



Guidelines for CLI Facilities

BT's response to Ofcom's consultation on revising the guidance for the provision of Calling Line Identification information
Including proposals to modify the National Telephone Numbering Plan

Date 14 November 2017

Author Name Sarah Wood

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Executive summary

- BT welcomes Ofcom's move to strengthen regulation and protect end-users from nuisance and unwanted calls.
- Without some further work to remove ambiguity from the proposals, the changes may lack the necessary clarity to help industry implement and apply the guidance in a consistent manner.
- Emergency calls must be exempted from Ofcom's call blocking proposals within these Guidelines and in the revised General Conditions to ensure end-users can access the emergency organisations at all times and from any mobile network.

1 Introduction

In responding to Ofcom's consultation on the Guidelines for CLI Facilities, BT is including comments in relation to Ofcom's revised General Conditions where we consider these relevant. While we appreciate that Ofcom has published the revised General Conditions as a statement, it is not clear to us how else we might raise any concerns without further consultation or more formal opportunity to do so.

We trust that including our points within this response will enable Ofcom to consider these issues and make further revisions to the General Conditions in advance of their mandatory implementation on 1 October 2018. However, comments we may wish to make in relation to the revised General Conditions are not limited to this response. In the somewhat limited time since their publication, it has not been possible to fully assess the impact of the proposed changes and BT reserves the right to address any subsequent issues separately with Ofcom as may become appropriate.

Whilst Ofcom explicitly identifies Network and Presentation CLI in parts of the consultation and statement, there are still instances where it is unclear whether they are referring to Network CLI, Presentation CLI, or both. We have made suggestions within our response to Question 2 on how Ofcom might easily remedy this to provide clarity to the Guidelines that we believe will be beneficial to industry overall and assist in universal compliance and application of implementation.

The current CLI Guidelines are based on existing technology, much of it legacy, which will become less and less relevant over time. We believe Ofcom should take more account of future technologies being rolled out across the UK and beyond, as well as considering other types and mechanisms for communication. Eventually, numbers are unlikely to be relevant and display may be based on alternative technologies and formats, each adopted differently throughout the world and within differing timeframes. If the Guidelines are to be relevant over time, Ofcom should give thought now to how it will achieve this for the future.

Ofcom states in the background section of its consultation that the CLI Guidelines set out the common approach to the handling of caller information from the initiation of a call through to its termination. However, while descriptions of each is included within the glossary, only limited reference is made within the Guidelines to the differences between Network CLI and Presentation CLI, and to Calling Line Identification and Connected Line Identity. BT believes that the Guidelines as currently drafted offer insufficient clarity for all of the communications industry to understand what is expected of them in relation to the identification information needed for each call to originate, transit and terminate via multiple Providers, and to implement and apply Ofcom's guidelines compliantly, effectively and consistently.

If all Regulated Providers are to apply a common approach to call identification information and the action to be taken at each point in a call's journey from its point of origination or ingress within the UK through to its termination, there must be no ambiguity within the supporting guidance. Where such ambiguity exists, the guidance will be open to the interpretation of each Regulated Provider and inconsistencies will occur in how call information is implemented.

We believe it is possible to minimise this risk by adding a number of minor amendments to the Guidelines and to help with this further wherever possible, we have provided suggested redrafting within this response. We also believe that Ofcom should include a review timeframe for the CLI Guidelines to ensure they remain relevant and adapt to the fast-changing communications environment, today and in the future.

2 General Comments in response to Ofcom’s consultation document

2.1 CLI Data

The many references to CLI within the Guidelines should be clarified to make clear whether the guidance refers to the Network CLI or to the Presentation CLI. Where such distinction is inappropriate or irrelevant to the guidance, we believe Ofcom should refer to ‘CLI Data’ using the suggested definition below to make this clear.

CLI Data	CLI Data comprises a mandatory Network CLI, an optional Presentation CLI and respective privacy information (which indicates what the call originator is prepared to have displayed to the called party). Privacy information is ignored in the case of calls to the emergency services.
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2.2 Valid and Dialable Numbers

One primary concern BT has with Ofcom’s proposals is the use of the terms ‘valid’ and ‘dialable’ numbers. These are used frequently throughout the document and play a key part in defining the nature of CLI Data and the triggers for the actions CPs should take when CLI Data is not ‘valid’ or ‘dialable’. As such the terms need to be defined clearly and accurately.

2.2.1 Valid Numbers

In setting out the CLI principles within the consultation, Ofcom defines a valid CLI within paragraph 4.11 as:

“a valid number is one which has been designated as available for use in the Numbering Plan and has been allocated by Ofcom (i.e. is shown as allocated in the National Numbering Scheme)”

However, this is the only reference to a definition of validity that BT can find. We believe it would be helpful if Ofcom provided the necessary clarity by including a definition of ‘valid’ within both the Guidelines and the General Conditions such as:

Valid	Means, when referring to numbers or CLI, one which has been designated as available for use in the Numbering Plan or Scheme and has been allocated by Ofcom or similar international body if outside of the National Numbering Plan or Scheme. Unless the call is being made to a recognised UK Emergency Call number, numbers are considered to be invalid if they: <ol style="list-style-type: none">1) do not comply with the ITU-T E.164 number plan; or2) do not meet the minimum number length for the country of origin. (The country of origin is assumed by analysis of the Country Code in the received CLI); or3) fall into protected, spare or unallocated ranges of the Ofcom Numbering Plan; or
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	<ul style="list-style-type: none"> 4) are premium rate numbers; 5) are anything other than a geographic number where the call originates on a fixed network; 6) are anything other than a mobile number where the call originates on a mobile network; 7) are anything other than a geographic, 03 or mobile number where used as a Presentation CLI.
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We note that the majority of internationally originated traffic would include numbers from outside Ofcom’s jurisdiction and national allocation authority. Originating from outside the UK would not, in itself invalidate these numbers, or render them ‘non-dialable’ from the UK.

2.2.2 Dialable Numbers

The term ‘dialable’ is one where a number of different interpretations of its meaning might be applied. The major point is that a dialable number is one that is displayed to a called party and when dialled will be answered. In order to be dialable, a dialable number must first be a valid number and then must satisfy the requirement that calls to it will be answered.

The inclusion of a definition for ‘dialable’ number within the Glossary would go a long way towards removing some of the potential ambiguity within the Guidelines.

Dialable Number	a dialable number is one that: (a) conforms to the ITU-T number plan E164; and (b) is allocated to a network end-point that (i) is in service with an end-user; and (ii) is configured to accept incoming calls
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2.3 Emergency Calls

2.3.1 Blocking of Emergency Calls

To avoid potential risk to life, Ofcom must make clear that calls to the emergency numbers 999 and 112 should never be blocked, regardless of what, if any, CLI is present on the emergency call. There are entirely valid reasons why an emergency call may not have CLI information but this lack of information does not invalidate the call.

The revised General Condition A3.4¹ requires access to the emergency call numbers to be provided to all End-Users. This requirement helps, in particular, to maximise mobile coverage within the UK by

¹ A3.4 **Regulated Providers must ensure that all End-Users can access Emergency Organisations** by using the emergency call numbers “112” and “999” at no charge and, in the case of a **Pay Telephone**, without having to use coins or cards. In the case of **Regulated Providers providing Mobile Communications Services**, this obligation also applies to access by all **End-Users to Emergency Organisations** by using **eCalls**.

enabling an emergency call to be made on any network, without relying solely on a network with which a subscriber has a commercial arrangement.

We believe in conjunction with the review of the CLI Guidelines, that Ofcom must amend the revised General Condition C6.6(b)² to make clear that the obligation to block calls with non-dialable CLI is not applied where the caller has made an Emergency Call.

An alternative approach would be to require all mobile networks to insert a 'dummy' CLI into emergency calls which originate from handsets with which they have no commercial arrangements and cannot identify the user.

2.3.2 New Section covering Emergency Calls

To avoid having to make it clear on a case-by-case basis whether the guidelines are referring to a Presentation Number, a Network Number or both, we suggest that a sentence is inserted at the start that makes it clear the document is referring to Presentation Number throughout apart from in the case of Emergency calls. In our view, a separate section should be added to the guidelines that then sets out how these calls should be managed where the CLI does not meet the dialable or valid criteria.

NEW:

SECTION 5

5. Calling Line Identification and calls to the Emergency Services

- 5.1 General Condition A3.5 requires all Regulated Providers to make available Caller Location Information when a caller makes a call to the emergency numbers 999 or 112. To discharge this obligation on behalf of the Regulated Provider the 999/112 Call Handling Agency (CHA) with whom they have contracted to process emergency calls, will, for all types of call, need the Network CLI of the call. The CHA will use this Network CLI as a reference with which to interrogate either a database of pre-provided location information or other systems which can identify the caller's location in real-time.
- 5.2 All Regulated Providers, when an emergency call is initiated from their network, must supply the relevant CLI Data and include as a minimum the Network CLI from which the call originated.
- 5.3 In cases where a Regulated Provider receives an emergency call which has an invalid or non-dialable CLI that Regulated Provider should connect the call (as opposed to blocking or filtering the call as it would were it a non-emergency call). That Regulated Provider should then work with the Regulated Provider or customer who had initiated the call to ensure that future Emergency calls include the necessary CLI. This should apply to all Emergency calls both those from the end-user to the CHA and those from the CHA to the emergency authority control room.

² C6.6 Where technically feasible, **Regulated Providers must:**

(a) take all reasonable steps to identify calls in relation to which invalid or non-dialable **CLI Data** is provided; and (b) prevent those calls from being connected to the called party, where such calls are identified.

2.4 Technical Feasibility and Economic Viability

The revised General Condition 6.2³ requires Regulated Providers to “enable [Calling Line Identification facilities] by default” subject to technical feasibility and economic viability. The words “enable by default” were not consulted upon and we would welcome clear guidance on their meaning.

In the current technological, economic and legal context, they cannot be interpreted as meaning that all Regulated Providers must invest in providing full CLI capacity for all their PSTN customers. This would be a disproportionate and unnecessary approach because it would involve investing in old technology at a time when BT is investing in and moving to IP and because a high proportion of BT’s customers do not require this facility.

For instance, more than [X⁴] % of BT’s retail customers with a landline make and receive no landline calls. Many customers who do make and receive calls on their landline do not have a handset capable of displaying CLI data. Moreover, BT’s Caller Display product is selected by customers who want to use it. Some customers simply do not want to use it.

It follows that too broad an interpretation of “enable [CLI facilities] by default” would result in the availability of CLI facilities to customers who do not need them, cannot take them and do not want them. It is disproportionate and unnecessary to require providers to invest in additional capacity in the knowledge that customers will not use it. It is also economically unfeasible for a provider to do so.

BT considers that the words “enable [CLI facilities] by default” should mean that Regulated Providers only have to provide CLI facilities when a customer actively requests them and when the network is capable of providing them (older networks often cannot provide CLI facilities for a variety of technical reasons).

From both the technical and economic perspective, it is inappropriate to extend CLI capabilities across the entire PSTN switch base. BT estimates that the process would take materially longer than two years and cost anything between £[X⁵]M and £[X⁶]M. This would be a wasteful investment in old technology at a time when BT and much of industry is investing in new IP platforms that provide more flexible services and facilities like CLI on a per port basis. BT has already stated that it expects its customers to have migrated to new IP services by 2025 and therefore is focusing its investment on IP while maintaining the PSTN until customers have migrated.

Clear guidance would also be welcome on how technical feasibility and economic viability might be assessed. Ofcom should indicate the circumstances in which the inability to provide Calling Line Identification Facilities for technical or economic reasons would apply. We propose the following definitions:

Technically Feasible	An action or development utilising design and build methods and materials, which are approved, codified, recognized, fall under standard or acceptable levels of practice or otherwise are determined to be generally acceptable by the industry and Ofcom
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³ C6.2 **Regulated Providers must provide Calling Line Identification Facilities**, and enable them by default, unless they can demonstrate that it is not technically feasible or economically viable to do so.

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	and for which the action has an acceptable minimum lifespan of the technology deployed.
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Economically Viable	An action or development that is already technically feasible, or which can be implemented by additional technical development at a cost that does not represent an unfair burden to the party bearing that cost and which has an acceptable minimum period of sustainability.
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2.5 PECR

Ofcom points out that the Privacy and Electronic Communications (EC Directive) Regulations (PECR) 2003, with the 2016 amendments, set out the rights of people both making and receiving calls.

- Regulation 107 requires callers to be able to prevent their CLI presenting when they make calls;
- Regulation 118 enables the called party to reject a call where the CLI has been withheld by the caller;
- Regulation 129 requires Communications Providers to publish information about the availability of withholding CLI and rejecting calls without CLI, and;
- Regulation 1310 requires intra-industry compliance and interoperability to enable compliance.

The 2016 amendment to PECR requires the CLI presented on direct marketing calls to identify the caller and be capable of supporting a call back. However, there are many instances where the call

⁷ **Prevention of calling line identification – outgoing calls**

10.—(1) This regulation applies, subject to regulations 15 and 16, to outgoing calls where a facility enabling the presentation of calling line identification is available.

(2) The provider of a public electronic communications service shall provide users originating a call by means of that service with a simple means to prevent presentation of the identity of the calling line on the connected line as respects that call.

(3) The provider of a public electronic communications service shall provide subscribers to the service, as respects their line and all calls originating from that line, with a simple means of preventing presentation of the identity of that subscriber's line on any connected line.

(4) The measures to be provided under paragraphs (2) and (3) shall be provided free of charge.

⁸ **Prevention of calling or connected line identification – incoming calls**

11.—(1) This regulation applies to incoming calls.

(2) Where a facility enabling the presentation of calling line identification is available, the provider of a public electronic communications service shall provide the called subscriber with a simple means to prevent, free of charge for reasonable use of the facility, presentation of the identity of the calling line on the connected line.

(3) Where a facility enabling the presentation of calling line identification prior to the call being established is available, the provider of a public electronic communications service shall provide the called subscriber with a simple means of rejecting incoming calls where the presentation of the calling line identification has been prevented by the calling user or subscriber.

(4) Where a facility enabling the presentation of connected line identification is available, the provider of a public electronic communications service shall provide the called subscriber with a simple means to prevent, without charge, presentation of the identity of the connected line on any calling line.

(5) In this regulation "called subscriber" means the subscriber receiving a call by means of the service in question whose line is the called line (whether or not it is also the connected line).

⁹ **Publication of information for the purposes of regulations 10 and 11**

12. Where a provider of a public electronic communications service provides facilities for calling or connected line identification, he shall provide information to the public regarding the availability of such facilities, including information regarding the options to be made available for the purposes of regulations 10 and 11.

¹⁰ **Co-operation of communications providers for the purposes of regulations 10 and 11**

back number is routed to an IVR with a generic message. It is unclear from Ofcom's proposals whether such routing is permissible. Is Ofcom satisfied that this meets the requirement for the caller to be contacted on the number provided? We believe such instances help to enable compliance and should be allowed but consider additional clarification by Ofcom in relation to use of IVR may assist in preventing such calls being blocked in error. We also believe that this clarification should specify what is not permissible such as an IVR that routes the caller to a signposting service or those which promote additional chargeable calls. Further, we are aware of recent instances where callers to dropped calls have been invited to send an email to change their call preferences or remove themselves from call lists. We believe Ofcom should stipulate the minimum customer experience required from Providers using an automated response for call-back purposes.

2.6 Scope

Our interpretation of the scope of General Condition C6 is that it does not apply to resellers who do not provide Publicly Available Telephone Services, or to any network or Communications Provider originating calls outside of the UK. This raises a number of issues which we believe may benefit from additional clarity. We assume that for those services breaking into the UK telephony network that the break-in service provider must act as the 'originating network' for the purpose of compliance with GC C6.

While Ofcom has provided a new definitions section within the revised General Conditions, and a glossary in the CLI Guidelines, neither contains the definition of a call. The 2009 Communications Framework revised the definition of a call as follows:

“call” means a connection established by means of a publicly available electronic communications service allowing two-way voice communication”

Although the Framework is under review and will be replaced by the Communications Code by 2020, we believe it is important to consider this definition when setting the General Conditions and the CLI Guidelines as without further clarity, it may be interpreted that communications not comprising a two-way voice call fall outside the scope. We would therefore ask Ofcom to consider not just traditional calls, but to anticipate how the scope may be exploited without further revision to protect end-users from unwanted or potentially harmful communications such as SMS. For instance, EE is working with organisations in other sectors where customers are affected by SMS spoofing to develop solutions.

2.7 Interconnect Agreements and Technical Standards

Given that the scope of both General Condition C6 and the PECR is limited to Providers of Publicly Available Telephone Services (PATS) and those Providers of Public Electronic Communications Networks (PECN) over which these are provided, many Communications Providers are not subject to either regulation or to the CLI Guidelines. While Ofcom has sought to plug this gap by urging PATS

13. For the purposes of regulations 10 and 11, a communications provider shall comply with any reasonable requests made by the provider of the public electronic communications service by means of which facilities for calling or connected line identification are provided.

providers and PECNs to embed the Guidelines within their interconnect agreements, we believe this will be insufficient to secure cross-industry compliance.

If Ofcom believes it has sufficient power to do so, it should therefore consider requiring those caught by GC6 to mandate compliance with the principles of PECR and the CLI Guidelines within not only interconnect agreements but also subscriber contracts and reseller agreements. With this additional requirement in place, it would be difficult to envisage any valid reason for non-adherence with NICC's ND1016.

With the exception of some mobile calls to the Emergency Organisations, if all UK originated calls must have a CLI, and all calls from networks not covered by ND1016 must, as a minimum, have a Network Number injected, we do not understand what exceptions might exist. It would be helpful, if Ofcom believes there may be allowable exceptions to these rules, that it provide clarification of such instances to ensure these calls are not blocked in error by Communications Providers.

2.8 Validity of CLI at First Point of Ingress

We welcome Ofcom's statement that the originating Regulated Provider, or the Regulated Provider at the first point of ingress to the UK network, is responsible for ensuring that the correct CLI data may be generated for that call.

However, a Regulated Provider inserting a CLI at the first point of ingress on an international call should not, in our opinion, be providing a dialable number. The injected CLI would be at network level to enable the call to progress through the network while identifying its origin to the various points of interconnect. However, it should not be to the called party presented in a manner that can be dialled as the inserted Network CLI will not allow a call to connect to the originating party, making the terminating network non-compliant where they to display it to the called party. As such, we do not believe it should be the responsibility of the Regulated Provider at the first point of ingress to own or manage that call in the event of a caller attempting to call back and we therefore do not agree there is a need for an IVR and free call to it nor any justification for the cost to the Regulated Provider of supplying it. Instead, we believe the injected Network CLI should carry a suitable identification message that can be displayed or provided via 1471 (as opposed to a Presentation Number that can be displayed) to the called party that will neither encourage, nor require a call back.

It is also not clear to us what action the Regulated Provider at the first point of ingress into the UK should take when the international CLI presented to it is dialable but untrustworthy. We would request that Ofcom considers this point and sets out criteria within the Guidelines that Regulated Providers can refer to so as to ensure consistent handling of CLI data where such situations arise.

Ofcom should also note that a transit network provider cannot verify the 'dialability', or rather the 'connectability', of a CLI. If the number conforms to a relevant Numbering Plan it will be onward routed to its destination. We believe that with businesses now being truly global, there is a driver for corporations' CLIs to be delivered in other countries. Unfortunately, a deficiency in IP signalling has led to instances where the terminating network is unable to identify the origin of the call as being outside the UK. The inclusion of a UK specific indicator in IP signalling would go some way to helping identify these calls.

Ofcom refers in paragraph 4.11 to valid numbers in ND1016 as complying with ITU-T Recommendation E.164 (11/2010) and having been allocated for use in the UK in the National Telephone Numbering Plan. However, our understanding of ND1016 is that it does not restrict the

format of the presented CLI to one that would have come from a UK number range. Calls with valid CLIs at the point of ingress into the UK can also be presented. When considering international numbers in particular, a CLI may be dialable but not actively allocated, however it is unclear how the Regulated Provider receiving that call at the point of ingress would know this to be the case. Additionally, without calling the CLI before onward routing it, it is unclear how a Regulated Provider would know that the CLI identifies the caller or the caller's organisation. This is not a requirement for the CLI but for a call back to that CLI, in which instance, it is possible that the IVR in place on that number may not identify the caller if it has been originated by a third party. In our view, none of these factors would invalidate that CLI and prevent its use within the UK.

We would therefore suggest that Ofcom reconsider its position on CLIs for Internationally originated calls being made visible to end users in the UK.

Given the prevalence of spoofing coupled with the inability to validate CLI on such a call (paragraph 4.23 of Ofcom's consultation document), we believe a number of the issues would be resolved better by reverting to our previous practice.

One of the shortfalls of IP signalling is the lack of an indication that the call had entered the UK. Having such information would allow Regulated Providers to perform blocking of calls more accurately and Terminating Networks could provide this additional information to the called user.

Should Ofcom decline to adopt this recommendation we believe Ofcom must make it clear within the Guidelines that international incoming traffic must not have a UK Network CLI (i.e. purport to be a call originating within the UK). The majority of nuisance calls (we believe almost 90%) originate from outside the UK but use UK number ranges for their CLI, many with telemarketers based abroad. We believe that Ofcom should either find a way of controlling number allocation more effectively to prohibit number use by internationally based call centres, or ensure that allocated UK numbers are not used to generate nuisance calls.

Further, if Ofcom maintains its position that a Presentation CLI should be provided to the called party, we believe this should not be presented as a UK or UK mobile CLI. This is because of the potential difficulty in ensuring compliance i.e that the presented number is a legitimate geographic or mobile number associated with the party making the call.

This said, we have assumed given Ofcom's reference to mobile and geographic charge rates that 03, and Free-to-Caller 08 numbers are also acceptable for use as Presentation CLIs, however further clarification as to which 08 ranges are permissible for use in IVR messaging would be helpful as we believe all numbers attracting an Access Charge under the unbundled tariff should be prohibited. If it is Ofcom's intention, as we believe, to limit messages to geographic and mobile call rates and free-to-caller numbers only, Ofcom should state this in the Guidelines to ensure chargeable 08 numbers that might also attract an Access Charge are not used either as Presentation CLIs or in call-back IVR messages.

2.9 Privacy

Where a CLI is available for display, BT will send it to networks outside of the UK.

In cases where the CLI is restricted, the CLI is only sent where there is a trust relationship with the receiving network. However we are aware of instances where a trusted network then passes calls to a network that does not support Presentation Numbers or Calling Line Identification Restriction

(CLIR). In order to ensure that the caller's privacy settings are protected, we propose that it is permissible for UK Communications Providers to remove CLIs from calls to international trusted networks where there is sufficient evidence that this is necessary to protect the caller's privacy status.

3 Responses to Ofcom’s Specific Questions

Q1 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?

It is of paramount importance that calls to the emergency numbers 112 and 999 are not blocked as a result of the call having an invalid or non-dialable CLI. However to prevent continued abuse, Regulated Providers should be held responsible for such calls but should also be able to amend contracts to refuse to carry calls to 999 and 112 should the sources of such calls continue so to do.

There is not yet a final report available from the NICC study group looking at the issue of CLI authentication to improve accuracy of CLI information and we believe it is therefore premature to comment at this stage.

Q2 Do you have any comments on the proposed changes to the CLI guidelines?

A1.	<i>A guide to Network and Presentation Numbers</i>
<i>Introduction</i>	
A1.1	<p><i>Section 4 of this document sets out the guidelines relating to the CLI that is displayed to the end user. The CLI that is displayed can be either a Network Number or a Presentation Number representing the origin of the call. Every call must be associated with a Network Number. For the COL, the number that is displayed represents the destination of the call</i></p> <ul style="list-style-type: none"> <i>• The fixed access ingress to, or egress from, a Public Telephone Network, i.e. the Network Termination Point (NTP);</i> <i>• A Subscriber or terminal/telephone that has non-fixed access to a Public Telephone Network, i.e. the line identity that has been allocated to an individual subscription or terminal/telephone with a non-fixed access to the public network; or</i> <i>• The first known UK PECN (or a node within that PECN) in the call path. This should only be used where the first known UK PECN does not reasonably trust the CLI data that is being provided or the CLI data is not available. In these circumstances, the privacy marking provided alongside the CLI should be marked as ‘unavailable’.</i> <i>• The number that is used must not be a number that results in charges in excess of the cost of calling a standard geographic number or a mobile number.</i>

Ofcom should provide further clarification to make clear that the Network CLI of the caller should not be modified. We believe Ofcom should revise A1.1 to ensure it is consistent with ND1016.

A1.3	<i>The authenticity of a Network Number is guaranteed as the number must be one which has been provided by the originating network and it is a number that has been allocated to the originating network provider.[The Network Number is</i>
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	<i>used by the emergency services to ascertain the origin of an emergency call, hence should be representative of the PECN.]</i>
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Sub-allocated numbers do result in the allocated network making calls via another Communications Provider and in some cases, international carriers. It is not clear from the Guidelines whether this is permissible. Further, it is also not clear how a UK Communications Provider would determine which customer had been allocated the use of a CLI where this has originated overseas.

A1.4	<i>The Presentation Number is a number nominated or provided by the caller that can identify that caller or be used to make a return or subsequent call. In the UK, the industry has recognised a number of scenarios where Presentation Numbers may be provided, as a commercial service, to meet differing customer calling requirements.</i>
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We suggest Ofcom revise this paragraph to clarify who is deemed to be the owner of the number in this instance. Is it acceptable for a Presentation Number to be used by any third party the 'owner' of the number may use, for example? Would Ofcom consider that use by multiple third parties on behalf of the 'owner' would be compliant with the requirement that CLIs should identify unique callers.

A1.5	<p><i>Unlike a Network Number, a Presentation Number will not necessarily identify a call's point of ingress to a public network. However, it may carry other useful information. The requirements of a Presentation Number are that:</i></p> <ul style="list-style-type: none"> <i>• It must be a valid number, that complies with the ITU-T numbering plan E.164.</i> <i>• It must be a dialable number that identifies the caller and can be used to make a return or subsequent call.</i> <i>• It must be a number that the user has been given authority to use (either because it is a number that has been allocated to the user or because the user has been given permission from a third party who has been allocated that number); and</i> <i>• It must not be a number that results charges in excess of the cost of calling a standard geographic number or a mobile number. (NB the exploitation of a Presentation Number to generate revenue-sharing calls may constitute persistent misuse of an Electronic Communications Network or Electronic Communications Service).</i>
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Ofcom should consider BT's points in relation to use of the term 'dialable' made in section 2 of this response.

A1.6	<i>In order to maintain the integrity of the CLI data as it is passed between networks, COMMUNICATIONS PROVIDERS must consider whether the Presentation Number is sufficiently authentic and if further verification may be required. Where additional verification is needed to demonstrate that the</i>
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	<i>caller has permission to use the number, this could be in the form of a contract between the caller and the third party who has been allocated that number. A number of different types of Presentation Number services have been developed to meet these end user requirements and the following section lists the conditions that should be observed for their use.</i>
<i>Types of Presentation Number</i>	
	<i>Type 1</i>
<i>A1.7</i>	<i>A Presentation Number generated by the subscriber's network provider. The number is stored in the network and applied to an outgoing call at the local exchange by the provider. Because the number is applied by network equipment there is no need for it to be verified each time a call is made – instead the level of authenticity will depend on the checks made by a network provider that a subscriber is entitled to use a particular Presentation Number.</i>
	<i>Type 2</i>
<i>A1.8</i>	<i>A Presentation Number which identifies a caller's extension number behind a DDI switchboard. Although the number or partial number is generated by the user's own equipment, the network provider is able to check that it falls within the range and length allocated to a particular subscriber. In this way the authenticity of the number may be ensured. It should be noted that some network providers classify Type 2 Presentation Numbers as network numbers (especially where the full number is constituted at the local exchange). This type of number is considered to carry sufficient authenticity to be classified as a network number and is carried as such by some networks.</i>
<i>A1.9</i>	<i>A Presentation Number limited to the far-end break out scenario where a call's ingress to the public network may be geographically remote from where it was originated. The number is generated by the user's equipment and is not capable of being subjected to network verification procedures. Verification is based on a contract between the subscriber and the network provider in which the subscriber gives an undertaking that only authentic calling party numbers will be generated.</i>

Ofcom can provide additional clarity by changing 'calling party numbers' to 'Presentation Numbers' to ensure consistency of use.

	<i>Type 4</i>
<i>A1.10</i>	<i>A Presentation Number available for the onward transmission of the originating number where a call breaks into a private network and breaks out again before termination, as in a DISA scenario. On the break out leg the number is generated by the user's equipment although it will have already been verified in consequence of having been delivered to the private network. To maintain the verification it is necessary to ensure that the number submitted by the private network is the number that was received.</i>
<i>A1.11</i>	<i>Network providers wishing to offer a Type 4 service will require a contractual commitment from customers that they will only submit CLIs that have been received from the public network. Unlike other types of Presentation Numbers, Type 4 numbers may not always be dialable: This will depend on the nature of the number received from the public network.</i>

Again, Ofcom should consider BT’s points in relation to use of the term ‘dialable’ made in section 2 of this response.

	<i>Type 5</i>
A1.12	<i>Presentation numbers that identify separate groups of callers behind a private network switch wishing to send different outgoing CLIs. A typical scenario is a call centre making calls on behalf of more than one client. Type 5 Presentation Numbers are generated by the user’s equipment. Subscribers will need to enter into a similar contractual commitment with their network providers as for Type 1 Presentation Numbers – that they are entitled to use the numbers they have selected.</i>

We have revised Ofcom’s Glossary to include those definitions where, in Section 2 of this response, we have proposed amendment or additional inclusion. For clarity, these are shown in yellow in table below.

A2. Glossary

<i>Anonymous Call Reject (ACR)</i>	<i>Where the called party has opted to reject calls where the caller has chosen to prevent the display of their CLI data.</i>
<i>Calling Line Identification (CLI)</i>	<i>Calling Line Identification is the data that is provided with a telephone call about the caller. It consists of the caller’s line identity along with a privacy marking, which indicates whether the number can be shared with the recipient of the call.</i>
<i>Calling Line Identification (CLI) facilities</i>	<i>These are the facilities by which the telephone number of a calling party is presented to the called party prior to the call being established.</i>
CLI Data	CLI Data comprises a mandatory Network CLI, an optional Presentation CLI and respective privacy information (which indicates what the call originator is prepared to have displayed to the called party). Privacy information is ignored in the case of calls to the emergency services.
<i>Connected Line Identity (COL)</i>	<i>Connected Line Identity is the data that is provided with a telephone call about the called party. It consists of the called party’s line identity along with a privacy marking, which indicates whether the number can be shared with the caller.</i>
Dialable Number	a dialable number is one that: (a) conforms to the ITU-T number plan E164; and (b) is allocated to a network end-point that (i) is in service with an end-user; and (ii) is configured to accept incoming calls
Economically Viable	An action or development that is already technically feasible, or which can be implemented by additional technical development at a cost that does not represent an unfair burden to the party bearing that cost and which has an acceptable minimum period of sustainability.

<i>Network Number</i>	<i>The Network Number is a telephone number that unambiguously identifies the line identity of the fixed access ingress to or egress from a Public Telephone Network or a subscriber or terminal/telephone that has non-fixed access to a Public Telephone Network. For CLI, it can also be the first known Public Electronic Communication Network in the call path, where the first known UK PECN does not reasonably trust the CLI data that is being provided or the CLI data is not available.</i>
<i>Network Termination Point</i>	<i>This is the physical point at which a subscriber is provided with access to a Public Electronic Communications Network and can be identified by means of a specific network address, which may be linked to the Telephone Number or name of a Subscriber.</i>
<i>NICC</i>	<i>NICC is the UK telecoms industry standards forum that develops interoperability standards for UK communications networks.</i>
<i>Presentation Number</i>	<i>The Presentation Number is 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</i>
Technically Feasible	An action or development utilising design and build methods and materials, which are approved, codified, recognized, fall under standard or acceptable levels of practice or otherwise are determined to be generally acceptable by the industry and Ofcom and for which the action has an acceptable minimum lifespan of the technology deployed.
Valid	Means, when referring to numbers or CLI, one which has been designated as available for use in the Numbering Plan or Scheme and has been allocated by Ofcom or similar international body if outside of the National Numbering Plan or Scheme. Unless the call is being made to a recognised UK Emergency Call number, numbers are considered to be invalid if they: <ol style="list-style-type: none"> 1) do not comply with the ITU-T E.164 number plan; or 2) do not meet the minimum number length for the country of origin. (The country of origin is assumed by analysis of the Country Code in the received CLI); or 3) fall into protected, spare or unallocated ranges of the Ofcom Numbering Plan; or 4) are premium rate numbers; 5) are anything other than a geographic number where the call originates on a fixed network; 6) are anything other than a mobile number where the call originates on a mobile network; 7) are anything other than a free-to-caller, geographic, 03 or mobile number where used as a Presentation CLI.

Q3 Are there any other types of Presentation Numbers which could be added to the list in Annex 1 of the CLI guidelines?

At the current time, we are not aware of any other types of Presentation Numbers. However, we would suggest that may be helpful if Ofcom sets out a process for reviewing and amending this list as required by future developments and technologies.

Q4 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?

We support Ofcom's proposal to designate the 08979 number range as 'Inserted Network Numbers for Calling Line Identification'. We believe that Ofcom should specify in the Numbering Plan that 08979 numbers from the Inserted Network Numbers range should also be used by Mobile Providers when carrying an emergency call on behalf of another network's customer that does not have CLI information associated with it.