



Localling Your SIM Card Worldwide



Go.
Localling

Fly with Your SIM



Go.
Localling

00
020
0000
6422



Idea INNOVATION:

GLOBALIZATION is the main factor to drive Localling. **Globalization** is described as a process by which the people of the world are unified into a single society and function together. Governments are easing the old fashion complicated formalities of countries entrance permits (visas) issuance to attract more tourists due to the economical importance and impact of tourism. However, cell phone current roaming scenarios are considered as one of the main obstacles which need to be sent to history through the introduction of new concepts to easing the use of mobile phones globally without implying high cost on travelers. Therefore, temporary Localizing of travelers' GSM usage is all about LOCALLING.

What is LOCALLING

It is the process of Assigning Local Mobile Number by a visited operator to subscriber of foreign GSM Operators when reaching its jurisdictions. The local mobile number (TLN) is assigned to the traveler's same SIM card without the need to replace it with another SIM card from the visited operator.

LOCALLING Terminology:

It maybe a new terminology added to people's dictionary worldwide. The term is fetched from the word LOCAL in a signaling meaning to LOCAL MOBILE NUMBER or LOCAL EQUAL TREATMENT. With adding -ING to the word [LOCAL] to make it more of treating an adjective as a verb to fetch more terms from the same, like Localling and Localler. Where Localler is the person using the LOCALLING service (like Roaming and Roamer).

What happens?

- When a GSM user turns on his mobile phone in a foreign (visited) operator's coverage:
- The visited network detects a strange mobile phone in its coverage.
- The visited network identifies the strange mobile phone's home network.
- The Visited operator assigns local mobile number to the SIM Card of the visitor.
- The Visited Operator sends SMS to the user informing him of the local mobile number.



LOCALLER

- Localler is a subscriber of a foreign operator (postpaid or prepaid) who uses local prepaid mobile number of a visited operator when traveling.
- To be a Localler is to travel out of your Home Operator jurisdiction and be treated as local prepaid user of the Visited Operator.
- Localler is a mobile phone's user who travels and uses the Localling Telecommunication method/ scenario instead of Roaming.

Scenario script:

- A GSM subscriber of GCC Telecom travels to London.
- The airplane arrives to London, and the traveler switches on his mobile phone.
- A London's Local Prepaid Mobile Number (TLN) is automatically assigned to the traveler home SIM card.
-
- The traveler receives the following SMS:
 - o "Welcome to London, your local mobile number is XXXXXXXXX, you can now start receiving calls for free. To make a call buy Top-Up Card from shops around the city, for help call XXXX"
 - The Traveler can send his London's local mobile number (TLN) by SMS to all of his friends and family members using his home operator number (roaming).
 - The traveler turns his home operator number off and keeps his new London's mobile number on.
 - The traveler starts Receiving Calls.
 - The Traveler is then referred to as LOCALLER.
 - The Localler goes to a shop and buys Credit Top-Up Card.
 - The localler can now make calls using his new London's mobile number.
 - When Localler leaves London, the Temporary Local Number is kept pending for 30 days with the balance credit left.



What is TLN:

Traveler Local Number (TLN), also called “Traveler Local Prepaid Mobile Number (TLPMN)”, is a temporary local prepaid mobile number assigned by the visited operator to the subscriber of another operator visiting its geographical coverage.

Same SIM

TLN (Traveler Local Number) is assigned via OTA (Over the Air) to the same SIM card of the Localler’s home mobile number.

Pay LOCAL

The Localler is charged the same local tariffs as other residents and local subscribers of the visited operator. No extra or hidden charges, deductions or tariffs are applied.

Localler Balance Credit:

Once the traveler (Localler) leaves the visited operator’s geographical jurisdictions with a credit balance left, then this balance is kept valid for 30 days. If the same user returns to the jurisdiction of that same visited operator within these 30 days then the balance is made available for use.

Global SIM

LOCALLING makes SIM cards valid worldwide. Users will no longer need to buy new SIM cards in every country they visit, just switching on their same mobiles when arriving to destinations and start using LOCAL numbers from the visited countries’ local GSM Operators.

LOCALLING MESSAGE:

Once Localler reaches destination and opens his mobile phone, a message is received as follows: “Welcome to London, your local mobile number is XXXXXXXXX, Buy Credit Filling Card from shops at the airport, for help call XXXX”



Moving between HOME and TLN numbers

- Localler should be able to move SIM number between home and Localling mobile numbers.
- Localler would only need moving to his home mobile number if needs to initiate a call when not having credit balance in the TLN.
- Moving between TLN and original number should be made easy by entering a USSD code [*55*home country code# SEND] to activate home mobile number, and [*55*visited country code# SEND] to change to the Localling number. *(This is standardize when setting up LOCALLING application)*

Switching off Home Number:

- When receiving a call, Locallers is able to easily identify the called number whether Home or TLN.
- If Localler wishes to switch off his Home Number, a USSD code should be enabled i.e.: [*54*home country code# SEND], and to switch it back on [*54* home country code * SEND]. *(This is standardize when setting up LOCALLING application)*

WIN - WIN - WIN

To be successful, the GLO opportunity is made attractive to travellers, home operators and visited operators:

Localler (Traveller) benefits:

- Lower call tariffs (than roaming) on all outbound calls made with the TLN while travelling.
- No inbound call fees on calls to the TLN number
- The attraction of having a local number while travelling, while simultaneously retaining the home MSISDN for inbound callers who are not aware of the TLN
- One phone, one SIM, two subscriptions



Home Operator benefits

- Revenue share of increased call usage while subscriber is travelling (demand elasticity)
- Revenue share of local calls on visited network
- Revenue share from subscribers who currently eschew roaming due to high costs (subscriber elasticity)
- Reduced credit risk from roaming subscribers
- Share of expired credits

Visited operator benefits

- Revenue share of increased call usage (demand elasticity)
- Revenue share from subscribers who currently eschew roaming due to high costs (subscriber elasticity)
- Increased roaming subscribers (from being preferred roaming partner)
- Share of expired credits



Localling You SIM.wise



Go.
Localling



Global Localling Organization (GLO):

Global Localling Organization (GLO) founded in 2008 and is the world first and only Localling HUB. GLO provides total solution that includes setting up Localling application, testing, operating, clearing and settlement, plus partner management for network operators worldwide. In addition, GLO Open Connectivity Hub will provide new connectivity services on an ongoing basis. Its multilateral approach enables operators to have worldwide coverage for Localling with just one agreement and one link to the Localling Hub.

GLO MAKES WORLDWIDE LOCALLING EASY:

Saving operators from managing many bilateral relationships to a single relationship with the GLO multilateral Localling hub is the cornerstone of our value proposition. But we do a lot more. To help you build your business and increase efficiency, we've developed services that simplify Localling management and processes.

Global Localling Organization (GLO) shall act as a regulator for global Localling value added service to:

Set Go.Localling service's Standards.	1
Develop Localling membership rules and regulations.	2
Design and upgrade Localling concept.	3
Legalize Localling as Value Added Service worldwide.	4
Design and manage the Localling Solution.	5
Data Clearing and Financial Clearing.	6
Structure Localling system securities.	7
Standardize and Manage Localling members (Operators) contracts.	8
Design Localling partners' relationship.	9
Design guidelines and manage Localling marketing strategies.	10
Initiate invoicing between Localling partners.	11
Conduct annual Localling International conference.	12
Issue Localling annual report.	12



Localling Membership:

- Localling Membership would be limited to only one operator from each country or geographical jurisdictions.
- Joining the LOCALLING HUB (GLO) would be subject to full compliance with LOCALLING rules and regulations.

Localling Membership FEES:

Once an operator is selected and certified to be a Localling Member, a one time fees of two million US dollars will be charged for the following:

- 1 Exclusive rights in operator's jurisdictions.
- 2 Localling Application and Technical setup.
- 3 Testing and Training.
- 4 Other member benefits (*to be designed*)

Localling Partners:

- Every Localling member (GSM Operator) will have ONLY one Localling Partner in every country or geographical jurisdiction out of its bound.
- Localling partners are GLO Members only, and partners (operators) cannot sign direct Localling contracts with other operators except through GLO.
- Partners are pre-selected and announced as members of the LOCALLING FORUM (GLO). Therefore members of LOCALLING FORUM are becoming obvious Localling Partners to other members.

LTR: Localling Traffic Redirection:

Localling Traffic Redirection solution is designed by GLO and developed by GLO partners as an innovative IT solution that enables Localling members to proactively influence their outbound Locallers' (subscribers) choice of mobile networks when traveling to the Localling partner. This solution should enable home operators to direct Locallers to their Localling partners.



LOCALLING Agreements:

A Legal LOCALLING Agreement between GSM Operators and Global LOCALLING Organization (GLO) to achieve connectivity with all operators connected to the hub, and to standardize business aspect and sets revenue sharing formulas between members (operators) worldwide.

Testing

For IREG and TADIG purposes, the different services between operators connected to the Hub will be tested using the standard documents of the GSM Association (IR.24, IR.27, IR.35, IR.32, IR.60...), Q and A v 0.1.doc 4/9 2/29/08. GLO ensures that all necessary testing will be carried out.

The LOCALLING process:

When the mobile device is turned on in the jurisdictions of a new operator, this new “visited” network sees the device, notices that it is not registered with its own system, and attempts to identify its home network. If there is no LOCALLING Agreement then basically provide typical roaming service if applicable.

The visited network contacts the home network and requests service information (including whether or not the mobile should be granted Traveler Local Number [TLN]) about the visiting device using the IMSI number.

If successful, the visited network begins to:

- Maintain a *Temporary LOCALLING Subscriber Record (TSR)*.
- Assign a Traveler Local Number to the IMSI.
- Sends the TLN (**T**Traveler **L**ocal Prepaid Mobile **N**umber) by SMS to visitor (Localler) original home operator mobile number.
- Likewise, the home network updates its information to indicate that the mobile is on the host network so that a LOCALLING financial tracking is initiated.
- If the visitor (Localler) adds credit balance to his TLN (Traveler Local Prepaid Mobile Number), a data should be added to the TSR (Temporary LOCALLING Subscriber Record).
- 60% of the credit value added by a visitor (Localler) into the temporary TLN is captured in a file called the **TAF** (Transferred Account File) for LOCALLING.



Assigning TLN to SIM Card:

- When the mobile device is turned on in a visited operator jurisdiction.
- The MSC (Mobile Switching Center) of visited network detects a new MS (Mobile Station).
- MSC identifies the home network of the MS.
- If LOCALLING agreement with the home network is valid, then
- MSC creates a new TSR (Temporary LOCALLING Subscriber Record) in the VLR (Visited Location Register database).
- MSC updated the HLR (Home Location Register Database) of the mobile subscriber.
- MSC apprise the HLR of the new location of the MS.

TSR: Temporary LOCALLINGSubscriber Record:

TSR is a Temporary Traveler Local Number Subscriber's Record generated and maintained in LOCALLING database to include:

- IMSI number.
 - Temporary Traveler Local Mobile Number [TLN] assigned to subscriber.
 - Date and Time of assigning TLN.
 - Credit Balance added to TLN.
 - Credit Balance used.
 - Date and Time of Closing TLN.
- LOCALLING Financial Track. TSR is continuously updated once any transaction is made by the visitor.

LOCALLING mobility management:

The aim of mobility management is to track where the subscribers are, so that the home network updates the HLR (Home Location Register) and LFT (LOCALLING Financial Track), and accordingly communication with LOCALLING main server to update its information and adjust to TAF (Transferred Account File) of the visited network.



LOCALLING authentication:

Authentication is an essential premise for deploying LOCALLING in the real world. The technical challenge lies in the fact that a visited network does not initially have the authentication credentials of a LOCALLING user. Existing solutions require that authentication is performed via three-party communications: user to visited network to home network. A new concept that mutual authentication between a visited network and a LOCALLING user can be performed locally without the contact with user's home network is proposed. This new protocol not only satisfies the LOCALLING authentication requirements, but also has efficiency in terms of authentication time delay.

LOCALLING authorization:

A LOCALLING restriction system permits a visited network to set a profile that identifies a chosen home network subscriber with which the visited network has LOCALLING Agreement in place to give its subscribers priority in obtaining TLN (Traveler Local Number).

LOCALLING Network Prioritizing:

When two operators sign LOCALLING Agreement via GLO, it is obligatory to set each others as priority network once a subscriber of one operator travels to the other operator's jurisdiction when more than one network is available.

Independent LOCALLING:

A member operator can assign a TLN (Temporary Traveler Local Prepaid Mobile Number) to a visitor (Localler) without any connections to home operator, but the visited operator will have to comply with revenue sharing procedure standardized by GLO.

This can only be done when this visited operator is a Localling Partner and the visiting user (Localler) is a subscriber of an operator that is not member of Localling.



LOCALLING Revenue Sharing:

The visiting subscriber is a property of his Home operator, and thus is not counted as expected revenue for the visited operator; accordingly the visitors' home operators (Localling Partners) get the right to collect 40% of the Localling balance credit used by the Locallers, and Global Localling Organization (GLO) retains 20% share from the total amount spent by the visitors (Locallers) when using LOCALLING TLN (Traveler Local Numbers) of the visited operators (Localling Partners).

The balance sixty percent (60%) payable revenue share (for home operators and GLO) is captured in a file called the TAF (Transferred Account File) for LOCALLING.

Visited operators shall clearly understand that this extra generated Localling revenue is an additional income that is usually not included in the year projected income. In addition the visited operators would be in the place of the home operators when their subscriber travels and would collect the 40% in return. Thus most potential Localling partners would extremely be encouraged to accept the (40-20-40) revenue share formula.

TAF: Transferred Account File

TAF is "Transferred Account File" which is transferred to the home network. TAF contains details of the credit balance added by the visitor (Localler) and other information as deemed necessary and endorsed by GLO (Global Localling Organization) at any stage. The TAF files are rated as per the local tariffs charged by the visited operator.

LFT: LOCALLING Financial Track:

LFT is a record where the home network updates its information to indicate that the mobile of its subscriber is on the host network which is expected to forward TAF (Transferred Account File) within the TSR (Temporary LOCALLING Subscriber Record) which is updated once any transaction is made (i.e: adding new credit balance).



Data Clearing

GLO data clearing services, the exchange of data is done in a secure and timely manner. All data is validated and then converted to and from any known TAP format defined by individual operators. Clients simply send raw CDRs and GLO manages all of the tasks involved in the Localling process. GLO also support the creation of TAP files from raw CDRs and the sending of scheduling transmissions to Localling partners. GLO also gives operators tailor-made file generation, IOT check and re-rating. Operators can be a member of GLO and maintain their current data clearing house.

Financial Clearing

GLO provides Operators with a single financial clearing and settlement pool with integrated payments. A powerful web interface allows operators to monitor their financial settlement, invoices, debt process and positions in real-time. GLO automated reconciliation ensures that operators settle as quickly and accurately as possible. By simplifying payment process, GLO prevents any additional administrative costs.

GLO eliminates the need for time-consuming bilateral settlement. Instead, each member receives a monthly invoice for GLO service and a separate invoice for Localling traffic. If required, Localling traffic can be specified on an operator-byoperator basis. With GLO controlling settlement on a daily basis, operators are likely to get payments more promptly. If operators choose to keep their current data clearing house but would like to benefit from GLO's financial clearing and settlement, they simply need to ask their DCH to forward the Localling traffic-related TAP files to the hub.

LMS: LOCALLING Main Server:

LMS is the LOCALLING Main Server manages the accounts of all members and synchronizes data of both LFT (LOCALLING Financial Track) of home network and TAF (Transferred Account File) of the visited network. And accordingly sets the monthly billing for all members and clearance of accounts. LMS keeps records of all Locallers and associated networks. LMS is located at GLOBAL LOCALLING ORG main premises.



Go.
Localling



Localling Your SIM Card Worldwide



Go.
Localling



*When Travelling
Your Same SIM
Splits into Roaming & Localling Numbers*