

Your response

Question	Your response
<p>Question 3.1: Do you have further views about the implementation of STIR?</p>	<p>As a global provider we have been involved in a STIR/SHAKEN discussions in several countries. We consider that the key take away today would be the complexity on the wholesale market both on a national level and for international call flows. On a national level some countries allow multi-layered allocation of ranges and/or reselling which makes the process significantly more complex, especially if the process is not defined.</p> <p>The result of the ability to control the origination of a call from a range owner typically works well within markets whereby multi-layered allocation is not permissible or is controlled in large block allocations. If an authorised certificate authentication party/service is able to also tap into a dynamically addressed multi-layered allocation platform then the market can be addressed as a whole whilst also, at the same time, ensuring the wholesale voice market has choices and is not restricted by locking into the range owner to provide the STIR identity within the SIP call flow.</p> <p>Also to consider within this will be the location of the certificate repositories themselves as network latency plays a part when sending out messages to these platforms for validation, especially by small telecom providers that do not have the infrastructure to support such update requests into their platforms.</p> <p>We feel that one part of the call flow that has not been addressed within the messaging framework is the return response to the calling party whereby the called party's provider was either unable to confirm the validity of the calling party or the called party rejected the call specifically because of the invalid identity status of the calling party. These are valid response mechanisms that would promote the use of the STIR framework from the consumers and just not the telecom providers.</p>

<p>Question 3.2: Are there any other approaches we should consider for addressing CLI authentication?</p>	<p>We do not believe so, at least, not without impacting the competitive landscape or putting new barriers to enter the market. For example, control of the call only from the range owners point codes into the designated national network providers would impact the competitive behavior in the market and make the national incumbent the dominant party but should, in principle, guarantee full compliance/ responsibility of spoofed calls to the originating provider's customer base. We think that a specific number range within the Numbering Plan may be considered for allocation for such a purpose to trial, i.e. 0333 ranges can be guaranteed not spoofed as they only come from trusted network originators.</p>
<p>Question 3.3: Do you agree a common database would be required to support the implementation of STIR?</p>	<p>Yes, we do not see this working any other way. Additionally, we consider that such a database should be managed by an independent third party without any commercial benefit.</p>
<p>Question 3.4: What are your views on using blockchain technology as the basis for a common numbering database to support CLI authentication? What other solutions do you think should be considered and why?</p>	<p>We believe that blockchain technologies are a good solution here; there are already efforts in standard setting bodies on potential standards on the technical solution. Additionally, it would be of even increased benefit if such standardisation happens, at the very least on a regional if not global level, to ensure unified approach not just for numbering but also for end-user data structures.</p>
<p>Question 3.5: What are your views on timeframes?</p>	<p>We do not have a particular view on this.</p>
<p>Question 4.1: What are your views on the current implementation of number portability in the fixed and mobile sectors?</p>	<p>We believe that the current implementation is rather archaic and not fit-for-purpose in the current state of technologies and expectations of end-users. Elimination of the onward routing currently in place should also be considered in this particular scope.</p>
<p>Question 4.2: What are your views on sharing the functionality of a common numbering database for CLI authentication to also</p>	<p>We fully support such views, specifically</p>

<p>support improvements in UK porting processes?</p>	<p>because of the efforts to put such a database and functionality in place and not consider using them for other purposes. This should be viewed as a master numbering platform whereby activities such as numbering allocation, management, identity verification (especially for the purposes of STIR activities), porting, routing, etc. can be done for simplification, efficiency and time-reducing purposes.</p>
<p>Question 4.3: We are currently supporting a blockchain pilot. Do you have any views on using this technology for port transactions and a routing database? Are there other alternatives that should be considered?</p>	<p>Other countries have implemented routing databases based on other technical solutions based on more “known” and proven technologies. The consideration we think is important to be made is here is how easy would it be for all providers to adopt blockchain technology?</p> <p>Nonetheless, we believe that allowing blockchain for porting transactions has the potential to promote trust and dramatically simplify the authentication activities of numbering ownership that currently adds significant lead times to the expected porting times by consumers. We cannot fully consider this from a routing point of view as this as this could potentially add undue latency to the call flow itself.</p>
<p>Question 4.4: What are your views on implementation timeframes and the importance of a common database solution being available to support the migration of telephony services to IP?</p>	<p>We do not believe it is absolutely necessary but if implemented, it could potentially simplify and standardize the routing updates and communication of migrated and ported numbers. However, we believe there should not be any distinction as to the origination point type, whether PSTN or IP.</p>
<p>Question 5.1: What are your views on the potential for a common database solution to also provide shared functionality to support number management?</p>	<p>We fully support such views. Same comments apply as per response in question 4.2.</p>
<p>Question 5.2: What do you see as the benefits or disbenefits of changes to number management post PSTN retirement?</p>	<p>In our view, we should not be treating the numbering system as a call messaging technology but more so an inventory repository that switching equipment can use as part of the call flow, for consumers to use as part of the</p>

	<p>port to another provider, for providers and regulators to use as part of the assessment on utilization of ranges. This would allow for more efficient management of numbering resources, transparency and simpler porting processes. Such benefits will also be present in a PSTN world not just confined to the situation post the retirement of the PSTN.</p>
<p>Question 6.1: Do you agree, in principle, with the need to develop and adopt a common numbering database? If not, why not?</p>	<p>We fully agree.</p>
<p>Question 6.2: If you do not agree with the need to develop and adopt a common numbering database, do you have any suggestions on how the issues we have set out in this consultation could be addressed?</p>	<p>Not applicable.</p>
<p>Question 6.3: Do you agree that in the first instance industry should lead the implementation of a common numbering database, with Ofcom providing support to convene and coordinate key activities? If not, what are your views on how implementation should be taken forward?</p>	<p>Yes, we do agree, specifically considering the previous attempts failed. We do suggest that there also needs to be a review of why the same efforts failed previously and take a different approach this time around. We would strongly support also a regional, if not global, discussion on best practices and what initiatives work best to implement the desired functionalities since there are countries that have made different progress on these elements and might provide good insights and food for thought.</p>