From:	██████████████████████████████████████
Sent:	12 June 2018 10:03
To:	███████████
Cc:	███████████
Subject:	EXTERNAL:NICC Standards response to consultation "Review of the General Conditions of Entitlement"

Hi Lara,

NICC Standards is the UK telecoms technical standards organisation, with members from all major communications providers and equipment vendors. This email forms a response from NICC to the recent consultation on the minor changes to the General Conditions. I apologise for the late submission; NICC was asked by Ofcom to identify any issues with the proposed CLI Guidelines, and in doing so noticed issues with the new GC C6 itself. As this consultation on changes to GC C6 has only recently closed, it was felt that a late response to the consultation was the best vehicle to submit NICC's concerns.

GC C6, and the associated CLI Guidelines, places requirements on Regulated Providers to provide Calling Line Identification Facilities. These requirements include the characteristics of "CLI Data" (i.e. the CLI itself plus associated privacy markings), but it is common for calls to carry multiple CLIs each with a distinct purpose, and by failing to separate out the requirements of those purposes GC C6 places virtually impossible demands upon Regulated Providers.

To clarify, we can separate out the requirements of CLIs intended for display purposes (which I'll term "display CLI") and CLIs intended to unambiguously identify the point of origin of a call (Network Number).

- There is no requirement of the "display CLI" to unambiguously identify either the caller, or the point of origin of the call (for example an enterprise might have multiple 3rd party call-centres acting on its behalf, each and all using the enterprise's "display CLI"). However, it is absolutely key that the number used as a "display CLI" is one which is capable of being used to make a return call, i.e. is diallable.
- Conversely, for the Network Number, it is an absolute requirement that the number uniquely identifies the origin of the call into the public network, but (unless it is being used as the "display CLI") there should be no requirement that it is diallable. For example, a very common use case is that for enterprise customers possessing private networks (traditional or SIP), the Network Number identifies the customer trunk into the public network whereas an associated Presentation Number provides a number that can be used to make a return call. Since the Network Number is never intended for display/release to the called customer, it is common for it to not be diallable – in effect it's a network-internal identifier.

GC C6.4 as currently framed is open to interpretation that it applies to CLI Data *individually* (i.e. both the Network Number and Presentation Number - where present - must each meet the requirement), whereas I believe that Ofcom's intent was that it would apply to the CLI Data *collectively* (i.e. if there is both a Network and Presentation Number present, then between them they should meet the characteristics set out in GC C6.4a).

Unfortunately, the pre-amble explanatory text in pink in GC C6 – which I believe has no legal standing – serves to reinforce the "individual" interpretation as it points that *"providers should ensure that **any** telephone number associated with a call at the network level **and/or** presented to a call recipient is a valid, diallable number"* [my emphasis].

If GC C6.4 is enacted as currently framed, it will potentially place any provider serving enterprise customers in regulatory breach, as Network Numbers aren't commonly diallable when accompanied by a Presentation Number. Further, even if it was desirable to make all Network Numbers diallable, this is not something that could be accomplished quickly because it would require reconfiguration of customer equipment to route calls to an appropriate location (for the avoidance of doubt NICC doesn't consider it a desirable exercise to make them

diallable – when accompanied by a Presentation Number the Network Number isn't intended for display, hence to be used on return calls, so it would be a pointless exercise to make them diallable).

Therefore, at the very least NICC considers that the pre-amble text should be amended to make the intent of GC C6.4a clear, and ideally GC C6.4a itself should be revised to separate out the requirements of the Network Number vs those intended for display.

Moving on to the CLI Guidelines themselves, there is general agreement from NICC members that the confusion of requirements of Network Numbers versus display numbers carries over into the Guidelines. For example, both 4.3 and 4.10 point to calls containing non-diallable CLIs being blocked, whereas this requirement only applies for CLIs intended for display. Indeed, the logical conclusion of these paragraphs is that any call with an injected 08979 NN CLI should be blocked, as they are not intended to be dialled by end users: which would mean it would have been simpler all around for the gateway to have blocked the call rather than inserting a Network Number.

Feedback from those who haven't been involved in CLI developments is that the Guidance is consequently difficult to understand. We note that some progress has been made in putting the requirements of Presentation Numbers into the core of the Guidance, but consider that a further restructuring would be beneficial. We suggest it could make sense for the requirements be separated into those of Network Number CLIs (valid and uniquely identifying the caller, using the language of 4.10) and those of Display CLIs (valid and diallable, using the language of 4.10). "Display CLI" can then be clarified as being a Presentation Number if present, otherwise the Network Number: as such the requirement of diallability on Network Numbers is only invoked if there's no Presentation Number present.

Even with these changes, however, we'd note that e.g. a transit or terminating network cannot validate that any CLI received meets the criteria of *"is in service and can be used to make a return…call"* short of pinging every CLI on receiving a call to see if it connects to a live number.

NICC has raised the issues in this response because they're fundamental to the requirements of the GC, indeed the GC needs amending if only to clarify the explanatory text. I understand that individual operators will be writing to Ofcom separately highlighting individual issues in the Guidance, but it was best that these fundamental issues were raised by NICC as they're concerns that are held collectively. Please do contact me if you've got any queries.

Regards