

**OMAN MOBILE**

***REFERENCE***

***INTERCONNECTION***

***OFFER***

July 7, 2010

**ANNEX I**

**CALLING LINE IDENTIFICATION**

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# 1 Introduction

- 1.1 The provision of Calling Line Identification (“CLI”) display services requires that there is end-to-end availability and control of the CLI messages, and that these messages are generated in a consistent way. Unless this is achieved, the CLI display service cannot be provided efficiently as the status of the message (e.g. the validity of the numbers displayed) cannot be guaranteed by the Provider of the display service.
- 1.2 Therefore, consistency is required between the network where the messages are generated (the Originating Network) and the network where the messages are displayed (the Terminating Network). Clearly where these are the same network there is less likelihood of any problem but where interconnection between two or more networks occurs, some way of ensuring that all networks adhere to the same rules is required if customers of CLI display services are to have confidence in such a service.
- 1.3 Against this background, this Code was designed to achieve a number of objectives:
  - 1.3.1 to encourage the industry to adopt a consistent set of rules for CLI display to enable the provision of CLI display across network boundaries;
  - 1.3.2 for those rules to ensure that the requirements of Data Protection legislation are met;
  - 1.3.3 to provide a reasonable balance between consumer and producer interests;
  - 1.3.4 to be flexible so that any set of rules can evolve in an efficient manner to reflect changing technological and other developments.
- 1.4 The Code is to be agreed by the Operator and the TRA.
- 1.5 The Code is not a technical standard in itself. Rather its purpose is to standardize a mutually agreed set of rules about how CLI presentation is implemented in order to protect Omani consumers by ensuring a necessary degree of consistency.
- 1.6 It is agreed that the Code requires further work to clarify ongoing developments within the industry. Oman Mobile does not currently accept responsibility for the administration of this code.
- 1.7 The following constitutes a Code of Practice for operators of telecommunications networks in Oman.
- 1.8 This Code governs the responsibilities of such operators in relation to:
  - 1.8.1 CLI Data,
  - 1.8.2 The provision of a CLI display.

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- 1.9 In particular, it covers the responsibilities of networks in relation to the origination of CLI Data, the transmission across networks of such Data, and the delivery to a Network Termination Point of CLI Data, including the information that governs the status of that Data.
- 1.10 For the avoidance of doubt, the operation of this Code of Practice does not affect the ability of networks to use CLI Data for network and/or billing purposes or, in co-operation with the relevant authorities, emergency calls and the tracing of malicious calls and similar activities insofar as the same are lawfully permitted.
- 1.11 The Parties acknowledge that the prevention of any improper use of CLI presentation, such as the return establishment of calls to Premium Rate Numbers, needs to be addressed.

## 2 Scope

### NETWORKS COVERED

- 2.1 This Code of Practice covers all licensed operators of telecommunications networks in Oman interconnected with other public telecommunications networks in Oman where such public networks support both PSTN and/or GSM networks.

### CALL TYPES COVERED

- 2.2 All calls originating or terminating in Oman which are carried by one or more of the networks covered by this Code (for the avoidance of doubt, transit calls that do not either originate or terminate in Oman are not covered).

### MODIFICATION PROCEDURE

- 2.3 Modifications to this Code shall only be made by the agreement of the Parties and is likely under the following circumstances:
- 2.3.1 to reflect a change in Omani legislation; or
  - 2.3.2 to reflect a decisions and regulations by Omani legal bodies concerning data protection or personal information protection; or
  - 2.3.3 to reflect one or more decisions of the TRA which has the effect of applying to all networks, covered by this Code.
  - 2.3.4 to reflect technical and service development.
- 2.4 Oman Mobile does not currently accept responsibility for the administration of this code.

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### 3 Definitions

- 3.1 In this Code there are some terms used that does not have precise meanings in everyday use. For the interpretation of this Code they have been given the following, more precise, meanings:
- 3.2 **“Calling Line Identification”** means Calling Line Identification as defined by the ITU-T.
- 3.3 **“Calling Line Identification Presentation”** means the digits (the “presentation numbers”) that comprise a national dialing sequence for which the originating operator providing the presentation number service has the following responsibilities:
- to have established and recorded the consent of the party to whom a connection would be made for their associated national dialing sequence to be used for that purpose,
  - to have established (with another network provider, if applicable) that the same associated national dialing sequence to be used for that purpose,
  - to have established (with another network provider, if applicable) that the same associated national dialing sequence has been and remains allocated to the presentation number applicant,
  - to correctly data-fill a presentation number,
  - to ensure that any meaningful digits (e.g. the country code) are permissible for all Display CLI receptions.
- 3.4 **“Calling Line Identification Restriction (CLIR) for display purposes** CLI data can have one of three classifications.
- **“Available”** the CLI data is available for transmission to the Network Termination Point of the Terminating Network.
  - **“Unavailable”** the CLI data is not available for transmission to the Network Termination Point of the Terminating Network;
  - **“Private Call”** the CLI data is not available for transmission to the Network Termination Point of the Terminating Network because the originating customer has taken specific action to indicate that the CLI should not be available at the Network Termination Point of the Terminating Network.
- 3.5 **“CLI display Service”** is the delivery to the customers Network Termination Point of data that allows that customer to gain access to the caller’s CLI in the form of data that is displayed.

- 3.6 **“Network Termination Point”** means telecommunications calls originating on a particular network which terminates on geographic number ranges in another network within Oman.
- 3.7 **“Originating Network”** is the network to which the originating customer is first connected (Note – This means that the Code puts a responsibility on the Originating Network even if the customer is paying for the call via another network – e.g. indirect access but the Code does not specify how the classification of CLI data is to be passed between networks).
- 3.8 **“Receiving Network”** means the network in receipt of a call across any Interconnect. The Receiving Network will also be a Transit Network or a Terminating Network.
- 3.9 **“Terminating Network”** means the network to which the called customer is connected.
- 3.10 **“Transit Network”** means any public switched telephone network involved in the conveyance of a call which is neither an Originating Network nor a Terminating Network.
- 3.11 **“CLIP code”** is the per call basis code \*31#
- 3.12 **“CLIR code”** is the per call basis code #31#

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## 4 Rules of the code

**Responsibilities of the Originating Network:** It is the responsibility of the Originating Network to ensure that a call presented for handover to another network is correctly classified at the network boundary. The following classification applies:

- 4.1 **Rule 1:** All calls emerging from a network which does not support the generally used per call blocking code or other acceptable means of blocking are set to “Unavailable” classification.
- 4.2 **Rule 2:** All calls originating on any part of any network that does not support the generally used per call blocking code or other acceptable means of blocking are set to “Unavailable”.
- 4.3 **Rule 3:** All calls originating on parts of networks where customers have not been informed that CLI will be forwarded unless the blocking code or other acceptable means of blocking is operated are set to “Unavailable” or, where blocking has been activated, to “Private
- 4.4 **Rule 4:** All calls originating on parts of networks where the blocking code or other acceptable means of blocking are operational and customers have been informed shall be classified as
- “Private Call” if blocking has been activated; or
  - “Available” if blocking has not been activated.
- 4.5 **Rule 5:** Originating Networks shall offer one or more of the following options (at the customer’s Network Termination Point):
- dialing the prefix generally used blocking code inhibits the transmission of CLI data to the destination Network Termination Point;
  - dialing the prefix generally used blocking code results in a message (uncharged) which tells the customer what prefix to dial (or other action to take) in order to inhibit the transmission of CLI data to the destination Network Termination Point;
  - for those parts of networks where all calls are set to “Unavailable”, dialing generally used blocking code has no effect on the call (i.e. call progresses normally with the “Unavailable” indicator) or causes the call to fail (e.g. number unobtainable tone);
  - In relation to calls where the generally used blocking code is dialed after an indirect access code, will result in the obligations outlined in (a) and (c) above passing to the Network which has been allocated the indirect access code by the TRA.

**Responsibilities of Terminating Network:** It is the responsibility of the Terminating Network to ensure that the classification of a call is respected in the delivery of that call to the final destination. In particular the following rules apply:

- 4.6 **Rule 6:** A Terminating Network that supports a CLI must ensure that CLI data shall be available at the Network Termination Point for display purposes only for those calls classified as “available”.
- 4.7 **Rule 7:** Where the Terminating Network supports a CLI service the indicator delivered to the destination, customer must adhere to the following:

Indicator at Interconnect	Data at Network Termination Point <sup>(1)</sup>
Private Call	Withheld indicator, no CLI data to be displayed
Unavailable	Unavailable indicator, no CLI data displayed <sup>(2)</sup>
Available	CLI data displayed

Notes:

(1) – This Code does not determine how the indicators should be displayed.

(2) – The indicator for “unavailable” might be an empty data set. The crucial factor is that it can be distinguished in some way from the “Private Call” indicator.

- 4.8 **Rule 8:** Where the Terminating Network is not capable of supporting CLI, no action is required on the basis of the call classification.
- 4.9 **Rule 9:** Where a Terminating Network offers an anonymous call rejection service to its customers, this service shall not operate in such a way as to have anti-competitive effects (e.g. by rejecting all calls classified as “unavailable”). This does not preclude the offering of anonymous call rejection services which reject calls classified as “unavailable” on legitimate, differentiated services basis (e.g. where the called customer is part of a closed user group).

**Responsibilities of transit networks:** It is the responsibility of the Transit Network to ensure that the caller’s CLI and the call classification does not alter from the point of entry to the point of exit. However, in exceptional circumstances, where the transit network is not capable of ensuring that the CLI and/or the classification remain constant a limited set of transformations is permitted, as follows:

- 4.10 **Rule 10:** Except as permitted by Rule 11, a Transit Network will not alter the classification or CLI of a call.

4.11 **Rule 11:** Where it is not technically possible to comply with Rule 10 the following transformations are allowable and/or mandatory as indicated. These transformations are hierarchical; where more than one transformation is possible, the transformation towards the top of the list shall take place first.

- (a) a “Private Call” classification will be maintained;
- (b) subject to (a) above, if the integrity of CLI data cannot be maintained, the exit classification shall be “unavailable” (i.e. if the “Private Call” indicator can be maintained but the integrity of the actual CLI data cannot, the exit classification shall be “private”; or otherwise
- (c) where the integrity of the classification cannot be maintained, the exit classification for all calls shall be “unavailable”.

**Responsibilities of receiving networks:** The responsibility for maintaining the integrity of the CLI data and classification lies primarily with the network from which that data is being received. However in the event that this network is unable to meet the Rules outlined above it is the responsibility of the Receiving Network to ensure that CLI data and classification default to a safe from.

4.12 **Rule 12:** In the event that the network from which CLI and/or classification data is being received cannot, or does not, conform to the Rules set out above, the receiving network shall operate Rule 11 at the point of entry.