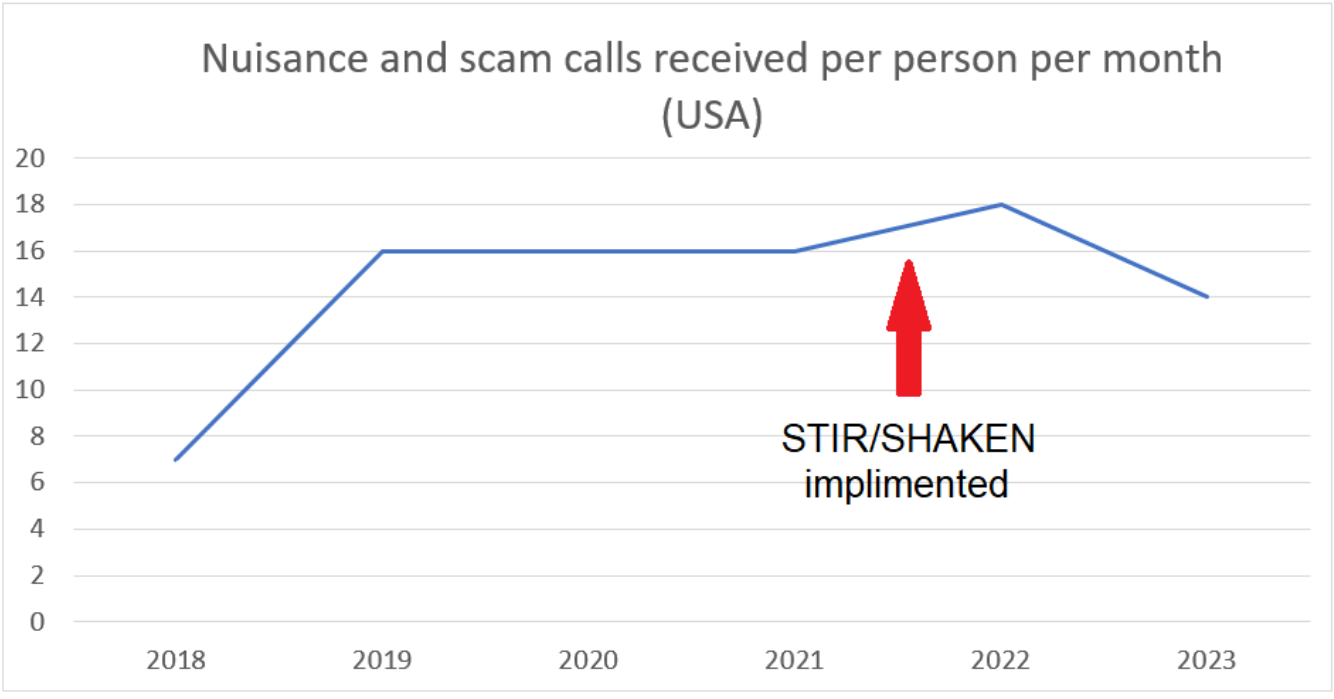
Your response

Question	Your response
Question 3.1: Do you agree with our analysis of the ways in which number spoofing is used, and the extent and types of harm associated with its use? If you have any further evidence which demonstrates the extent and types of harm involved, please provide this.	*Is this response confidential? – No* Over the last 20 years scammers and spammers have weaponised the telecoms network. The light regulatory control of the allocation and use of telephone numbers means that, by taking a few simple precautions, criminals can make calls without the risk of being identified. trueCall has developed a model used to carry out a cost/benefit analysis of a call blocking project. This model contains an estimate of the harm caused by scam phone calls, covering everything in Ofcom's model, plus additional factors such as a QALY calculation, and an estimate of the impact on the consumers wellbeing (following a study by Bournemouth University). ✂
Question 4.1: Do you agree with our assessment that while Ofcom rules and industry measures are likely to help to reduce scam calls, more needs to be done to tackle number spoofing? Provide reasons for your answer and include any suggested measures that could have a material impact on reducing the incidence of scam calls involving number spoofing.	*Is this response confidential? – No* We welcome new controls to manage number spoofing, but are concerned that the proposed STIR/SHAKEN approach is expensive and unproven. We believe that other options are available that would make more difference and are cheaper. In particular, we believe that there is much more that Ofcom could do to ensure that Communications Providers (CPs) correctly allocate and manage numbers that they have been allocated. (see 5.3 below). Our view is that it is too early for the UK to commit to STIR/SHAKEN technology – it is a big step, and a compelling case has not yet been made. It is not a silver bullet to solve the nuisance/scam call problem, the benefits are unclear, the costs are unclear, and other measures are available that have not yet been investigated.
Question 5.1: Is the approach to CLI authentication we have outlined feasible and workable?	*Is this response confidential? – No* This is difficult to assess with the information we have. The Shockey report is very useful, but is seriously out of date. In the USA the TRACED Act in 2019 mandated that by the 30 June 2021 carriers had to adopt the STIR/SHAKEN framework, with smaller providers being granted extensions. Since STIR/SHAKEN only works if all operators are signed up this means that at the time that the Shockey report was written (June 2021) neither the costs nor the benefits of the STIR/SHAKEN initiative were evident. Indeed, Shockey acknowledges that many aspects

	of STIR/SHAKEN were 'work in progress', and that issues such as call forwarding and dispute resolution were yet to be resolved. Two years have elapsed since the Shockey report was written – I would like to read a more up-to-date report that assesses the progress of the STIR/SHAKEN initiative and discusses how some of the issues that were outstanding in 2021 were resolved. I would also like to see an assessment of the impact that STIR/SHAKEN has had on the number of nuisance and scam calls received by US households.
Question 5.2: To what extent could adopting this approach to CLI authentication have a material impact on reducing scams and other unwanted calls? If you consider an alternative approach would be better, please outline this and your reasons why.	*Is this response confidential? – No* Neither the consultation document, nor the Shockey report estimate the proportion of nuisance and scam phone calls that would be blocked. This is a key metric. At trueCall we have been keeping an eye on the statistics from the USA over the last few years and have been unable to find any compelling evidence that STIR/SHAKEN has had a significant impact. The best and most consistent statistics we can find are from the annual 'State of the Call' report from HiYa. This is based on the analysis of billions of phone calls, and suggest that since STIR/SHAKEN was implemented in June 2021 the number of unwanted calls received by US households has dropped from 17 per month to 14 per month – a reduction of just 18%, and more than the number of nuisance and scam calls received in 2018 (when the level of nuisance/scam calls was already considered an epidemic by news outlets). Is Ofcom aware of any better estimates of the effectiveness of STIR/SHAKEN?



Question 5.3: Are there additional measures that could be adopted to further strengthen the suggested approach and/or minimise the identified exemptions?	*Is this response confidential? – No* We believe that STIR/SHAKEN is an unproven and costly technology, and that other ways to reduce the number of nuisance and scam phone calls should be investigated. The consultation document compared the implementation of STIR/SHAKEN with the counterfactual 'do nothing' option. This is a false choice as other options are available that should be considered. We believe that better control of the allocation of use of number by range holders would be effective, and that the Caller ID Verification system (CIV) proposed by researchers at Warwick University - a lightweight alternative to STIR/SHAKEN - should be evaluated (along with any other options that are available). **1. Controlling the allocation and use of numbers** Ofcom's 'Good practice guide to help prevent misuse of sub-allocated and assigned numbers' is a welcome step in the right direction, but in our view it doesn't go far enough. We believe that: • Know Your Customer checks should be mandated for range holders, and compliance should be closely monitored by Ofcom • Range holders should carry out regular traffic checks on all phone numbers in their ranges to identify any suspicious activity • All organisations that trade in phone numbers should themselves be regulated by Ofcom, and required to carry out Know Your Customer checks • Range holders and resellers should be legally obliged to co-operate with enforcement authorities in a timely manner to provide data about the end user of any specific phone number (name, contact details, traffic data, etc). This should be easy for the enforcement authorities to request, without the requirement for complex paperwork or sign-off by a judge. We believe that these actions would be easy to implement, and would not require primary legislation. The costs would fall on the CPs who sell the phone numbers - it seems reasonable that those whose business is selling phone numbers bear some responsibility for ensuring that these numbers are not used for criminal purposes. These actions could be very effective. Consider just the requirement to co-operate with enforcement authorities - in the last 12 months the National Trading Standards Team have caused major disruption for scammers by getting one particular CP to withdraw phone numbers that were being used by scammers. If all CPs were required to cooperate in this way, then this sort of disruption work would be simpler. **2. Caller ID verification system** Warwick University has developed caller ID verification system that is much lighter touch than STIR/SHAKEN called Caller ID Verification (CIV). It confirms that a phone call really is coming from the number that is displayed in the caller-ID by simply calling back the number during the call setup with a verification token. In addition: • The CIV system doesn't require 100% coverage to be effective

	• The CIV system doesn't share data about calls with any third party – only the originating CP and terminating CP know about the calls (as is currently the case) • When put alongside the proposals we have made about controlling the allocation and use of numbers (above), the CIV system would give the traceback benefits of STIR/SHAKEN. • The CIV system is simple and open source. It doesn't require a central organisation, so it can be implemented by CPs without requiring high initial costs, or ongoing licence fees from certificate authorities
Question 6.1: Do you agree with the approach outlined for the monitoring and enforcement of the rules with regard to CLI authentication? Are there any alternative approaches that we should consider?	*Is this response confidential? – No* Enforcement is very important, but the problem is always resources. STIR/SHAKEN's ability to help in tracing back calls is valuable so long as enforcement action is taken, but in the UK the resources are not there to do this. While 53% of crime is classified as being fraud or cyber, it has been claimed that less than 2% of police resources are devoted to it. We work with enforcement teams around the country to track down scammers - they do a fantastic job, but they are seriously under-resourced. For example, despite billions of nuisance and scam calls being received in the UK annually, only a small number of companies are fined each year by the ICO. It could be argued that the lack of traceability is the key factor that hampers enforcement teams, but we don't see this being the case. There is much more work that could be done by enforcement teams with existing network technology if more resources were available.
Question 6.2: Do you agree that CLI authentication could make call tracing easier and yield benefits in terms of detecting scammers and nuisance callers?	*Is this response confidential? – No* Yes, but more enforcement resources are needed.
Question 7.1: What are your views on the timescales for the potential implementation of CLI authentication, including the interdependencies with legacy network retirement?	*Is this response confidential? – No* We don't have detailed knowledge in this area, so can't comment
Question 7.2: Do you agree with our	*Is this response confidential? – No*

assessment of the administrative steps required to implement CLI authentication and how these should be achieved?	We are concerned about two aspects of the administration of the system: **Risk to vital UK infrastructure** There is the risk that STIR/SHAKEN will impact the resilience of the UK phone network: a) You propose that the CLI Authentication Administrator who manages the system is a commercial organisation. Our view is that this is dangerous - if an unreliable operator controlled the company they would have control of all telephone communications in the UK. We believe that it would be better if this were managed by a government organisation. *b)* What would happen if the CLI Authentication Administrator is unable to attest calls because of a system failure or cyber-attack? (Does the system have a 'kill switch' such that STIR/SHAKEN processing is bypassed in the event of a system failure?) **Data security** The CLI Authentication Administrator will have access to a huge amount of data about calls made and received in the UK. Extensive data security procedures need to be implemented to prevent the misuse or theft of this data.
Question 7.3: Should a common numbering database be implemented to support the CLI authentication approach? Please provide any comments on the steps needed to implement a common numbering database, including on the feasibility of the industry leading on (a) the specification; and (b) the implementation?	*Is this response confidential? – No* While we don't have detailed knowledge in this area, it does seem reasonable to have a common numbering database, so long as this didn't impact the resilience of the UK telecoms network.
Question 8.1: Do you agree with the proposed framework for impact assessment and the potential categories of costs and benefits? Please identify any other	*Is this response confidential? – No* In the consultation document Ofcom have described in very broad terms the problems that nuisance and scam phone calls cause, and a checklist of the types of cost that would be incurred by the telecoms industry to implement STIR/SHAKEN. No attempt has been made to estimate an actual costs and benefits, so it isn't clear whether the costs exceed the benefits.

factors that we should take into account in our assessment.	An estimate of the cost for CPs to become compliant is extremely important because there is some evidence that the requirement to implement STIR/SHAKEN in the USA has led to some smaller telcos going out of business (https://www.youtube.com/watch?v=ycGPHG_ANrE). If this happened in the UK it could reduce competition in what is currently a dynamic, competitive telecoms market. We believe that it is too early for the UK to adopt STIR/SHAKEN technology – that we should wait until the case is proven in the USA, Canada and France, and in the meantime investigate other options.

Please complete this form in full and return to: **CLIauthentication@ofcom.org.uk**