



**User Guide** 

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www.telinta.com



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# Introduction

## About Telinta

Founded in 2002, Telinta offers secure and reliable cloud-based solutions for VolP service providers. Our full portfolio of white label solutions is highly customizable for you and your resellers. With Telinta, you can focus on growing your business, while we focus on managing your technology.

TeliCore<sup>™</sup> is our robust platform, integrating world-class carrier-grade Switching and Billing capabilities from PortaSwitch, with Telinta's own proprietary enhancements. With Telinta's highly-customizable white label solutions, you and your resellers can offer a full range of VoIP services, all under your own brand.

#### Telinta offers:

- Cloud-based rapid deployment, with no capital investment
- Full portfolio of ready to use turn-key solutions for VoIP service providers
- Fully integrated white label MVNO Solution
- Highly stable, scalable, and customizable platform
- Your own VoIP termination and origination providers
- Comprehensive instructor-led Training and Around-The-Clock Technical Support.



## Preface

This document provides a general overview of TeliSIM<sup>™</sup> and its functionality along with configuration guidelines.

- TeliSIM is a Global Roaming MVNO solution offered as a partnership between Telinta, Inc. and Global 1 SIM Ltd.
- TeliSIM is designed for use by travelers who are roaming outside their home country.
- TeliSIM works with any unlocked GSM phone with a SIM card provided by Global 1 SIM.
- Both Smartphones and Basic Phones can use TeliSIM.

TeliSIM is an entirely new methodology that seamlessly brings GSM technology into Telinta's cloud-based softswitch platform. This enables cost-effective VoIP termination to replace more expensive termination from mobile operators, cutting the costs of Global Roaming.

TeliSIM can be used virtually anywhere in the world, including the GSM footprints offered by Tier1 mobile operators such as AT&T, T-Mobile, China Mobile, Vodafone, América Móvil, Telefonica, Orange and anywhere else a GSM cellular signal is available. TeliSIM offers low-cost roaming with over 600 mobile operators around the world, with free roaming in over 150 countries. Any unlocked GSM phone – basic or smartphone – can be used.

TeliSIM does not require access numbers, PINs, Wi-Fi or mobile data.

TeliSIM SIM card includes two free DID numbers, one for the US and another for the UK. TeliSIM also lets you add DIDs available from your own VoIP DID providers, so when your customers travel internationally they can have Local phone numbers in the countries they need. Using the intelligence of Telinta's hosted softswitch platform, your



customers can use as many local phone numbers as they need with their TeliSIM SIM card. Your customers can have a local number virtually anywhere in the world they travel, provided that DIDs are available from your DID provider for that location. With a local number from their home country, they can be reached anywhere in the world from their home country without callers dialing internationally.

TeliSIM lets you offer both prepaid and postpaid services. Users can easily replenish their prepaid balances for free directly from their mobile phone, from virtually anywhere in the world.

TeliSIM is available to Telinta customers only. Like all of Telinta's solutions, TeliSIM is a white label solution that can be branded by you and your resellers.

## Key Features and Benefits

- Mobile Voice, Data and SMS
- Fully brandable solution
- Does not require access numbers, IVR menus or PINs.
- Low-Cost Roaming with over 600 Mobile Operators around the World
- Free Roaming in over 150 Countries Worldwide
- SIM Inventory to simplify SIM card management
- Short Codes for balance, assigned numbers, recharge and more
- Multiple DID numbers assigned to the same SIM card
- Free incoming SMS
- Self-care interface for SIM users



## The TeliSIM User Experience

Inbound calls are received as usual. Users dial outbound calls without Access Numbers, PINs or WiFi. TeliSIM sees an outbound call being dialed and the phone's display informs the user that their call is being placed. Within seconds TeliCore will call the dialed number and then call the user back, connecting the two call legs together.

## Phone Numbers on SIM card

Every TeliSIM SIM Card comes with two mobile phone numbers: USA and United Kingdom. We call these "**Native DIDs**" and they are included free of charge with TeliSIM.

Additional phone numbers can be added, for example, local phone numbers of the visited country or the user's home country while traveling. We call these "Foreign DIDs" and they can be obtained for use with TeliSIM from any DID provider you need.





## **TeliSIM Call Flows**

There are different call flows for incoming calls to Foreign and Native DIDs.

## Incoming Calls to a Native DID



TeliCore routes incoming calls to the TeliSIM user via your A-Z VoIP termination providers and Global 1 SIM Roaming Partners.

## Incoming Calls to a Foreign DID





Your DID Provider routes incoming calls to TeliCore and TeliCore routes these calls to the TeliSIM user via your A-Z VoIP termination providers and Global 1 SIM Roaming Partners.

### **Outgoing Calls**

Outgoing calls can be divided into three categories:

- 1. TeliSIM is in European Union (EU) and the call is placed to a EU destination
- 2. TeliSIM is in EU and the call is placed to a non-EU country
- 3. TeliSIM is not in EU

In cases 1 and 2 it will be a direct call, in case 3 callback will be initiated. The SIM card will switch to the needed mode automatically, there is no need to configure anything in addition.

EU to EU calls



Outgoing calls are delivered to the Called Party via the GSM network. TeliCore performs the call authorization and billing.



#### EU to non-EU calls

Non-EU calls



Outgoing calls are routed to TeliCore and TeliCore routes these calls to the Called Party user via your A-Z VoIP termination providers.



Outgoing calls are delivered via the GSM network to Global 1 SIM to trigger a callback (Leg A) from TeliCore. TeliCore places a separate call (Leg B) to the Called Party, and connects the two call legs together.



# **Configuration Checklist**

Begin by printing the checklist shown below. Follow the system setup instructions detailed in this chapter, checking off each completed operation on the printed list. Please be sure to perform all of the operations, otherwise the service will not be properly configured. (All boxes should be checked.)

General Configuration	
Create and populate tariffs for Leg A	
Create and populate a tariff for Leg B	
Create a zero-cost tariff	
Create and populate tariffs for direct calls	
Create and populate SMS tariffs	
Create and populate Mobile data tariff	
Create and configure product	
Create a template account for SIM importing	
Import SIM cards	
Perform MSISDN retrieve for SIM cards	
Testing	
Make incoming and outgoing calls to check if it works as expected	



# Tariffs and Products - Instructions and Features

## Tariff configuration

TeliSIM solution requires several tariffs to perform billing correctly:

- Two tariffs for Leg A (for Global and Global+ profiles)
- Tariff for Leg B (call to the destination)
- Zero-cost tariff for voice calls (to charge for failed callback attempts)
- Tariff for Leg I (incoming calls to the SIM card)
- Two tariffs for direct calls (EU to EU and EU to non-EU)
- Two tariffs for outgoing SMS (SMS-MO and SMS-MT)
- Tariff for Mobile Data

#### NOTE

Upon request, Global 1 SIM will provide you a sample tariff for Leg A, Leg B, SMS and Mobile Data with suggested mark-up based on estimated average market pricing.

Step 1: Log into TeliCore as a root or admin user.

۵	PortaBilling Login									
•	* Password Recovery									
		Login Password Login								

#### Figure 1. Logging in

### TIP

Click on the **Password Recovery** button to restore the forgotten password.



#### Step 2: Add tariff for Leg-A.

Leg A requires two tariffs for the Global and Global+ profiles. TeliSIM profile is a list of mobile networks a SIM card can connect to in every country. The SIM card will switch to the needed profile automatically.

Use the following parameters in the Leg-A tariffs:

- Name: SIM retail voice A-leg (SIM retail voice A-leg [Global+] for the second one)
- Currency: select a currency
- Applied to: Customer

		A	dd	Tariff			
Name	SIM retail	voice A-leg	] ×	Currency	USD - US Dollar		¥
Applied To	Customer	<u>د</u> ۲	×	Service	Voice Calls	•	
General I		rator Unly			1		
	akrellou	NOT DEFINED			]		
Destination G	roup Set			•			
Free Seconds		0					
Post Call Sur	harge	0.00000 %					
Login Fee		0.00000					
Connect Fee		0.00000					

Figure 1. Adding Leg-A tariff

**Step 3**: Populate the tariff with the rates received from Global1SIM. Additional information about rates management can be found in <u>Rate Import Guide</u>.

#### NOTE

Leg-A tariffs must contain only rates for mobile destinations. This tariff is for calls to the user's mobile phone.



#### **Step 4**: Add a tariff for Leg-B.

Use the following parameters to add a Leg-B tariff:

- Name: SIM retail voice B-leg
- Currency: select a currency
- Applied to: Customer

The B-leg tariff must contain A-Z rates. According to this tariff the user will be charged for the long distance call.

Step 5: Add tariff "zero-cost"

- Name: "SIM retail zero-cost"
- Select a desired currency
- Apply the tariff to Customer

The tariff must contain zero-cost rates for the same destination as in the Leg-A tariff. The "SIM retail zero-cost" tariff will be used to bill zero charges for the outgoing calls when Leg-A of a call is successful and Leg-B fails, let's say due to a VoIP termination vendor failure to complete the call to a dialed destination. A caller charge for the failed call should be zero.

### TIP

With TeliSIM, profit margins are very high, therefore we recommend to use only high quality VoIP termination.

Step 6: Add tariffs for direct calls

Use the following parameters in the direct calls tariffs:

- Name: SIM retail voice AB-leg [EU->EU] (SIM retail voice AG-leg [EU->non-EU] for the second one)
- Currency: select a currency
- Applied to: Customer

Populate the tariff with the rates received from Global1SIM.



Step 7: Add tariff "SMS-MO"

- Name: "SIM retail SMS-MO"
- Select a desired currency
- Apply the tariff to Customer
- Select "Quantity" Service

		Add	l Tariff		
Name	SIM retail SMS-MO		Currency	USD - US Dollar	•
Applied To Managed By	Customer Administrator Only	<b>T</b>	Service	Quantity Based 🔻	
General I	nfo				
Default Off-Pe	ak Period Not Define	D	۲	]	
Destination G	roup Set			]	

Figure 2. Adding SMS-MO tariff

Outgoing SMS billing contains two legs: MO (Mobile Origination) and MT (Mobile Termination). For example when you send a SMS from the France Orange mobile network to Aruba Digicel mobile, TeliCore will use the SMS-MO tariff to find a rate for the France Orange network and the SMS-MT tariff to find a rate for the Aruba Digicel tariff. The total for a SMS is SMS-MO + SMS-MT.

#### NOTE

MCC (Mobile Country Code) and MNC (Mobile Network Code) are used to define Destinations. For example 37060 is LITHUANIA MOBILE TELE2 network.

Step 8: Add tariff "SMS-MT"

- Name: "SIM retail SMS-MT"
- Select a desired currency
- Apply the tariff to Customer
- Select "Quantity" Service



Rates for SMS-MO and SMS-MT tariffs are provided by Global 1 SIM.

#### Step 8: Add tariff "Mobile"

- Name: "SIM retail Data"
- Select a desired currency
- Apply the tariff to Customer
- Select "Data Service [MB]" Service

Rates for the "Mobile" data tariff are provided by Global 1 SIM.

Add Tariff									
Name Applied To	SIM retail Data Customer	*	Currency Service	USD - US Dollar Data Service [MB]	T	¥			
Managed By General I	Administrator Only	•							
Default Off-Pe Destination G	ak Period NOT DEFIN	ED	•	]					

Figure 3. Adding Mobile data tariff.

#### Step 9: Add tariff "Leg-I"

Use the following parameters to add a Leg-I tariff:

- Name: "SIM retail voice I-leg"
- Select a desired currency
- Apply the tariff to Customer

Leg-I tariff is for incoming calls to the SIM card Native and Foreign DIDs. This tariff can have rates similar to the Leg-A tariff. If a TeliSIM service provider chooses to market the service with free incoming calls, then this tariff should include zero rates.



## Product configuration

Thanks to the flexibility in Product configurations in the TeliCore platform, TeliSIM service providers can package their offers in a variety of attractive ways. Service and Rating components of Product in TeliCore determine what services can be used and how they are billed.

#### Step 10: Add Product "International SIM-p"

		Edit Pro	duct 'Internatio	onal SIM-p'		
Rate Lookup 🛛 🖻 Clo	one и Objects					
Product Name Inter Managed By Admi	rnational SIM-p inistrator Only	* (	Currency USD			
General Info	Maintenance Fee	Online Signup	Services and Rating	Subscriptions	Service Features	Notepad
Breakage Overdraft Protection Account Default ACL Default Discount Pla Info URL Description	0.00000 Debit account Account self in None	USD -care V -				

Figure 4. Adding a new product.

Rating entry is a component of a product. It specifies whether customers are allowed to use a service and how they should be charged for it. In the product's settings add new **Service and Rating** entries using the tariffs created before.

Under the Service and Rating TAB of the Product add:

- 1. Leg-A (Global profile) rating
  - Select "Voice Calls" Service
  - Select Node "Any"
  - Input "LEGA" in the Access Code field
  - Select Tariff "SIM retail A-leg"



- 2. Leg-A (Global+ profile) rating
  - Select "Voice Calls" Service
  - Select Node "Any"
  - Input "LEGAGLOBALPLUS" in the Access Code field
  - Select Tariff "SIM retail A-leg [Global+]"
- 3. Leg-B rating
  - Select "Voice Calls" Service
  - Select Node "Any"
  - Input "LEGB" in the Access Code field
  - Select Tariff "SIM retail B-leg"
- 4. Leg-I rating
  - Select "Voice Calls" Service
  - Select Node "Any"
  - Leave Access Code field blank
  - Select Tariff "SIM retail I-leg"
- 5. Zero-Cost Tariff rating
  - Select "Voice Calls" Service
  - Select Node "Any"
  - Input "CALLBACK\_FAIL" in the Access Code field
  - Select Tariff "SIM retail zero-cost"
- 6. Direct calls rating (EU -> EU)
  - Select "Voice Calls" Service
  - Select Node "Any"
  - Input "CALLTHROUGH" in the Access Code field
  - Select Tariff "SIM retail voice AB-leg [EU->EU]"
- 7. Direct calls rating (EU -> non-EU)
  - Select "Voice Calls" Service
  - Select Node "Any"
  - Input "CALLTHROUGHAG" in the Access Code field
  - Select Tariff "SIM retail voice AG-leg [EU->non-EU]"



- 8. SMS-MO rating
  - Select "Quantity" Service
  - Select Node "Any"
  - Input "MO" in the Access Code field
  - Select Tariff "SIM retail SMS-MO"
- 9. SMS-MT rating
  - Select "Quantity" Service
  - Select Node "Any"
  - Input "MT" in the Access Code field
  - Select Tariff "SIM retail SMS-MT"
- 10.Mobile Data rating
  - Select "Data Service [MB]" Service
  - Select Node "Any"
  - Leave Access Code field blank
  - Select Tariff "SIM retail SMS-MT"

	General Info	Maintenance I	Fee Services and R	ating Subscriptions		Service Features	Notepa	ad
Da	ta Service [MB]	]						
Ed	it I	lode	Access Code	Info Digi	ts	Tariff		Delete
		ANY	Any code	N/A		<u>SIM retail Data</u>		×
Qu	antity Based							
Ed	it I	lode	Access Code	Info Digi	ts	Tariff		Delete
		ANY	MO	N/A	5	<u>SIM retail SMS-MO</u>		×
		ANY	MT	N/A	1	SIM retail SMS-MT		×
Vo	ice Calls							
Ed	it I	lode	Access Code	Info Digi	ts	Routing/Rating		Delete
		ANY	LEGA	ANY	AN	IY — <u>SIM retail A-leq</u>		×
		ANY	LEGAGLOBALPLUS	ANY	ANY —	<u>SIM retail A-leg (Glob</u>	al+]	×
		ANY	CALLTHROUGH	ANY	any <u>- s</u>	<u> 31M retail AB-leg (EU-</u>	>EU]	×
		ANY	CALLTHROUGHAG	ANY	ANY — <u>SIN</u>	l retail AG-leq [EU->n	on-EU]	×
		ANY	LEGB	ANY	AN	Y — <u>SIM retail B-leq</u>		×
		ANY	Any code	ANY	AN	IY — <u>SIM retail I-leq</u>		×
		ANY	CALLBACK_FAIL	ANY	ANY	— <u>SIM retail zero-cos</u>	<u>st</u>	×

#### Figure 5. Services and rating entries



## Managing SIM Cards - Instructions and Features

## Uploading SIM Cards

When a Service Provider orders a batch of SIM cards, they will also receive a CSV SIM inventory file that contains all additional information related to the card.

id, IMSI, PublicNumber, PrivateNumber, UserID, CustomerID, SIMStatusID, PIN1, PIN2, PUK2, SerialNumber, SoftwareVersion 1308918, 234180004168000, NP\_550000802500, NP\_550000802500, 1210510, 1206695, 1, 9441, 8557, 16878215, 57885344, 89234185500008020000, V3.09b 1308919, 234180004168000, NP\_550000802501, NP\_550000802501, 1210511, 1206696, 1, 2856, 6098, 44265600, 89818354, 89234185500008020000, V3.09b 1308920, 234180004168000, NP\_550000802502, NP\_550000802503, 1210512, 1206697, 1, 3798, 7249, 25286772, 65866441, 89234185500008020000, V3.09b 1308921, 234180004168000, NP\_550000802503, NP\_550000802503, 1210513, 1206698, 1, 4740, 8401, 96307943, 41914529, 89234185500008020000, V3.09b 1308922, 234180004168000, NP\_550000802504, NP\_550000802504, 1210514, 1206699, 1, 5682, 9552, 77329115, 87962615, 89234185500008020000, V3.09b 1308923, 234180004168000, NP\_550000802505, NP\_550000802505, 1210515, 1206700, 1, 2327, 4345, 31259207, 78951708, 89234185500008020000, V3.09b

Figure 6. SIM Inventory file example

Every SIM card comes with a SIM holder. The SIM itself has a unique ICC ID number that represents account ID in PortaBilling.



Figure 7. SIM card example

Step 11: Creating a template account

When PortaBilling imports SIM cards into the SIM card inventory, it needs to have a template account. All newly imported SIM cards will inherit the following options from the template account:

- Customer
- Opening balance
- Credit limit



• Product

To perform SIM upload service provider should create a template account under the needed customer.

Step 12: Uploading SIM cards.

Proceed to the SIM Inventory Main Menu entry.

My Company Access Levels Users Mailing List Templates Web Interface Quick Forms	Destinations Destination Group Sets Tariffs Volume Discount Plans Bundle Promotions Subscription Plans Products	<b>0:0</b>	Nodes Call Handling SIP Environments IP Centrex Service Policies Internet Services IP Device Profiles IP Device Profiles IP Device Inventory DID Inventory Geo/Risk Profiles	~	System Load Call Monitor SIM Inventory ASR Cost / Revenue Custom Reports Vendor xDRs Customer xDRs Invoices
\$ Services Currencies Exchange Rates Customer Classes Payments	Representatives Distributors Resellers Customers Vendors	₽	Route Categories Routing Plans Test Dialplan Routing Criteria Access Numbers Connections	Q	Trace Session Active Sessions BE Log Viewer SIP Log Viewer Account Info

Figure 8. SIM Inventory Main Menu entry

Click on the Upload SIMs button, choose the file and click Upload SIM cards.

l	Jpload SIM Cards		×
	File should be in CS File should contain Usually file contains A template accourt New accounts will	3V (comma-separated values) format column with 'SerialNumber' header : the following headers (IMSI, UserID, CustomerID, PIN1, PIN2, PUK, PUK2, SerialNumber, SoftwareVersion) it should be specified inherit values from the template account (product, credit limit, customer, type, etc.)	1
	Template account:	sim_template	
	CSV File:	C:\fakepath\G Browse	
		Upload	

Figure 9. Uploading SIM cards

When the upload is finished a page with the upload results will be shown and an email with upload results will be sent to the user's email address.

#### NOTE

When the SIM card is uploaded into PortaBilling it is not active. Every SIM card comes without a Native DID (MSISDN) allocated. Service provider must allocate MSISDN in SIM Inventory to activate the SIM card.



#### **Step 13:** MSISDN allocation.

The MSISDN allocation process will use the SIM card's UK Native DID (MSISDN) and can have as many additional DID numbers as it is needed.

To allocate a Native DID for a single SIM card, double click on the SIM card entry in SIM Inventory. In pop-up window click **Retrieve MSISDN** button.

8923416	194061 ,44744	23418000	50	
892341	194061 ,44744	23418000	Additional info	×
892341	194061 ,44744	23418000		
892341	194061 ,44744	23418000	SIM CustomerID: 155	
892341	194061 ,44744	23418000	SIM PIN2: 2295	
892341	194061 ,44744	23418000	SIM PUK1: 33392667 SIM PUK2: 78412223	
892341	194061 ,44744	23418000	SIM Software Version: V3.09b	
892341	194061 ,44744	23418000	SIM User ID: 156	
			Retrieve MSISDN Retrieve US MSISDN L	.ocation Updates

Figure 10. Allocating MSISDN

To allocate MSISDN for a group of SIM cards, enter the first ICC ID of the range into the **FROM** field and the last ICC ID of the range in the **TO** field and click **Retrieve MSISDN** button.



Figure 11. Allocating MSISDN for a group of SIM cards

#### NOTE

By default only the UK MSISDN number allocation is enabled, i.e. Service Provider can assign only the UK native DID to a SIM card. Please contact support to enable US MSISDN allocation.



## **SIM Inventory**

SIM Inventory is a convenient tool designed to easily manage SIM cards. The tool is available for both administrators and resellers (resellers will see only their accounts).

In order to enable the SIM Inventory link for a reseller the administrator should create a new ACL with the following permissions:

Access Type = Read Allow/Deny = Allow Object = WebForms Attribute = SIM Inventory

☆ = \$ \$\$ \$ ? ?	Z Q			SIM Inven	tory				@ u	лс	-	
🕨 🛞 Close 🔺 Upload SIMs	🗏 Retrieve Range 📑 Activate	/ Block Range 🛛 🕀 Objects								1	🛙 Logout	
ilM cards ?												
Serial(8923418) MSISDN	(44) Reseller/Custome	r Search										
Serial Number	MSISDN	IMSI	Funds	Subscriber	Reseller	Customer	Active From	Active Until	Data	Status		
<u>892341 326</u>			101		ivan sip3 reseller	ivan sip callshop	09-15-2014		Off	Active	9	
<u>892341</u> <u>500</u>			101		ivan sip3 reseller	ivan sip callshop	09-15-2014		Off	Active	9	
<u>892341 501</u>			10			International SIM	09-13-2015		Off	Active	9	
<u>892341 502</u>			10			International SIM	12-07-2014		Off	Active	9	
892341 503			10			International SIM	12-07-2014		Off	Active	9	
<u>892341</u> <u>504</u>			10			International SIM	12-07-2014		Off	Active	9	
<u>892341</u> <u>505</u>			10			International SIM	12-07-2014		Off	Active	0	
<u>892341</u> <u>506</u>			10			International SIM	12-07-2014		Off	Active	9	
892341 507			10			International SIM	12-07-2014		Off	Active	9	

Figure 12. SIM Inventory page

SIM Inventory contains several columns:

#### • Serial Number

ICC IDs of the SIM cards. Click on the serial number to open the Account Info page.

• MSISDN

DID numbers assigned to a card. Bothe 'Native' and 'Foreign' DIDs are listed.

• IMSI

Unique Identifier of a SIM card in the mobile operator network.

• Funds Available funds of the SIM card.



#### • Subscriber

First name and Last name defined for the SIM card account. To edit it please proceed to the **Account Info** page and add the name under the **Subscriber** tab.

#### • Reseller

Reseller who owns the SIM card account. If the field is empty the SIM card account is created under a direct customer.

#### • Customer

Customer who owns the SIM card account.

#### • Active From

Date of the SIM card account creation.

#### Active Until

The SIM card is valid until this date. If the field is empty – there is no expiration date. In order to change the expiration date please proceed to the **Account Info** page and add the date under the **Life Cycle** tab.

#### • Status

Shows SIM account status. Can be Active, Blocked, Inactive, Expired.

• Data

SIM card mobile Internet status. If Data is disabled the SIM card will not be able to use mobile Internet.

• Block

Click the button to block the SIM card.

Double click on a SIM cards shows the additional information pop up window. It contains technical information about the SIM card and location information. We keep two recent location updates of a SIM card. Location update is performed when the SIM card switches from one network to another network or when the phone is rebooted.



Additional info			×
SIM CustomerID: 12 SIM PIN1: 3486 SIM PIN2: SIM PUK1: SIM PUK2: SIM Software Version: V3.09b SIM User ID: 131 Current location: SPAIN VODAFONE M	10BILE - VODAFON	JE [ESPAT]	
	Retrieve MSISDN	Retrieve US MSISDN	Location Updates

Figure 13. Additional information window

#### NOTE

It is possible to send to a SIM card welcome USSD message when the user switches to a new network. This message can contain custom text and rate for incoming calls. Please contact <u>support@telinta.com</u> to enable this feature.



# **TeliSIM Features**

SIM card configuration can be adjusted via short codes - 3 digits USSD messages. All USSD messages should start with asterisk and end with a pound sign.

The following short codes are available:

\*141# – Check SIM card balance.

\*142# – The list of DID numbers assigned to the SIM card.

 $\times 143 \times$  phone number # – Change outgoing identity.

**\*143\*0**# – Hide outgoing identity. **NOTE**: To allow a customer to use this feature please set the **SIM\_HideCLI** custom field to **Yes**.

\*143\*1# – Show outgoing identity.

 $\times$  144 $\times$  voucher number # – Recharge balance of the SIM card with a voucher.

\*149\* number of the receiver \* amount # - Transfer funds from your balance to another SIM card. For example the command \*149\*447440900466\*10# will transfer 10 USD from your balance to the SIM card 447440900466.

\*150# - Mobile data service on/off.

\*11511# - Check Voice Mail. Calls to the Voice Mail service can be non-free.

\*152# - Enable Voice Mail.

\*153# – Disable Voice Mail.

\*155# - Voice Mail status.

**TISE** forwarding number  $\underline{#}$  – Enable unconditional forwarding to the number. All calls coming to the SIM will be automatically forwarded.

\*157# - Disable forwarding.



\*500# - Call customer service (requires additional configuration).

#### NOTE

Short code notifications are available in multiple languages and can be configured. Please contact support for additional information.



## Troubleshooting

Symptom	Problem	Action
The handset shows 'No service'.	The handset cannot connect to a network.	<ul> <li>Do one of the following steps:</li> <li>Check that the handset is not locked (both mobile network and region lock will prevent TeliSIM from operating).</li> <li>Try to manually switch to another mobile network.</li> <li>Make sure that the handset is in the region with a mobile network coverage.</li> </ul>
You cannot make an outgoing call.	The subscriber is either out of coverage. There is a billing/routing misconfiguration.	<ul> <li>Do one of the following steps:</li> <li>Check that the SIM account has a LU (location update).</li> <li>Make sure that after the number is dialed you receive a USSD message 'Please wait for callback'.</li> <li>Try to dial a short code (e.g., *141#). If the short code works it usually means that there is an issue with vendors. Please try to reroute the destination.</li> </ul>



Symptom	Problem	Action	
You cannot receive an incoming call.	You have low balance.	<ul> <li>Do one of the following steps:</li> <li>Make sure that the SIM account has enough credit.</li> <li>Check that the SIM account has</li> </ul>	
	The mobile operator does not supply MSRN.	<ul> <li>Check that the Sim account has LU (location update).</li> <li>Try to reboot the phone.</li> </ul>	
You cannot send an SMS.	The product assigned to the account does not have services and rating entries for the quantity based service.	Add rating entries for quantity based service.	
	You have low balance.	Make sure that the SIM account has enough credit.	
You cannot receive an SMS.	SMS is sent to a foreign DID	Make sure that you send SMS to a native DID (either UK or US MSISDN).	
		In some cases it can take some time to deliver the SMS.	
You cannot connect to mobile Internet	The handset is not configured properly	Make sure that mobile Internet in roaming is enabled.	



Symptom	Problem	Action
		Check that APN is set to <b>globaldata</b>
	Data is disabled for the SIM account	Dial the short code *150#



# Definitions

Foreign DID - DID number bought from a DID provider. Can be assigned to a SIM card.

**ICC ID** - 19 digits unique serial number of a SIM card. ICC ID is printed on the SIM card. In TeliCore ICC ID is used as an account ID of the SIM card.

**IMSI** – International Mobile Subscriber Identity is used to identify the user of a mobile network and is a unique identification associated with all mobile networks. In TeliCore is represented by a custom field assigned to an account.

LU – Location Update, special request sent by Global1SIM to TeliCore. It contains MCCMNC combination to identify the network the SIM card is connected to.

**MCC** – **Mobile Country Code**, is used in combination with a Mobile Network Code (MNC) to uniquely identify a mobile phone operator.

**MNC** – **Mobile Network Code**, is used in combination with a Mobile Country Code (MCC) to uniquely identify a mobile phone operator.

MO – Mobile Origination.

MT - Mobile Termination.

**MSISDN** – Mobile Service Integrated Services Digital Number, phone number assigned to the SIM card (we call them **Native DIDs**).

**MSRN** – Mobile Station Roaming Number, temporary phone number assigned to a SIM card by the guest mobile network. Is used to route calls directly to the SIM card.

**Native DID** - MSISDN of the SIM card. UK or US number that comes with a SIM card free of charge.

**Short code** - three digits USSD request used to adjust the SIM account configuration from a handset.



# Additional services

In some business models it can be beneficial to use sales agents (distributors) to distribute the SIM cards. Telinta whitelabel distributor interface has an out of the box support of TeliSIM. Your sales agents will be able to activate and recharge SIM cards with just a few mouse clicks. Additional information is available in the <u>Distributor Interface Admin Guide</u>.

Distributor	Accounts	Reports	Logout				
A	ctions List		Accoun	t List			Search
Add Pinles	s Account						
Show Pinle	ess Accounts			Account ID	Balance 🖕	Blocked 🍦	Activation Date 🝦
			8923	7	-10	N	2014-12-06
Add Vouch	er		8923	8	0	N	2014-12-06
			8923	<u>1</u>	0	N	2014-12-06
Show your	cher List		8923	2	0	N	2014-12-06
Show SIM.	Accounts		8923	3	0	N	2014-12-06
	, locodinto		8923	4	0	N	2014-12-06
Account Sea	rch		8923	5	0	N	2014-12-06
			Total		-10		
pinless 🔵 s	sim 🔘		Showing 1	to 7 of 7 entries	(	First Previous	1 Next Last
Search							

Figure 14. Distributor Interface with TeliSIM addition

For SIM card users it is possible to enable a special self-care interface. It is fully whitelabel, responsive and designed specially for the SIM accounts. Additional information is available in <u>TeliSIM self-care interface guide</u>.

TELINTA Your Logo Here	≡		⊘ America/New_York 350 USD	💄 Support Test SIM 👻 🛛 🛛
Hello, Support	Dasboard 2015/04/21 06:16:4	40		
🚯 Dasboard	0	0	0	0 MB
i Info	Outgoing Calls	Incoming Calls	SMS	Mobile Internet
🖃 Payment	More 🧿	More 🖸	More 🗨	More 🛇
📶 Rate Calculator	Contract Charged			
ී Your xDR History				
	0%	0%	0%	0%
	Outgoing Calls	Incoming Calls	SMS	Mobile Internet

Figure 15. TeliSIM self-care interface.

TeliSIM™ www.telinta.com



TeliSIM service providers in day to day operations move SIM card accounts from one customer to another. Telinta engineers developed Advanced Batch Editor that allows to perform this operation. In addition it is possible to assign DID number for a batch of SIM numbers with just a few mouse clicks. Please contact <a href="mailto:support@telinta.com">support@telinta.com</a> for additional information.

Options	3					
Cr Blu De As Tir Di: Pri Di: Fo Ctr Ad	edit Limit ock/Unblock escription me/Zone stributor oduct scount Plan efault Answering M orward Mode rl # ove Account	ode Select a customer	T			
Activate   Update   >   >>     Ctrl # Account ID   Balance   Blocked   Status						
	1	_template		10	N	0
	248	8923 51		10	Ν	0

Figure 16. Advanced Batch Editor.