VERIZON BUSINESS RESPONSE TO ACMA RE NUMBERING PLAN REVIEW

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Thank you for the opportunity to submit in response to the Review of the Numbering Plan and other instruments Discussion Paper issued in June 2024. Verizon has a particular interest in the matters raised in section 3.7 of the Discussion Paper with regard to the use of numbers by multiple carriage service providers. Verizon strongly supports the ability of a rights of use holder to have their number associated with services from multiple CSPs. There are many legitimate use cases that rely on this ability which have beneficial competitive and economic outcomes. Verizon also recognises that the ability to manipulate numbers leads to harmful outcomes when done with criminal intentions. As such the practice would need suitable safeguards and actions to ensure that the illegitimate use cases can be minimised. These would include know your customer (KYC) initiatives, traceback activities, law enforcement support, cross sector collaboration and technical implementation of agreed numbering practices. Most importantly there is a need for local and global harmonisation of solutions to ensure that solutions implemented are effective to tackle spoofed calls.

Please note that this response contains links and references to materials that are confidential in nature and not yet public so we are asserting confidentiality over its contents.

Questions

43. Do you support the use of numbers by multiple CSPs? Why or why not? *YES*

44. Can you provide some evidence/data of the benefits or harms of this practice? Please provide details and indicate if this information is provided in confidence. *See below*

Drivers

Verizon's interest in permitting this practice is driven by our end user/customer. It is our experience that a phone number is highly valued by an enterprise because it is part of their "brand" that is recognized and trusted when calling their customers. For cost, redundancy or other business reasons, enterprises contract with different outbound originating service providers nationally and internationally, such as Verizon or any of its competitors. Regardless of whether it is through the number-holder CSP or an alternative outbound originating service provider when it comes to business activities that utilise numbering as a core and component (call centres, general communications) enterprise customers want to display their preferred phone number to terminate calls.

Benefits

The ability of multiple CSPs to provide services because numbers allocated to the customer can be used in relation to that customer's services leads to customer focused outcomes and enables a competitive landscape to flourish. Permitting a customer to take advantage of services from multiple providers in respect of numbers for which the customer has the rights of use can lead to greater competition in the market, and result in meaningful outcomes for the customer in terms of cost savings and business model efficiencies which can have flow on benefits to the economy as a whole.

While we recognise there are challenges with the use of CLIs by multiple CSPs, Verizon doesn't believe that innovation and competition are served by adhering to practices that were developed in a completely different era of technology and service provision. The old circuit switched models by necessity had the outcome of a one to one relationship for numbers however the advent of the Internet Protocol combined with advanced technology have rendered that relationship obsolete. We need to be looking at ways to address the challenges that new technologies present so the full promise of the advances can be realised. Adhering to past practices is not the solution.

Use Cases

There are many valid use cases for this practice of more than one CSP using a CLI in their service provision to a customer. For example:

Call Centres

The call centre use case which involves call centre customers (especially global enterprises) wishing to place outbound calls to called party numbers that present a CLI associated with that customer in the country where the call recipient is located. This CLI will often be allocated to the customer by their telephony provider in that country - which provider will not be the same as the call centre service provider. There are many reasons for this, however the main ones in our experience is that the customer wants to minimise the risk that called parties do not answer and/or they want the customer, if they call back, to call a different number to the one associated with the call centre from which the call was made.

In this example the customer wishes to retain the relationship with the local provider, while using the global capabilities of Verizon. Verizon knows its customer and includes checks and warranties that the number is valid, will be answered when called and that our customer has the rights of use to any number provided for use in this way.

Multi-Homing Arrangements

It is also the case that in the US "Multi-Homing Arrangements" are supported where the originating provider permits the caller to out pulse multiple phone numbers, including ones that may have been assigned to the caller from other service providers. So, a bank may use Carrier 1 for outbound service but may use Carrier 2 for inbound service. Carrier 1 would permit the caller to out pulse a Carrier 2 number when making outbound calls.

Other Use Cases

There are other use cases outlined in the [Electronic Communications Committee (ECC) Report 248](). The ECC brings together 46 countries in Europe to develop common policies and regulations in electronic communications and related applications for Europe. Its primary objective is to harmonise the efficient use of the radio spectrum, satellite orbits and numbering resources across Europe. It takes an active role at the international level, preparing common European proposals to represent European interests in the ITU and other international organisations. Report 248 focuses on the very issues being discussed here - "Evolution in CLI usage – decoupling of rights of use of numbers from service provision". Section 4 of the Report provides examples of the use of E.164 numbers as CLI by service providers other than those to whom a number range is assigned. The scenarios described include cases where the network of the calling party's own service provider is used (i.e. the service associated with the number to be provided as CLI) as well as cases where alternative networks are used.

Harms

The harm / challenges in scam calling arise more from the easy manipulation of the call information, the spoofing of CLIs rather than the legitimate use of CLIs by multiple CSPs. The restrictions on use of CLIs to one CSP is a suggested solution to minimisation of harm but is not the only solution, nor is it a guarantee of the end of misuse of numbering and scam calling. In addition, the solution comes with its own potential harm to competition and innovation.

In the various discussions there have been concerns raised about the impact of the use of CLIs by multiple providers on emergency services and the IPND location information. In respect of the legitimate use cases noted here these concerns would not be applicable.

The call centre system which is inserting an alternate presentation or callback CLI would only do so in respect of calls where the criteria to use that CLI were met. The architecture would require validation that each call was one that not only required the CLI but also was permitted to use it. A call to a local emergency services number would not meet the required criteria.

In respect of the use of the CLI and the location information in the IPND that information would remain correct as the CLI (although being used by an alternate provider) is using the number on behalf of the legitimate rights of use holder of that number. The location information as provided by the CSP from whom the number was allocated would remain correct in the IPND.

Other Country Approaches

In the UK OFCOM acceptance of the practice of the presentation vs network CLI which they define as follows:

- Calling Line Identification (CLI): means data that enables identification of the number from which a call could be made or to which a return call could be made

- Network number: a telephone number that unambiguously identifies the line identity of the fixed access ingress to or egress from a Public Electronic Communications Network or a subscriber or terminal/telephone that has non-fixed access to a Public Electronic Communications Network

- Presentation number: a number nominated or provided by the caller that can identify that caller or be used to make a return or subsequent call. It may not necessarily identify the line identity of the geographic source of the call.

In the US this practice is also supported. While the FCC has extensive regulations governing the allocation and use of telephone numbers in the US, those rules are focused on compelling service providers to use their numbers efficiently, and preventing providers from hoarding or warehousing numbers in an anticompetitive or wasteful manner. Changing the calling party number that the called party sees at the terminating end of the call (i.e. presentation CLI or spoofing) is addressed separately through the FCC's "Truth in Caller ID" and telemarketing regulations. These rules generally don't prohibit all spoofing, only fraudulent or harmful spoofing. An example of "good" spoofing would be a vacationing physician calling a patient from his/her mobile phone but transmitting an office number for callback purposes. Spoofing to perpetuate identity theft, in contrast, would obviously be "bad" spoofing. And telemarketers have a stand-alone obligation to provide Caller ID information so the consumer can call and request to be placed on the telemarketer's "do not call" list. In addition, the US recognises practices that necessitate the use of CLIs by multiple service providers. Verizon's multi homing architecture is one example of this in practice.

In France, technical measures about the deployment and the implementation of STIR/SHAKEN are designed by APNF French number portability administrator. Attestation elevation aims at solving the following use case: a customer X, with number attributed by their operator 1, uses the services of call centre Z for their marketing campaigns. However, call centre Z is a customer of operator 2, and customer X wants call centre Z to use the numbers that have been attributed to the customer by operator 1.

In Ireland the practice is specifically addressed in the Numbering conditions section 3.1(5) f & g

(f) An end-user organisation may give permission to its call centre contractor to use the organisation's assigned number as CLI while providing the service.

(g) An employer may give permission to its remote working employees to use the employer's assigned number as CLI while carrying out their employment duties.

Scam Calling Solutions

Dual CLI Support

The usage of the numbering in this scenario is not as a network CLI – but as a presentation CLI. Note that the presentation CLI concept is subject to slightly differing terminology around the globe. Essentially though the terminology of 'over stamping', 'alternate CLI' and 'presentation CLI' is the same - that is the presentation CLI is determined by the customer and that decision is driven by the varying use cases discussed below. The presentation of a CLI that may vary from the actual originating number is a standard practice for corporations that may present a switch number rather than an extension or vice versa. There may be variations in the technology used to achieve the effect.

Having said that in practice there are some variations between presentation and alternate and over stamped CLIs. And this is driven by technology. The network in this region cannot support dual CLIs so the presentation CLI is an alternate CLI which replaces the network CLI. In APAC, we need to do a one-to-one mapping of the Alternate Caller ID on the Voice Switches as the interconnects run on ETSI-ISUP V1, which doesn't have this second field defined. These interconnects were driven by the carrier partners on the other side of the interconnect. In Europe the TDM interconnects are running on ETSI ISUP V2, which provides for a second CLI field to host the alternative CLI. Australia as with the rest of the world are currently in progress of transitioning to VoIP interconnects with Tier 1 carriers in Australia. Some carriers are faster than others to embrace this new technology. However, once we have moved to solely VoIP interconnects then carriers will also be able to support 2 CLIs in Australia (so a presentation CLI instead of over stamping or alternate CLI). This means that each call can have the presentation CLI selected by the customer as well as the network CLI of the carrier originating the call. In any event even in the alternate/over stamped case the underlying network CLI of the call – that is the number allocated to Verizon as the carrier in these scenarios – would still be able to be identified as the traceback would lead to our hand off and Verizon would be able to identify the network CLI and associated customer.

Once VOIP interconnects are in place then both CLIs will be easily identifiable as part of the call record accessible by the carrier of the call at any time.

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Other Solutions

There are a range of approaches to addressing the challenges that come with the technological advances that permit CLI manipulation. The attached ESCC Report 248 suggests a number of practices to minimise the potential harms resulting from the general ability to manipulate CLIs in calls. Many of these practices have already been implemented in Australia and seem to be working effectively - at least in the reported reductions of scam calls by the CSPs (achieved by the dropping of calls that are designated as scam). This is where the discussion should continue to focus. There is no evidence that calls originating from the incumbent numbers are somehow more trustworthy than other legitimate arrangements between carriers and customers.

However it is of note that all of these practices do not eliminate the origination of scam calls - they simply try and prevent those calls from reaching a recipient and causing harm. Like email spam before it the methods of response focus at the recipient end rather than the originating end. There is certainly a high value on preventing harm to the recipient but we would also see benefits to stopping the perpetrators of harmful spoofing.

The focus here would be on Know Your Customer practices to prevent the bad actors having access to networks to carry their malicious content, place traceback initiatives to route out the actual perpetrators of the fraudulent activities.

Although traceback is a requirement of the Scam Call Code here in Australia there has been little visible activity in this respect. In the US the USTelecom – The Broadband Association in 2015 established the [Industry Traceback Group](), or ITG, to conduct tracebacks on behalf of the communications industry. US Congress enacted the TRACED Act in December 2019 in which the beneficial collaboration between law enforcement agencies and the private sector on traceback is acknowledged. TRACED also required the Federal Communications Commission (FCC) to issue rules "for the registration of a single consortium that conducts private-led efforts to trace back the origin of suspected unlawful robocalls." ITG has been designated by the FCC as the registered traceback consortium since 2020. Voice service providers today are required by law to cooperate with traceback requests from the registered traceback consortium.

Another KYC initiative of interest has a working title of the Global Telecommunications Trust Registry (GLTTR). GLTTR is being discussed among industry members and GSMA in the US. The goal is to maintain a GSMA-hosted global source-of-truth directory of trusted providers who have all committed to limit the traffic they accept to traffic that has only passed through other trusted members. GLTTR would aim to (i) be a baseline registry of voice providers committed to working to restore trust in voice calling; and (ii) provide information to registrants with which to evaluate the reputation of their upstream service providers as part of their "know your customer" programs. That additional information would come from third party sources such as reputation monitoring companies and ITG (as mentioned above).

Three Options for Response - Status Quo (1), Introduce Rules (2), Prohibit (3)

In respect of the three options, it is clear we do not support Option 3. As noted, there are legitimate use cases for this practice - and Scam Calling will not be eliminated by prohibition of the legitimate use cases. To repeat, there is also no evidence that calls originating from the incumbent numbers are somehow more trustworthy than other legitimate arrangements between carriers and customers. Under the status quo the legitimate use cases can only be implemented at the decision of the carrier to whom the number is allocated. The status quo should be workable between trusted carriers - however with the current atmosphere surrounding scam calling we believe the status quo will cease to work without legislative or industry guideline support.

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This leaves option 2 which would definitely provide more certainty and presumably could be implemented in a way that didn't add to the harms of scam calling - by and between trusted carriers - in a similar way to how option one should work. While we would prefer such certainty, we also fear that this option could be managed in such a way to result in creating costly and complex processes that would render the option ineffective. To the extent that option 2 could be implemented in an efficient and practical way that did not eradicate the feasibility of the legitimate use cases then we would support this option.

Thank you again for this opportunity.