# System and Method for Calling Mobile Roamers

## FIELD OF INVENTION

The present invention relates broadly to a system and a method for enabling a caller in a telecommunication network to call a roaming callee, as well as a computer readable data storage medium having stored thereon computer code means for instructing a computer to execute a method for enabling a caller in a telecommunication network to call a roaming callee.

## BACKGROUND

Mobile phone users are typically subscribed to use a telecommunication network in their home country or region. When these users visit a foreign country or region, they are usually allowed to utilise the foreign network through an International Roaming Service. The service allows them usage of the foreign network at a fee. However, this fee is subject to roaming charges which are typically more expensive than local direct dial rates. For example, for a person X of country A visiting country B, person X's mobile number is subscribed to a network from country A and the mobile number is now roaming in country B. During this roaming, X is available locally in country B. However, should a local caller Y of country B wish to contact X, Y would have to call X's mobile number in country A, thereby incurring international call charges via international calling. We term such international calling IDD (International Direct Dial). In addition, since the call is routed back to country B by the X's mobile operator, X also incurs roaming charges. These extra charges are incurred even though both X and Y have local presence in country B when the call is made.

A further example of roaming charges incurred occurs when two roaming persons X1 and X2 from countries A1 and A2 (they could be from different countries) visit country B. If X1 wishes to call X2, he has to call X2's mobile number in country A2 incurring international call charges, while X2 pays roaming charges. This is again

despite the fact that both X1 and X2 have local presence in country B when the call is made.

In "Roamer Direct Dialing (RDD)" (Tencon 2004, Region 10 Conference, Volume C, 21-24 Nov 2004, pp. 41-43.), Assawaboonmee et al discusses a partial solution to alleviate this problem of excessive charging though both the calling and called parties are present locally. Known as 'local direct dial' or LDD in Singapore and 'roamer direct dialing' or RDD in Thailand, it enables a caller on a local mobile network to call a roamer mobile phone if both the caller and callee are on the same mobile operator's network without the caller having to use IDD and incur IDD rates. For example, a caller in a mobile operator network dials #0+N for a callee. The mobile operator checks to ensure that the caller is one of its mobile subscribers and goes through its database e.g. Virtual Location Register (VLR) to check if there is a roamer present in the network with mobile phone number N. If such a mobile phone number is indeed roaming in the same mobile operator network, the operator then connects the call between the caller and the callee. The system may similarly apply to a caller who is also a roamer on a local mobile network to call another roamer on the same local mobile network.

The scheme however suffers from numerous drawbacks. Firstly, a fixed-line or land-line user cannot call a roamer N using LDD or RDD. Secondly, a mobile phone can connect to the roamer N only if they are both in the same mobile operator network. This is usually not the case as there are typically multiple mobile operator networks in any geographic location. For instance, Singapore has three mobile operators, namely SingTel, M1, and StarHub. Hence, under the LDD scheme, the roamer N on SingTel network can only be called by mobile phone users that are also using the SingTel network. Callers from M1 and StarHub will not be able to utilize LDD and will have to resort to using IDD to call roamer N, thereby incurring all the IDD and Roaming costs discussed earlier. Given the operator network restrictions to use LDD or RDD, it is important that the roamer selects the correct network for his mobile phone during roaming. Further, because this network may change from time to time during roaming depending upon the phone settings, the callers calling N will be limited.

Therefore, there exists a need to provide a system and method for enabling a caller in a telecommunication network to call a roaming callee to address one or more of the problems mentioned above.

## SUMMARY

In accordance with a first aspect of the present invention, there is provided a method for enabling a caller in a telecommunication network to call a roaming callee, the method comprising the steps of receiving a call at an Advanced Local Direct Dialing (ALDD) server initiating respective LDD calls to the callee on a plurality of telecommunication networks; and transferring the caller to a connected one of the LDD calls to the callee.

The step of receiving the call at the ALDD server may further comprise obtaining an IDD number of the callee.

The step of obtaining the IDD number of the callee may comprise providing an IVR system for enabling the caller to provide the IDD number of the callee.

The step of obtaining the IDD number of the callee may comprise providing an access code based system for enabling the caller to append the IDD number of the callee to an access code.

The call may be received at a designated number and the method may further comprise obtaining the IDD number from a look-up based on the designated number.

The caller may define look-up data for the look-up.

The callee may define look-up data for the look-up.

The step of initiating the respective LDD calls to the callee on the plurality of telecommunication networks may comprise using respective LDD pre-fixes and the IDD number of the callee.

The method for enabling a caller in a telecommunication network to call a roaming callee may further comprise the step of providing an option to make an IDD call to the callee and transferring the caller to the connected IDD call if none of the LDD calls are connected.

The option may be provided to the caller.

The option may be defined by the callee.

The method for enabling a caller in a telecommunication network to call a roaming callee may further comprise initiating a call to another ALDD server, and the other ALDD server initiating respective LDD calls to the callee on a different plurality of telecommunication networks.

In accordance with a second aspect of the present invention, there is provided a system for enabling a caller in a telecommunication network to call a roaming callee, the system comprising means for receiving a call; means for initiating respective LDD calls to the callee on a plurality of telecommunication networks; and means for transferring the caller to a connected one of the LDD calls to the callee.

The means for receiving the call at the ALDD server may further comprise means for obtaining an IDD number of the callee.

The means for obtaining the IDD number of the callee may comprise an IVR system for enabling the caller to provide the IDD number of the callee.

The means for obtaining the IDD number of the callee may comprise an access code based system for enabling the caller to append the IDD number of the callee to an access code.

The call may be received at a designated number and the system may further comprise means for obtaining the IDD number from a look-up based on the designated number.

The caller may define look-up data for the look-up.

The callee may define look-up data for the look-up.

The means for initiating the respective LDD calls to the callee on the plurality of telecommunication networks may use respective LDD pre-fixes and the IDD number of the callee.

The system may further comprise means for providing an option to make an IDD call to the callee and transferring the caller to the connected IDD call if none of the LDD calls are connected.

The option may be provided to the caller.

The option may be defined by the callee.

The system may further comprise means for initiating a call to another ALDD server, and the other ALDD server initiating respective LDD calls to the callee on a different plurality of telecommunication networks.

In accordance with a third aspect of the present invention, there is provided a computer readable data storage medium having stored thereon computer code means for instructing a computer to execute a method for enabling a caller in a telecommunication network to call a roaming callee, the method comprising the steps of receiving a call at an Advanced Local Direct Dialing (ALDD) server; initiating respective LDD calls to the callee on a plurality of telecommunication networks; and transferring the caller to a connected one of the LDD calls to the callee.

## BRIEF DESCRIPTION OF THE DRAWINGS

Embodiments of the invention will be better understood and readily apparent to one of ordinary skill in the art from the following written description, by way of example only, and in conjunction with the drawings, in which:

Figure 1 illustrates the schematic diagram of a caller connecting to a Roamer via the proposed ALDD system in an example embodiment.

Figure 2 shows a flowchart 200 illustrating the process of making a phone call via the ALDD system in an example embodiment.

Figure 3 shows an example embodiment of the ALDD system implemented on a computer system.

Figure 4 shows a flow chart illustrating the method for enabling a caller in a telecommunication network to call a roaming callee.

## DETAILED DESCRIPTION

Some portions of the description which follows are explicitly or implicitly presented in terms of algorithms and functional or symbolic representations of operations on data within a computer memory. These algorithmic descriptions and functional or symbolic representations are the means used by those skilled in the data processing arts to convey most effectively the substance of their work to others skilled in the art. An algorithm is here, and generally, conceived to be a self-consistent sequence of steps leading to a desired result. The steps are those requiring physical manipulations of physical quantities, such as electrical, magnetic or optical signals capable of being stored, transferred, combined, compared, and otherwise manipulated.

Unless specifically stated otherwise, and as apparent from the following, it will be appreciated that throughout the present specification, discussions utilizing terms such as "determining", "obtaining", "receiving", "calling", "outputting", "connecting", "routing" or the like, refer to the action and processes of a computer system, or similar electronic device, that manipulates and transforms data represented as physical quantities within the the computer system into other data similarly represented as physical quantities within the computer system or other information storage, transmission or display devices.

The present specification also discloses apparatus for performing the operations of the methods. Such apparatus may be specially constructed for the required purposes, or may comprise a general purpose computer or other device selectively activated or reconfigured by a computer program stored in the computer. The algorithms and displays presented herein are not inherently related to any particular computer or other apparatus. Various general purpose machines may be used with programs in accordance with the teachings herein. Alternatively, the construction of more specialized apparatus to perform the required method steps may be appropriate. The structure of a conventional general purpose computer will appear from the description below.

In addition, the present specification also implicitly discloses a computer program, in that it would be apparent to the person skilled in the art that the individual steps of the method described herein may be put into effect by computer code. The computer program is not intended to be limited to any particular programming language and implementation thereof. It will be appreciated that a variety of programming languages and coding thereof may be used to implement the teachings of the disclosure contained herein. Moreover, the computer program is not intended to be limited to any particular control flow. There are many other variants of the computer program, which can use different control flows without departing from the spirit or scope of the invention.

Embodiments of the present invention provide a system to enable roamers from a foreign network to connect to local telecommunication devices and vice versa via a local mobile network. This is achieved through the use of an ALDD (Advanced LDD) system.

As an example, a roamer with mobile phone number #R visits the country of SGP where there are three different mobile operators namely, ST, MO and SH. The country, names and number of mobile operators are for illustrative purposes and any country, name and number of mobile operators may be used in practical implementations. A roamer in SGP will typically be logged onto a particular network e.g. ST. Using the forms of RDD or LDD as discussed in Assawaboonmee et al, only mobile phones with SingTel can call the roamer at #R with LDD.

Embodiments of the present invention allow any caller, including another roamer, on any of the mobile or fixed line networks to call a local number #ALDD to connect to the ALDD server. Thereafter, the ALDD server will request for the mobile phone number #R of the roamer. The ALDD server will then appropriately route the call to the roamer with mobile phone number #R. The ALDD Server is external to all the mobile operator networks in SGP and is unaware of which mobile operator network #R is currently logged on to. Therefore, the ALDD Server calls the roamer in each of the networks via LDD. Once the call is connected in one of the networks, the other calls are terminated. To illustrate, we assume that say that LDD is provided by ST, MO, and SH via pre-fixes #0, #1, and #2, respectively. With knowledge of these pre-fixes for each of the three mobile operators, the ALDD Server dials #0+#R using a mobile phone on the ST network, #1+#R using a mobile phone on the MO network, and #2+#R using a mobile phone on the SH network. This covers all possibilities for the roamer in SGP. The three mobile operators will then dial for the roamer with mobile phone number #R within their networks. When the roamer accepts the call, the ALDD Server will then connect the original caller to the roamer.

Figure 1 illustrates the schematic diagram of a caller 102 connecting to a Roamer 104 via the proposed ALDD system 100 in an example embodiment.

The caller 102 dials a local number #ALDD and is connected to the ALDD server 106 of the ALDD system 100. The ALDD server 104 first determines or obtains the mobile number of the roamer 104. This may be provided by the caller 102 and appended to the local number #ALDD when the caller 102 dials #ALDD. For example, the local number #ALDD may be an access-code used exclusively for ALDD and the callers may be instructed to dial #ALDD + #R, where #R represents the mobile number of the

Roamer 104. Alternatively, #ALDD may be an access-code shared among multiple services and the callers may be instructed to dial #ALDD + p + #R, where p is the code for the LDD service. In addition to obtaining the mobile number of the roamer 104, the ALDD server 106 may also authenticate the caller 102 for billing and/or perform other housekeeping functions. For example, the ALDD Server 106 may also provide the caller 102 an IVR (interactive voice response) system to enter further information such as the roamer 104 number, calling card number for billing and so on. In some circumstances, a non-IVR system may be preferred here as the caller 102 may wish to be charged only if the roamer 104 answers the call.

With the mobile number of the roamer 104, the ALDD server then dials for the roamer 104 on each of the mobile networks in parallel via a Dialing Unit 108. The dialing unit 108 comprises a set of dialers 118 to 124, each dialer registered in a respective one of the different mobile telecommunication networks 110 to 116. For convenience and clarity, the illustrations show the dialing for the roamer 104 to be performed in parallel. It will be appreciated by a person skilled in the art that the dialing for the roamer in each of the networks may be performed sequentially or in some sequential cum parallel combination in practical implementations. As an illustration, to contact the roamer 104, a dialer 118 of the dialing unit 108 on the first network 110 dials #R pre-fixed with #0, i.e. #0 + #R to activate the LDD service to contact the roamer R on the first network 110. Similar calls #1 + #R, #2 + #R, etc. are made on subsequent networks 112 to 116 respectively using the dialers 120 to 124 on each of the particular networks.

When the roamer 104 answers one of the calls, the ALDD server 106 connects the caller 102 to the call answered by the roamer 104 and terminates the other calls. As illustrated in figure 1, the roamer 104 is on network #1 110 and is connected to the caller 102 via the ALDD server 106, while LDD calls made on the other networks 112 to 116 are terminated by the ALDD server 106.

With the call connected, the ALDD server 106 may then perform further authentication or billing steps.

Figure 2 shows a flowchart 200 illustrating the process of making a phone call via the ALDD system in an example embodiment. At step 202, the caller dials a local

number #ALDD and is connected to the ALDD server of the ALDD system. At step 204, the ALDD server determines or obtains the mobile number of the roamer. The ALDD server may also authenticate the caller for billing and/or perform other housekeeping functions. At step 206, the ALDD server then dials for the roamer on each of the mobile networks via a dialing unit comprising a set dialers logged on to each of the mobile networks. At step 208, when the roamer answers one of the calls, the ALDD server connects the caller to the call answered by the roamer and terminates the other calls. At step 210, the ALDD server may then perform further authentication or billing steps.

Various different methods may be implemented to perform step 204 of the example embodiment. In one example embodiment, the ALDD service provider can provide a single number for callers to call and connect to the ALDD Server. When any caller calls this number, e.g. #ALDD, the ALDD Server answers the call and presents the caller a menu of choices via an IVR. The IVR then prompts the caller to enter the phone number of the callee or roamer whom the caller wishes to speak with. The ALDD server also carries out billing and authentication using the caller-ID of the caller and the IVR entries of the caller. In this example embodiment, either the caller or the roamer may register with the ALDD server. If the caller is the registered user for the ALDD service, then the caller may be provided with the additional option of the ALDD server calling the roamer via IDD in case he is not available locally. If the roamer is instead the registered user for the ALDD service, then the roamer may have the option of choosing to receive calls only from certain callers, while rejecting all other phone calls.

In another example embodiment to implement the step of 204, the ALDD service provider can provide an access based calling method for all callers to use for calling and connect to the ALDD server. If the access-code e.g. 1511, is used exclusively for ALDD, then the callers may be instructed to dial 1511 followed by the roamer's mobile number #R. If 1511 is an access-code shared among multiple services, then the callers may be instructed to dial out 1511 followed by the code for the ALDD Server and the roamer's mobile number #R. The ALDD server also carries out billing and authentication using the caller-ID of the caller. In this example embodiment, either the caller or the roamer may register with the ALDD server in this case. If the caller is the registered user for the ALDD service, then the caller may be provided with the option of the ALDD Server calling the roamer via IDD in case he is not available locally. If the roamer is the

registered user for the ALDD service, then the roamer may be provided with the option to choose to receive calls only from certain callers, while rejecting all other phone calls.

In another example embodiment to implement step 204, the roamer with a mobile number R may subscribe for a service with the ALDD service provider to provide him with a local number e.g. #R-LOCAL, such that calls from phones from all networks - mobile, fixed lines, local, overseas etc, to #R-LOCAL are automatically routed to the roamer via the ALDD system. The ALDD service provider then performs a look-up for the IDD number of the roamer associated with the #R-Local number and initiates the LDD calls as described when a caller has called #R-Local. The roamer may also choose to receive calls only from certain callers, while rejecting all other phone calls. In this example embodiment, the roamer may need to inform the callers of the number #R-LOCAL to call in order to connect to him locally. The roamer may also have, via the ALDD server, the option of requesting if callers choose the ALDD Server to call him via IDD in case he is not available locally via ALDD.

In another example embodiment to implement step 204, the ALDD Server maintains a database of local phone numbers for callers to call. A caller pre-registers a set of roaming mobile phone numbers that the caller intends to call via the ALDD server. The caller also assigns a particular local number to each of the pre-registered roaming phone numbers. For example, the caller pre-registers #R1, #R2 and #R3 as the set of roaming mobile phone numbers that he or she intends to call to #ALDD + 1, #ALDD + 2, #ALDD + 3 respectively. When the caller calls the ALDD Server at a particular number, e.g. #ALDD + 1, the ALDD Server checks the caller's information (using the caller-ID) by performing a look-up of the registered roaming numbers and determines that the #R1 is the intended mobile phone number to dial and dials it on behalf of the caller. A similar process is carried out when the caller calls another ALDD Server number e.g. #ALDD + 2, to connect to #R2. In summary, a caller pre-registers one or more of the ALDD Server numbers. When the caller calls a particular ALDD Server number, the ALDD Server uses the caller-ID information of the caller and the particular ALDD Server number called to determine the roamer the caller intends to reach. The pre-registration by the caller with the ALDD Server may be done via a web-interface, SMS, email or simply by calling a live operator.

It will be appreciated by a person skilled in the art that a variety of other commonly known services e.g. Voicemail, Call logging (Duration, Missed calls, etc.), IDD Calling may also be integrated into the ALDD Server.

Enhancements may be made to the embodiments of the present invention discussed earlier. In an alternate embodiment of the present invention, the ALDD system can also be call-back based, i.e. when a caller calls the ALDD server, the ALDD server terminates the call once the caller-ID of the caller is recorded and then calls the caller back thereby re-connecting the caller again to the LDD Server. The remainder of the process remains the same as described in earlier embodiments.

The ALDD Server may also be combined with IDD calling in another example embodiment. For instance, when someone in Singapore calls an IDD number, the IDD service provider may also employ ALDD to check if the person being called is available locally in Singapore as a roamer. As in many circumstances, ALDD may lead to cost savings and it might be preferable to first call the callee using LDD to connect to him as a roamer. If the roamer is not available, the ALDD server can then call him via IDD. In certain other circumstances, the order may be reversed. The sequence of ALDD and IDD calling used to connect the call may also be a part of registration information with the IDD service provider and ALDD Server.

In another example embodiment, an ALDD Server in one geographic location can also serve multiple locations. For instance, an ALDD Server in Singapore is used to call roamers in Singapore and roamers in Thailand. In such an implementation, there are ALDD servers in both countries that are connected to each other via the internet or VoIP (voice over IP). When a caller calls the ALDD server in Singapore, the ALDD server in Singapore may seek out the roamer in Singapore. The ALDD server in Singapore also contacts the ALDD servers in other countries (sequentially or in parallel) who check for the presence of roamer in their country. As soon as the intended roamer accepts a call, all other calls are then terminated and the caller is connected to the call answered by the roamer. ALDD Servers that serve multiple locations can also be combined with IDD calling as described in an earlier embodiment.

In another example embodiment, the roamer may update the ALDD Server (and the IDD service provider if LDD and IDD are combined) of his current location so that when a caller calls the LDD server for him or makes an IDD call for him, the LDD server will then call the roamer only in the location updated to the LDD Server by the roamer, optimizing the process. The roamer may inform the LDD Server via web, email, SMS, or via some other communication means.

The example embodiments illustrate a method and system of connecting a single caller to a single roamer on a mobile telecommunication network. However, it will be appreciated by a person skilled in the art that, in practical implementations, embodiments of the ALDD system are able to handle a plurality of callers, with each caller calling and subsequently connecting to respective roamer callees.

The method and system of the ALDD system can be implemented on a computer system 300, schematically shown in Figure 3. It may be implemented as software, such as a computer program being executed within the computer system 300, and instructing the computer system 300 to conduct the method of the example embodiment.

The computer system 300 comprises a computer module 302, input modules 304 to receive a plurality of incoming phone calls from a plurality of callers 306 and a bank of dialing units 308. Each dialing unit 308 comprises a plurality of dialers 310 with SIM cards 311 for initiating calls to a callee on the respective telecommunication networks 332 to 336.

The computer module 302 is connected to a computer network 312 via a suitable transceiver device 314, to enable access to a plurality of e.g. the Internet or other network systems such as Local Area Network (LAN) or Wide Area Network (WAN).

The computer module 302 in the example includes a processor 318, a Random Access Memory (RAM) 320 and a Read Only Memory (ROM) 322. The computer module 302 also includes a number of Input/Output (I/O) interfaces, for

example I/O interface 324 to the input modules 304 and 306, and I/O interface 326 to the output devices 308 and 310.

The components of the computer module 302 typically communicate via an interconnected bus 328 and in a manner known to the person skilled in the relevant art.

The application program is typically supplied to the user of the computer system 300 encoded on a data storage medium such as a CD-ROM or flash memory carrier and read utilising a corresponding data storage medium drive of a data storage device 330. The application program is read and controlled in its execution by the processor 318. Intermediate storage of program data maybe accomplished using RAM 320.

It will be appreciated by a person skilled in the art that the number of callers, dialing units, dialers, SIM cards and telecommunication networks and other components in the figure are illustrative and not restrictive. Any number of such components may be used in practical implementations.

Figure 4 shows a flowchart illustrating the method for enabling a caller in a telecommunication network to call a roaming callee. At step 402, a call is received a at an Advanced Local Direct Dialing (ALDD) server. At step 404, respective LDD calls to the callee are initiated on a plurality of telecommunication networks. At step 406, the caller is transferred to a connected one of the LDD calls to the callee.

It will be appreciated by a person skilled in the art that numerous variations and/or modifications may be made to the present invention as shown in the specific embodiments without departing from the spirit or scope of the invention as broadly described. The present embodiments are, therefore, to be considered in all respects to be illustrative and not restrictive.

**CLAIMS**

1. A method for enabling a caller in a telecommunication network to call a roaming callee, the method comprising the steps of:

receiving a call at an Advanced Local Direct Dialing (ALDD) server;

initiating respective LDD calls to the callee on a plurality of telecommunication networks; and

transferring the caller to a connected one of the LDD calls to the callee.

2. The method as claimed in claim 1, wherein receiving the call at the ALDD server further comprises obtaining an IDD number of the callee.

3. The method as claimed in claim 2, wherein obtaining the IDD number of the callee comprises providing an IVR system for enabling the caller to provide the IDD number of the callee.

4. The method as claimed in claim 2, wherein obtaining the IDD number of the callee comprises providing an access code based system for enabling the caller to append the IDD number of the callee to an access code.

5. The method as claimed in claimed in claim 2, wherein the call is received at a designated number and the method further comprises obtaining the IDD number from a look-up based on the designated number.

6. The method as claimed in claim 5 wherein the caller has defined look-up data for the look-up.

7. The method as claimed in claim 5 wherein the callee has defined look-up data for the look-up.

8. The method as claimed in any one of claims 2 to 7 wherein initiating the respective LDD calls to the callee on the plurality of telecommunication networks comprises using respective LDD pre-fixes and the IDD number of the callee.

9. The method as claimed in any one of claims 1 to 8 further comprises the step of providing an option to make an IDD call to the callee and transferring the caller to the connected IDD call if none of the LDD calls are connected.

10. The method as claimed in claim 9, wherein the option is provided to the caller.

11.The method as claimed in 9 or 10, wherein the option is defined by the callee.

12. The method as claimed in any one of claims 1 to 11, further comprising initiating a call to another ALDD server, and the other ALDD server initiating respective LDD calls to the callee on a different plurality of telecommunication networks.

13. A system for enabling a caller in a telecommunication network to call a roaming callee, the system comprising:

means for receiving a call;

means for initiating respective LDD calls to the callee on a plurality of telecommunication networks; and

means for transferring the caller to a connected one of the LDD calls to the callee.

14. The system as claimed in claim 13, wherein the means for receiving the call at the ALDD server further comprises means for obtaining an IDD number of the callee.

15. The system as claimed in claim 14, wherein means for obtaining the IDD number of the callee comprises an IVR system for enabling the caller to provide the IDD number of the callee.

16. The system as claimed in claim 14, wherein the means for obtaining the IDD number of the callee comprises an access code based system for enabling the caller to append the IDD number of the callee to an access code.

17. The system as claimed in claim 14, wherein the call is received at a designated number and the system further comprises means for obtaining the IDD number from a look-up based on the designated number.

18. The system as claimed in claim 17 wherein the caller has defined look-up data for the look-up.

19. The system as claimed in claim 17 wherein the callee has defined look-up data for the look-up.

20. The system as claimed in any one of claims 14 to 19 wherein the means for initiating the respective LDD calls to the callee on the plurality of telecommunication networks uses respective LDD pre-fixes and the IDD number of the callee.

21. The system as claimed in any one of claims 13 to 20 further comprises means for providing an option to make an IDD call to the callee and transferring the caller to the connected IDD call if none of the LDD calls are connected.

22. The system as claimed in claim 21, wherein the option is provided to the caller.

23. The system as claimed in claim 21 or 22, wherein the option is defined by the callee.

24. The system as claimed in any one of claims 13 to 23, further comprising means for initiating a call to another ALDD server, and the other ALDD server initiating respective LDD calls to the callee on a different plurality of telecommunication networks.

25. A computer readable data storage medium having stored thereon computer code means for instructing a computer to execute a method for enabling a

caller in a telecommunication network to call a roaming callee, the method comprising the steps of:

receiving a call at an Advanced Local Direct Dialing (ALDD) server;

initiating respective LDD calls to the callee on a plurality of telecommunication networks; and

transferring the caller to a connected one of the LDD calls to the callee.