



# Cellnetrix

**Research. Innovation. Experience.**

**SmartRoom**

# **A Smart Roaming Solution**

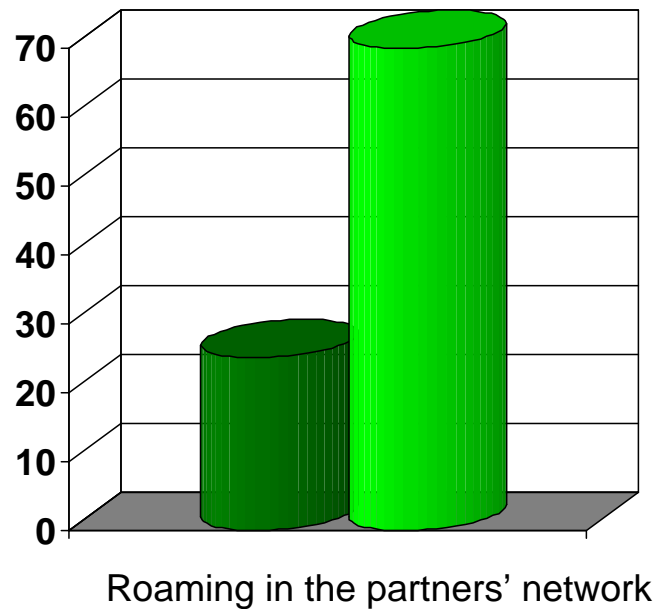
*Guide your subscribers to the right network and  
increase your revenues from roaming*

*Vladimir Nagin  
Cellnetrix*



## Objectives of smart roaming solutions

- Roaming cost reduction while roaming in the competitors' network
- Increase in roaming revenues in the partner networks
- Provide better roaming services for the subscribers



■ Standard roaming  
■ Smart roaming

This is assured  
by guiding  
subscribers to the  
right network

# Supported roaming modes

## Roaming management without an additional applet

No additional on-card application is required

Updatable via OTA

## SmartRoam Applet

SmartRoam application on the SIM

Single subscriptions for roaming

Flexible roaming business rules

Roaming rules are updatable via OTA

## SmartRoam with two or more subscriptions

SmartRoam application on the SIM

Several subscriptions for roaming

Flexible roaming business rules

Roaming rules are updatable via OTA

# Roaming management logic

## **Controlled roaming without additional applet on the SIM**

Provides the possibility to update PLMN/FPLMN files on the SIM card periodically depending on current roaming preferences. At the same time PLMN/FPLMN files can be modified by the handset depending on the current network information.

## **Controlled roaming with single IMSI (Smart roaming with single IMSI).**

SIM Application keeps internally current roaming preferences for the particular subscriber and updates PLMN/FPLMN files during the network registration in the new country. Various subscriber groups can have different roaming preferences. Update of PLMN/FPLMN files by the mobile can be prevented and such updates ignored. Internally stored roaming preferences can be updated by OTA.

## **Controlled roaming with 2 or more subscriptions (Smart roaming with a partner subscription)**

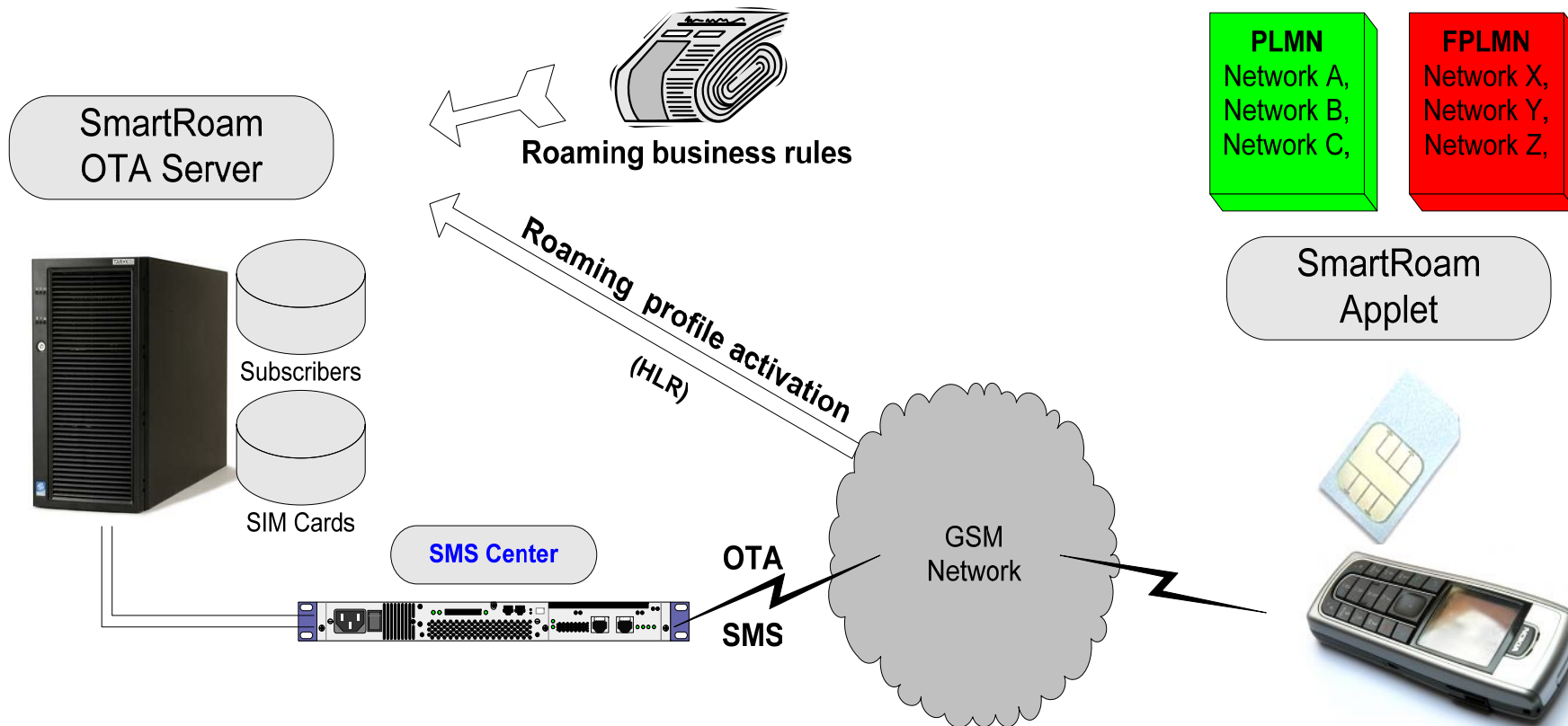
Additional functionality to activate different subscriptions during the visits in different countries is provided, so called roaming with a partner subscription. Just like in the previous solution PLMN/FPLMN files are updated each time activation in the new country is detected.

Example:

Subscription 1 is used to work in the home network and provide local/limited roaming, as example only CAMEL roaming;

Subscription 2 is used for broad global roaming using subscription of the partner.

# Keeping SmartRoam applet up-to-date with OTA



# Main features of Cellnetrix Smart Roaming solution

## **Comfortable WWW administrative interface**

Allows to manage DB of preferred networks for roaming, as well as available and forbidden networks. After modifications to the roaming DB OTA updates could be automatically generated and scheduled to update all SIM-cards in the field.

## **Subscriber groups**

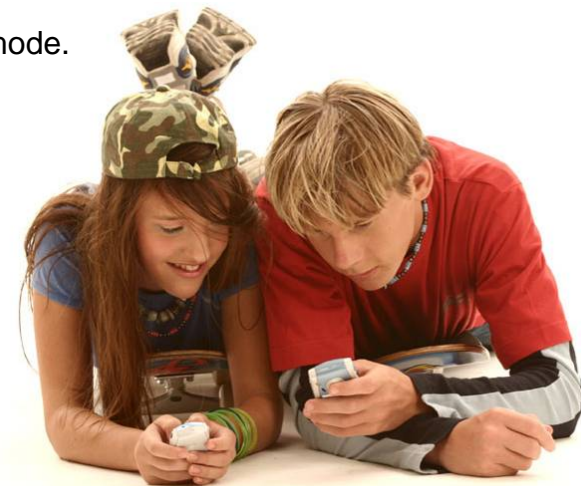
Solution provides support for managing different subscriber groups and specification of different roaming preferences for different types of subscribers: business, tourists etc. Subscribers with or without SmartRoam applet correspond to different subscriber groups.

## **Intellectual management of OTA dispatches**

OTA dispatches could be scheduled in the automatic as well as in the manual mode. Best delivery time when allocation of SMSC is the lowest one could specified.

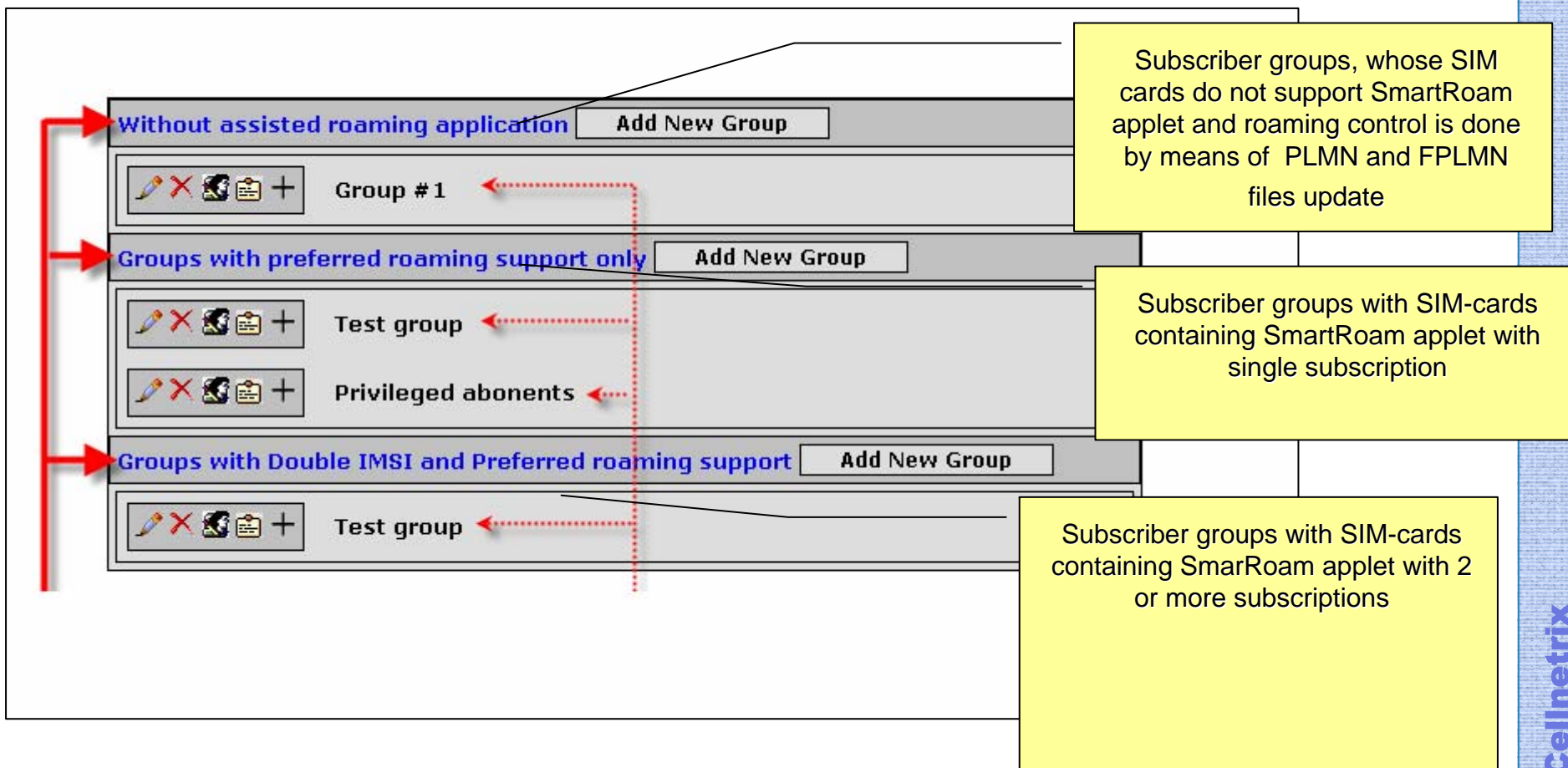
## **Forced change of the roaming partner**

Handset could be programmed to change the current network and select optimal one immediately after the receipt of the new roaming database update

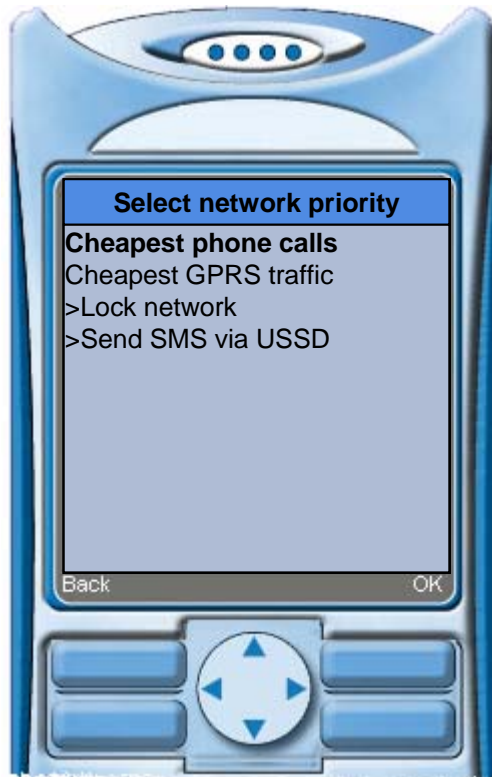


# Management of subscriber groups

SmartRoam supports several types of subscribers:



## Additional benefits of SmartRoam



- **SmartRoam** supports controlled roaming with or without additional application on the SIM;
- Flexible business rules for roaming ;
- Business rules on the SIM are updatable by OTA-server automatically or manually;
- Additional roaming services can be proposed to the subscribers: best SMS price, cheap SMS via USSD, best GPRS prices, lock current network to the preferred one, etc



## Conclusion....



Thank you for your attention!

We're pleased to answer your questions!

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