



# How Mobius reduced the cost of data roaming costs by a factor of 150

Adelante Software's unique credit card transaction processing system, MobilePOS, enables credit and debit card payment on mobile phones and PDAs. One of its key customers was using the system outside of the UK and incurring huge bills for mobile data usage because of the need to access a foreign mobile network. These 'roaming' costs are notoriously high as anyone using their mobile phone abroad knows. Mobius Networks offered a solution. Because of an exclusive agreement set up with every foreign network the costs for data sent via Mobius SIM cards can be reduced by a factor of 150.

Adelante's MobilePOS system is highly flexible, giving anyone working off-site the ability to accept card payment for goods or services. It is now used by more than 1000 customers ranging from market traders through to blue chip companies. MobilePOS and mobile chip & pin terminals both use the GPRS engine and the sim card in the device to send the payment details to the bank and receive the required authorisation of the transaction. The data is sent via the mobile networks and for UK users this is cost effective. However, when a UK based customer uses the service abroad the cost of the transaction soars because a foreign network will be accessed.

The price of a mobile data service is based on the volume of the data which is measured either in kilobytes (KB) or megabytes (MB). Data roaming charges on overseas networks are typically charged in increments of 200KB of data used. Even if only a fraction of that amount is used, the full session will be charged. So, a customer expecting to pay less than 1p for a transaction because they have only transferred a small amount of data may be charged £1.50.

Adelante's customer was only using 8KB per transaction and being charged for 200KB. These high costs were seriously eating into their profit margin. Whilst a £1.50 data charge per transaction may not seem a major issue if goods or services are sold for thousands of pounds it has a devastating effect on the profit margin of a transaction of £15 or £20.

The customer was looking for low roaming costs and Adelante have been able to deliver that requirement by using Mobius SIMs in the mobile devices

supplied to the end customer. Mobius has registered its own Access Point Name (APN) with every foreign network provider and has an agreement set up with all networks to ensure that data is charged in much smaller increments of 1KB.

This has resulted in massive savings for Adelante's customer and also an increased profit margin for Adelante themselves. The billing each month from Mobius Networks shows the cost of the roaming charges next to each individual SIM so Adelante can see the detailed transaction charges. The customer is delighted with the cost reductions that have been achieved and this has resulted in them increasing their business with Adelante.

Using Mobius SIMs brings a host of benefits to companies using mobile devices. Misuse is prevented because the SIM is solely set up to carry out the job required, i.e. send data. Mobius SIMs have a complete voice and premium text message ban, and the SMS, GPRS roaming and even the Internet APN can be removed. Security is increased because the Private Network provided by Mobius keeps data off the open internet and delivers it, through the mobile network, safely to its destination.

Every Mobius SIM is in isolation from every other SIM as opposed to normal practice where SIMs are linked. So if someone hacks into a Mobius SIM they only have access to that one, not the whole system. It is a far safer way of sending secure information to a bank. In addition to this, the SIM gives each terminal a fixed IP address. Any problems with the system can be pinpointed and even checked/repaired/updated remotely by sending software updates to it.

## THE CHALLENGE

Adelante wanted to reduce the high data roaming charges incurred by a UK-based customer who was using mobile payment devices to carry out credit card transactions abroad.

## THE SOLUTION

SIM cards provided by Mobius Networks were installed in the payment terminals. This radically reduced data roaming charges because Mobius has established usage agreements with foreign networks whereby users are charged for what they actually use rather than for a minimum data package.

## THE BENEFITS

By using Mobius SIM cards Adelante have been able to reduce the cost of sending mobile data from abroad. The cost for each transaction is now lower than a GSM/CSD call in the UK.

- Significant cost savings
- Increased security
- Anti-fraud / prevents misuse
- Gives fixed IP address so faulty terminals can be checked/ repaired/updated
- Makes job of terminal manager easier
- Reliability



## THE PROCESS

A standard internet enabled mobile payment terminal is taken overseas. When a transaction is initiated the terminal begins a manual roam of available networks and asks to be directed to the Mobius APN. The foreign network recognises the instruction and passes the connection to Vodafone UK. The data is then sent down a cable to the Mobius services. At that point the payment terminal 'handshakes' with the Mobius servers.

Mobius gives every terminal a unique name and password and can therefore direct the data from each terminal to its unique IP address. A policy for that connection routes the data down a VPN to the destination.

For more information about how Vodafone, Mobius and Adelante can cut costs and improve services

[www.mobiusnetworks.co.uk](http://www.mobiusnetworks.co.uk)  
[www.adelante.co.uk](http://www.adelante.co.uk)

