



Response to Consultation on proposed changes to Ofcom's Guidelines for CLI Facilities

DRAFT

1. Introduction

For the past 10 years we have been researching the issue of nuisance calls and campaigning for measures to block them. We have written a number of reports on the subject, and have acted as a consultant to the Telephone Preference Service. We have designed trueCall technology that is protecting over 1.5 million UK homes and is blocking an estimated 500 million nuisance calls a year. When independently tested, trueCall technology blocks 95%+ of nuisance calls.

2. General points

2.1 Untrusted caller-IDs

2.1.1 Introduction

We believe that having information is better than not having information, and disagree with Ofcom's proposal to prohibit CPs from forwarding a suspicious CLI to a subscriber's line. We believe that CPs should still pass on the number, but add a warning marker to the caller-ID text (For example '?????', '#Warning#' or 'Untrusted'). An unconfirmed (but not obviously invalid) international CLI together with a warning marker could be regarded as valid when interpreting GC6. We acknowledge that this would require a consumer awareness campaign.

Consider the following scenario where my sister lives in India:

Current situation

When my sister calls I recognise her calling number and pick up. I may choose to ignore calls from any other Indian number, so if an Indian telemarketer or scammer calls I won't pick up.

Ofcom's proposed solution

When my sister calls I get no information about the call – I see 'Unavailable'. I have no way of knowing whether this is my sister calling or a telemarketer or scammer.

trueCall stats tell us that 3% of incoming calls already come marked 'Unavailable', and 88% of these turn out to be nuisance calls, so very many people choose not to answer calls marked 'Unavailable'. This means that under Ofcom's proposal perfectly legitimate calls that arrive from a suspect CP will be less likely to be picked up. This will cause significant inconvenience.

trueCall's proposed solution

When my sister calls me I see her number, and also a warning marker. I can ignore the warning marker and accept the call knowing that it is from my sister.

If a telemarketer/scammer – through some great feat of social engineering – was able to discover my sister's number and spoof a call to me on that number then I would know when I picked up the call that this wasn't authentic because it wouldn't be my sister on the line.

2.1.2 Other issues

Proportionality

Consider an overseas CP that is not particularly diligent about policing the caller-IDs that are put on to its network – maybe 5% of its traffic has a spoofed caller-ID. Ofcom's proposed guidelines would require UK CPs to blank out the CLI on all calls from that CP.

Is it proportionate to inconvenience consumers on 95% of calls from that CP (which have a valid CLI) in order to protect consumers from 5% of spoofed numbers from that CP? (an 'inconvenience ratio' of 20:1).

Ofcom's consultation paper doesn't mention proportionality. UK CPs – to make sure they are fully compliant – may decide to designate an overseas CP as being untrusted suppliers of caller-ID on the basis of a single call with a spoofed number. If this is the case then the 'inconvenience ratio' may be a 1,000,000 to 1.

The impact of terminal equipment

Some telephone handsets can display a CLI number and text, some can just display a number and some handsets have no display capability at all.

- Most telephone handsets sold in the last 15 years have the ability to display both the caller-ID number and caller-ID text. These can display the warning marker – for example '#Warning#'.
- Some handsets (normally older handsets) only have the ability to display the caller's number, not the caller-ID text. If this is considered a barrier to our solution then we propose that CPs insert a leading hyphen at the front of a CLI that is untrusted – for example if a call from 020 8123 4567 is untrusted it will be displayed as '-020 8123 4567'. This solution complies with the requirement for this to be a dialable number because it is not uncommon for caller-IDs to have embedded hyphens in them.
- Those whose phone doesn't display caller ID wouldn't be affected in any way whatever Ofcom chooses to do - they don't know the caller-ID of the caller now, and they won't know the caller-ID of the caller in the future.

Network constraints

It may be that network equipment is unable to manipulate the Caller-ID text field. If this is the case then the leading hyphen solution could be adopted as the warning marker.

We aren't able to estimate the costs of making this change by the networks, but are assuming that it will be no more than in Ofcom's proposed solution – ie the task of clearing out parts of the CLI message will be programmatically similar to the task of adding a warning marker to the existing CLI message.

1471

If a consumer dials 1471 to get details of the last caller, the message could give the number and in addition say something like "Warning, this is an untrusted number" if it is untrusted.

Self-policing

An overseas CP whose numbers are being marked with a warning marker will have every incentive to put their house in order (though Ofcom's proposals don't specify how an overseas CP can demonstrate its compliance to UK CPs).

2.1.3 Summary

The warning marker gives the consumer the information they need to make an informed choice, and we believe that our solution meets all Ofcom's objectives, and causes less disruption for legitimate callers – like my sister – whose calls may be 'caught in the crossfire'.

2.2 Blocking calls where the CLI doesn't comply with the numbering plan

CPs are able to block calls in the network before they reach subscribers. There are many different ways in which non-compliant calls can be identified. These may not all be technically feasible, but these are all situations that our customers see:

2.2.1 Invalid numbers

There are many reasons why a caller-ID can be identified as being invalid:

- A. The CLI has the wrong number of digits
- B. The CLI is from a number that lies outside the numbering plan (eg a number starting 0511 in the UK)
- C. The CLI is from a number that is from an unissued number range
- D. The CLI format is incorrect – for example a number that starts '000'
- E. A call that arrives on an international circuit, but which carries a network CLI that is a UK geographic or mobile number (A presentation number that is a UK geographic number would be valid)
- F. The CLI is for a mobile number range, but the call does not originate from a mobile CP

We welcome the requirement for CPs to block in the network callers whose calls don't meet the requirements A - F above, however it isn't clear in the consultation document which of these checks CPs are required to implement, and how they are to be applied to calls from other countries:

- We are not aware of a resource that explains the numbering scheme of every country to a sufficient level to apply tests A, B or D
- It is probably not practical to require test C

2.2.2 Non-compliant operation

We would also like Ofcom to give some consideration to checking numbers that they receive complaints about. Even if the caller-ID is valid with regard to tests A – F above, the caller may be operating on a non-compliant way:

- G. The number is not returnable – eg when you call it you hear a NU tone or a network message saying that the number isn't in service
- H. Calls to the number ring but are not answered
- I. Calls to the number are answered, but the original caller's identity isn't given
- J. Calls to the number are answered, and the caller's identity is given, but the caller is not given the option to opt out of receiving future calls.

If a number that has been complained about fail tests G – J (which is simple to test by just calling the number), then Ofcom could ask CPs to block calls from these numbers. When these callers come back into compliance (which can be checked by making a single phone call), their number could be unblocked.

2.2.3 Impact of blocking these calls

Calls with these characteristics make up a significant proportion of nuisance calls.

In a study carried out by trueCall in August 2017 778,014 nuisance calls received between 1st January and 30th June 2017 by 5,900 trueCall users were analysed, and the top 241 calling numbers were identified. These 241 numbers made 17% of all nuisance calls received. Tests A – J were applied to each of these calling numbers. The results were as follows:

Test	Description	Calling numbers	% of calling numbers
A	The CLI has the wrong number of digits	15	6%
B	The CLI is from a non-existent number range	3	1%
C	The CLI is from an unissued number range	1	<1%
D	The CLI format is incorrect – for example a number that starts '000'	4	2%
E	A call that arrives on an international circuit, but which carries a network CLI that is UK geographic number	7	3%
F	The CLI is for a mobile number range, but the call does not originate from a mobile CP	0	0%
G	The number is not returnable – eg NU tone, network message	12	5%
H	Calls to the number ring but are not answered	115	48%
I	Calls to the number are answered, but are answered, but the original caller's identity isn't given	3	1%
J	Calls to the number are answered, and the original caller's identity is given, but the caller-back is not given the option to opt out of receiving future calls.	20	8%
	Fully compliant with all the tests above	61	25%

3. Response to specific consultation questions

Question 1 – What are your views of the use of CLI authentication to improve the accuracy of CLI information presented to an end user, in particular the viability and timeframe for implementation? Are there any issues associated with implementation?

We believe that having information is better than not having information, and disagree with Ofcom's proposal to prohibit CPs from forwarding a suspicious CLI to a subscriber's line. We believe that CPs should still pass on the number, but add a warning marker to the caller-ID text (For example '?????', '#Warning#' or 'Untrusted'.)

See description above.

Question 2 – Do you have any comments on the proposed changes to the CLI guidelines?

We welcome requirements on CPs to block in the network callers whose CLI is malformed or invalid in some way. We think that callers who are non-compliant with regards to answering a call to that number, identifying the calling party, and offering the option to opt out of future calls could also be blocked.

This consultation document isn't clear about which of these checks CPs are required to implement.

Question 3 – Are there any other types of Presentation Numbers which could be added to the list in Annex 1 of the CLI guidelines?

This is not our area - we are unable to comment on this

Question 4 – Do you have any comments on the proposal to designate the 08979 number range as 'Inserted Network Numbers for Calling Line Identification' in the Numbering Plan?

This is not our area - we are unable to comment on this