across all UK service providers. Ofcom's GC C6 requires "regulated providers [to] take all reasonable steps to identify calls…in which the CLI data provided…does not uniquely identify the caller." These regulated providers who enter into interconnection agreements should have the technical means to identify which of their own customers are legitimately roaming and can block calls from numbers that are not roaming at the time of the call.
Question 2: **What variables and factors should we take into account when considering whether – and, if so, how - to address the harms caused by spoofed UK mobile numbers?**	Confidential? – N Addressing the harms caused by spoofed UK mobile numbers requires a multi-faceted approach involving impact assessment, regulatory frameworks, technological solutions, and collaboration with telecom providers. Spoofed numbers pose significant risks, leading to financial losses, identity theft, and reputational damage for both individuals and businesses. Assessing the financial, emotional, and reputational harm caused by these scams

Question	Your response
	is crucial for prioritizing the response. The volume of incidents also plays a role in determining the scale of intervention, as understanding how widespread the problem is will help inform resource allocation. Additionally, vulnerable groups like the elderly and digitally unskilled are disproportionately affected, making it critical to tailor protective measures for them. From a regulatory perspective, cooperation with international regulators is essential, as many spoofing attacks originate outside the UK. Strengthening international coordination with telecom regulators and law enforcement agencies can help address this cross-border issue more effectively. Many +447 spoofing attacks exploit older technologies, particularly mobile phones operating on 2G and 3G networks. As the industry transitions to 4G and 5G networks, fewer spoofed calls will get through due to home routing technologies. However, some thought must be given to how the international gateway should know that the call should have been home routed and, no doubt, there will be situations where home routing does not occur. Ofcom must consider these nuances, work not only to address the vulnerabilities in these older networks but also to accelerate the technology transition to reduce the opportunities for spoofing. Technological solutions also play a key role in combating number spoofing. Network-level controls, such as automated filtering and flagging of suspicious calls, are crucial to the fight against robocalling. Collaboration with international gateway providers and mobile network operators is essential, as they will deploy the systems capable of stopping spoofed calls at the network level. Blocking capabilities, where mobile networks flag or block calls in real time, must be explored further. As the industry transitions to newer technologies, the scammers will find other ways to terminate calls into the UK. Effective number management, especially related to the process of number portability and management, will need to be streamlined. Centralizing this process into a unified database can simplify call routing and provide additional resources for fighting fraud.

Question	Your response
	Economic and resource considerations are also important. The costs associated with implementing technical solutions and enhancing network security should be balanced against the harm reduction potential.
Question 3: **a) What is the scope and scale of consumer harm caused by spoofed UK mobile numbers?** **b) What are the consumer impacts of spoofed UK mobile numbers more broadly?** **Please provide evidence to support your responses.**	Confidential? – Y / N iconectiv UK Limited has elected to not respond on this matter. We do not have specific evidence or quantitative insights that would support responding to these questions.
Question 4: **a) How significant is the volume of spoofed mobile calls from abroad?** **b) Is there any evidence that scammers are moving from spoofing fixed to mobile UK CLI?** **Please provide evidence to support your responses.**	Confidential? – N iconectiv UK Limited has elected to not respond on this matter. We do not have specific evidence or quantitative insights that would support responding to these questions.
Question 5: **How will developments in deployment of mobile technologies in the UK and abroad affect the problem of spoofed UK mobile calls from abroad? Please provide evidence to support your response.**	Confidential? – N Developments in the deployment of 4G and 5G mobile networks, both in the UK and internationally, are expected to significantly reduce the issue of spoofed UK mobile calls originating from abroad. These newer networks support a GSMA standard known as S8HR (Home Routing), where calls placed by roaming subscribers are routed through their home network rather than the foreign network they are visiting. Although this standard is not yet widely deployed (Home Routing is likely to be more widely available in 2-3 years), once it becomes more prevalent, calls will no longer originate from overseas networks, eliminating the need for exemptions related to international gateway blocking. As UK mobile networks adopt this technology, Ofcom can anticipate a decline in mobile roaming call volumes, thereby reducing

Question	Your response
	opportunities for fraudsters to exploit these international routes. This shift underscores the importance of accelerating the transition to 4G and 5G, as these technologies offer built-in protections that will curb spoofing activities.
Question 6: **a) What is your preferred option for addressing scam calls made from abroad using spoofed UK mobile numbers, and why (including the pros and cons of the different solutions)?** **b) Do you think it is possible to identify a solution that could be implemented relatively quickly now, and which would enable implementation of a more robust and effective solution in the future? If yes, what solution fits these criteria? Please give an explanation for your response.** **c) What would be the advantages and disadvantages of obtaining more information about, and oversight of, the international gateway providers which bring calls into UK networks, in the context of tackling use of telecommunications networks to facilitate fraud and scams? Please give an explanation for your response.** **d) What would be the advantages and disadvantages of industry-led solutions, and where might regulatory intervention be required? Please give an explanation for your response.**	Confidential? – Y / N iconectiv UK Limited supports any solution Ofcom believes appropriate to curb the use of UK mobile numbers as a vehicle for scammers to reach consumers. Ofcom provided summaries of three approaches to determine if the UK mobile number is actually roaming: direct verification, verification by proxy, or verification via database query. Each solution has potential benefits and detriments. Direct verifications at the time of call origination, requires the international gateway provider to check with the home network to verify that the CLI presented in the call belongs to an active roaming consumer. Although a similar solution, S8HR, is currently being leveraged by 4G and 5G devices, these checks may be complicated by the current call-forwarding number portability process. The international gateway provider may not know who the proper home network is and instead reach the original range holder who is unlikely to onward route the request to the service provider hosting the ported number. In the event of no response to this query, the international gateway may consider the home network check to be negative and block the termination to the destination network. Adopting all call query (ACQ) routing, is an efficient and scalable system which would require international gateway providers to route S8HR checks directly to the current number operator via information found in the centralized porting database, saving call delay time and network resources from the current onward routing system. Proxy solutions require the roaming checks to be forwarded to a third-party intermediary to determine if the call originated from a valid roamer before terminating to the destination network. This would require the intermediary to collect and maintain an update to date list of roaming numbers for every UK mobile carrier. In order

Question	Your response
	to remain accurate, the carriers would be required to establish a real time feed to the proxy, which could further complicated if there were multiple intermediaries serving as proxies. A more efficient hybrid has all the proxies synchronize their roaming data between each other so that mobile operators can select the proxy of their choice to provide the roaming data just as gateway providers can also select the proxy of their choice to run the queries through. A database solution would also require UK mobile carriers to feed real time information of roaming customers to a central database for dissemination. A database would allow any provider in the call flow, including the international gateway provider, to make the necessary dip and determine if the call is legitimate. A best practice may be established which pre-determines who in the call flow would be responsible for making the necessary dip. As Ofcom continues to explore local number portability solutions, it may be prudent to consider establishing a single database that would track number portability and roaming consumers. Although not every ported number is roaming, or vice-versa, it may be easier for service providers to interconnect with a single interface. Should a centralized number porting database be implemented UK service providers will need to adopt ACQ.
Question 7: Are there any international experiences of tackling this issue that you think are particularly relevant for the UK? Please provide evidence and an explanation for your answer.	Confidential? –N The United States' North American Numbering Council (NANC) has referred the fraudulent international roaming issue to the Call Authentication Trust Anchor (CATA) Working Group. The NANC's referral letter to the CATA Working Group can be found here: https://www.fcc.gov/files/cata-working-group-referral-letter. CATA has not yet released their final report, but this may be of interest to Ofcom when reviewing comments from this consultation. It is important to note that the US does not have a specified mobile prefix like the UK numbering plan.
Question 8: **Are the factors outlined in the section 'framework for evaluating options'**	Confidential? – Y / N

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the right things to think about when making a decision on options to address spoofed UK mobile numbers, and are there any additional factors which we should consider? Please explain your response where appropriate.	An additional factor Ofcom should consider is solving the ultimate problem. Home network routing will only address the spoofing issue for calls made back to the subscriber's home mobile network operator (MNO). However, for calls directed to other networks, such as those providing business lines to banks and similar organizations—which is where spoofing is most problematic—this solution won't be effective. These networks remain vulnerable to spoofed calls unless they implement measures like Mobile Call Verification (MCV) to evaluate and filter incoming calls. Without such safeguards, they will continue to be susceptible to fraudulent activity despite the advancements in home routing technology. Solutions including call authentication may be helpful in post-home routing network environments.

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