



NFC evolution in SMS based ticket and payment services

Dr. Christoph Koessler
10.06.2008





mobilkom austria group

m-commerce products

mobile NFC solution

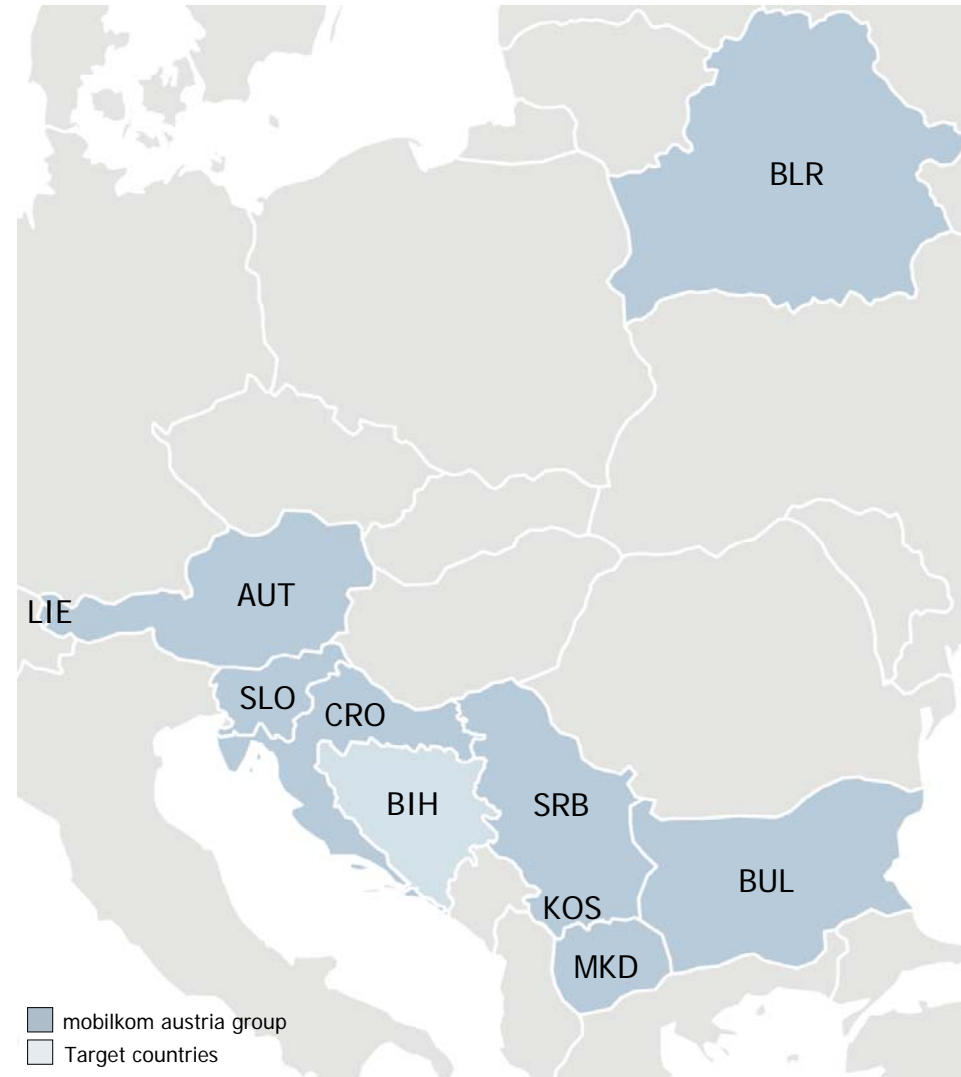


Company Overview



mobilkom austria group (mag) has locations in 8 countries

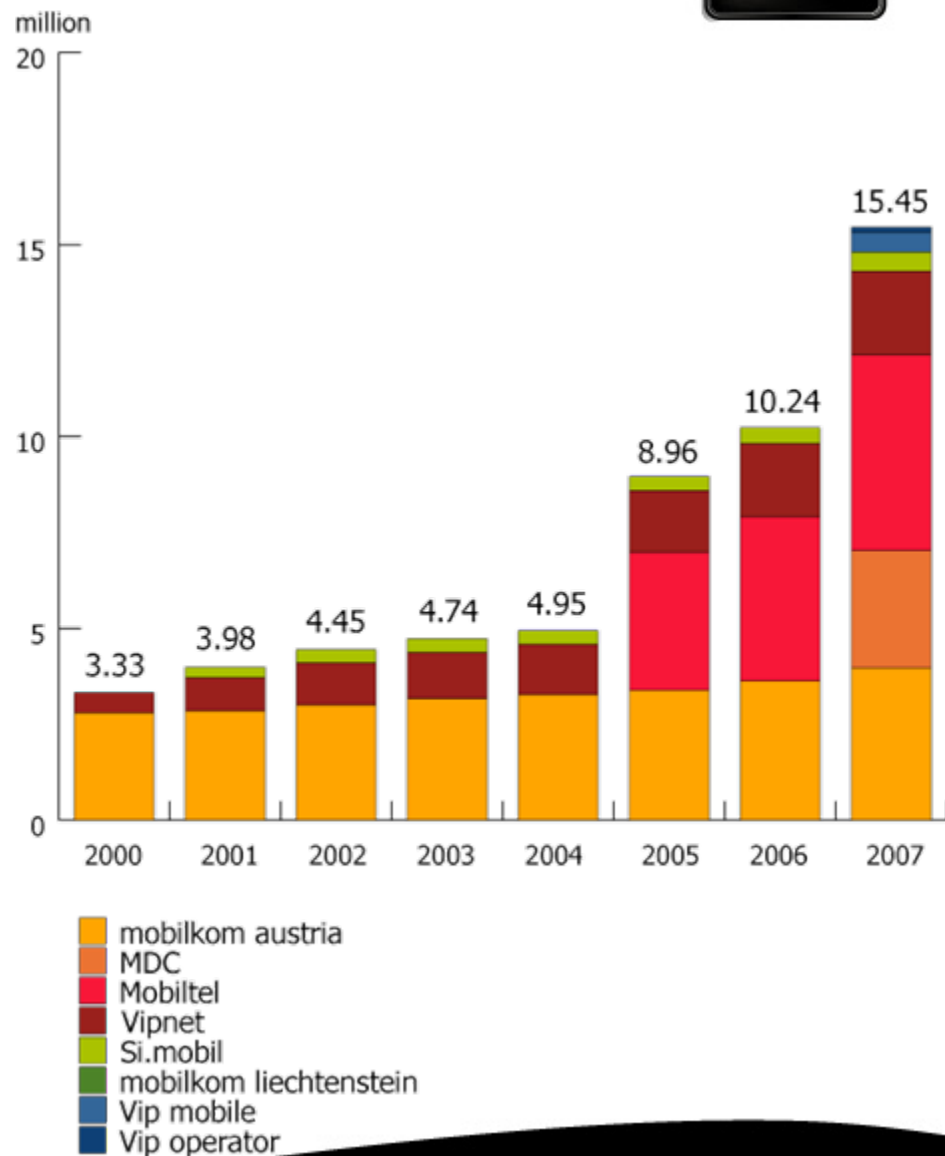
- mobilkom austria
- Mobiltel (Bulgaria)
- Vipnet (Croatia)
- Si.mobil (Slovenia)
- mobilkom liechtenstein
- Vip mobile (Serbia)
- Vip operator (Macedonia)
- MDC (Belarus)



Company Overview



	Q1/08
Customers	15.866 m
mobilkom austria	4.100 m
Velcom	3.227 m
Mobitel	5.058 m
Vipnet	2.196 m
Si.mobil	513,100
mobilkom liechtenstein	5,400
Vip mobile	601,700
Vip operator	163,300



Successful Innovations

- 1999: **SMS Rail Ticket** - First m-commerce application worldwide
- 2001: **Paybox** - First mobile payment platform in Austria
- 2002: **A1 Bank** - first mobile operator to launch a bank worldwide
- 2003: **m-Parking** – purchase a parking ticket via the mobile phone
- 2005: Paybox became the first **interoperable** mobile payment platform
- 2006: **NFC purse** - A1 BANK pilots first mobile e-cash service
- 2007: First nationwide **NFC launch**, worldwide
- 2007: **1.000.000 m-Commerce users**





mobilkom austria group

m-commerce products

mobile NFC solution



Customer's Expectation

- "Do it with the mobile phone"
 - Order and service use
 - Payment
 - Ticket reception and validation
- Convenience
 - Easy, fast, secure and transparent
 - Do it on the move



It's about usability, not plain technology

Most Popular m-Commerce Services @ A1



- **Mobile Public Transport Ticketing**
- **Mobile City Parking**
- **Mobile Vending**
- **Mobile Gambling**
- **Mobile Event Ticketing**

- SMS (WAP) based services
- Interoperable
- Shared SMS-number
- Payment via phone bill
- Corporate payment solution integrated
- NFC service initiation

“HANDY Fahrschein”

“HANDY Parken”

“HANDY Cent”

“HANDY Gambling”

“SMS HANDY Tickets”

→ no JAVA midled required

→ no separate registration

→ “With a single touch”

Mobile Transport Ticketing

- in 6 Cities and with ÖBB



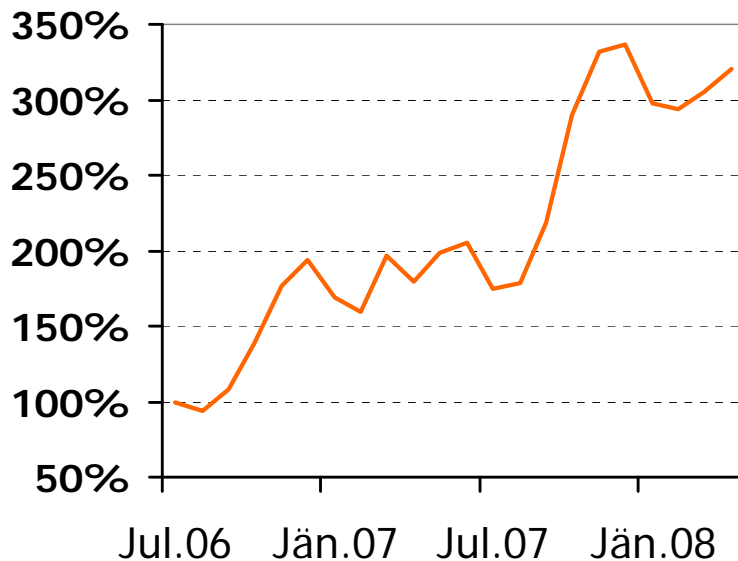
Business Model

- Focus: Non-regular commuters and travellers
- Buy your ticket on the move
- Combined with timetable service
- Interoperability

Ticket Types

- Tour and tour/retour tickets
- Single fare tickets
- Day tickets
- Adults, children, groups, reduced fare,...
- Private & Corporate tickets
- SMS-reminder and ticket prolongation

Number of HANDY-Tickets



Service Use

- Order-process simplified by NFC initiation
- 100% capable with open system
- No gates required
- Offline and online Validation

Mobile Payment at Vending Machines



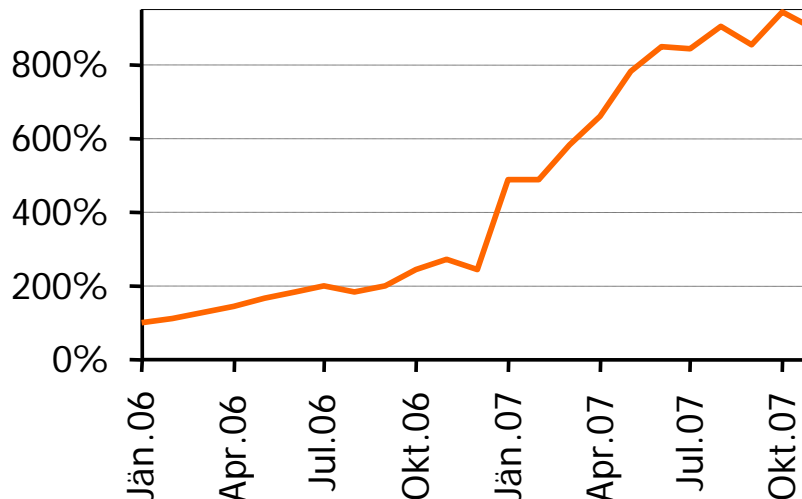
Business Model

- Snack-, drink- and cigarette vending machines with an integrated GSM module
- Mobile online payment – providing credit over-the-air to the vending machine
- Interoperability

Service Use

- Order-process simplified by NFC initiation
- Vending machines have an individual code → Purchasing SMS must contain this code
- Vending machines receive a credit over-the-air from the transaction server

Mobile Vending Transactions



Solution

- Cash-less payment - cleared via the phone bill or Paybox
- Legitimation & age check
- Transparent invoicing
- Supports additional telemetric functions via the GSM module

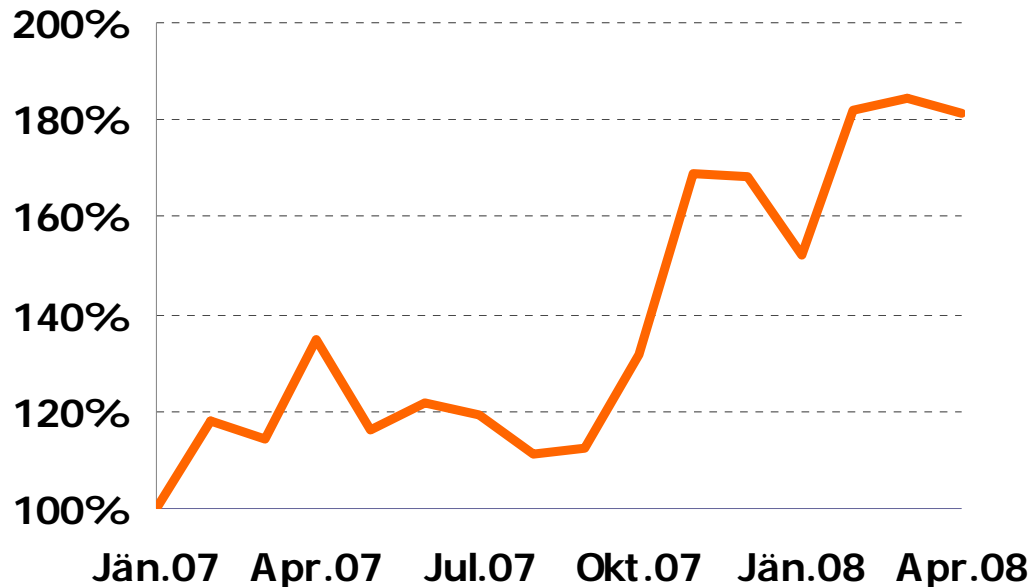
Solution

- SMS based parking ticket
- Mobile order, payment and validation
- Interoperability

Needs satisfied

- Order-process simplified by NFC initiation
- Simple, fast & convenient
- SMS-reminder and ticket prolongation

Number of Mobile Parking Tickets





mobilkom austria group

m-commerce products

mobile NFC solution



NFC Launch; First NFC Package Worldwide



04. September 2007



Nokia 6131 NFC

- First NFC phone, commercially available
- Nationwide distribution

Simplify SMS services with NFC initiation

- Outdoor infrastructure

ÖBB (national railway company)

Wr. Linien (local transport authority in Vienna)

Selecta (leading vending company)

- Additional NFC Tags

Mobile Ticketing at ÖBB

Mobile Parking Tickets in Vienna

Mobile Gambling at the leading lottery

1-Click download of corporate ringtone

ÖBB Handy-Ticket

Hier NFC Handy hinhalten und Fahrtschein buchen! Ticket kommt per SMS!

ÖBB Mehr Infos unter: CallCenter 05-1717, www.oebb.at A1

€5,- GUTSCHEIN FÜR ÖBB HANDY FAHRSCHEIN

SMS HANDY LOTTO

HANDY PARKEN WIEN

ÖBB HANDY FAHRSCHEIN

GRATIS KLINGELTON

SMS HANDY LOTTO QUICKTIPP

NFC Transportation Scenario



Strategy

- Enhance existing m-Commerce services with NFC
- Provide a seamless NFC experience when travelling



Buy tickets and snacks in the most convenient way

- No need to remember anything
- The NFC Tag for ÖBB tickets is suitable for tickets all over Austria
- NFC Touchpoint at ÖBB stations along the main commuting route in Austria
- NFC Touchpoint at every ticket machine at Vienna's subway stations
- NFC Touchpoint at 415 Selecta vending machines – mainly at train stations

Mobile Parking

- Purchase a 30 min parking ticket in Vienna



Buying Train Tickets using NFC



1) Touch the NFC logo to receive the link



2) Press 'Start' to visit the VFL site for OEBB ticketing



Train station is filled in from NFC Tag

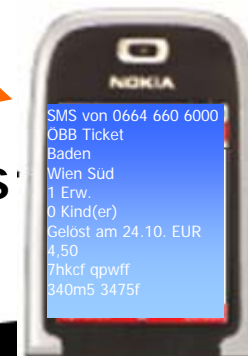
Destination (from last order)

Name (from last order)

3) Order a ticket



5) Receive the ticket via SMS



4) Ticketing Platform generates a ticket

SMS von 0664 660 6000
OBB Ticket
Baden
Wien Süd
1 Erw.
0 Kind(er)
Gelöst am 24.10. EUR
4,50
7hkcq qpwwf
340m5 3475f

Buying subway tickets using NFC



1) Touch NFC logo to receive order SMS



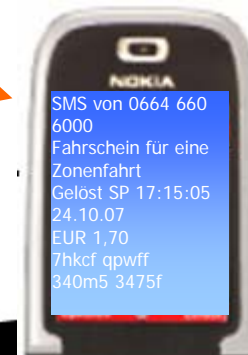
2) Press 'send' to order a ticket



4) Ticketing Platform generates a ticket



5) Receive Ticket via SMS



Buying snacks & drinks using NFC



1) Touch the NFC logo to receive the order SMS



2) Press 'send'

3) A1 Vending platform assigns a credit to the particular vending machine



4) Vending Machine receives a credit over-the-air



5) Press the code for the preferred Snack at the machine's keyboard

Usage figures 2007

- mobilkom austria leads m-Commerce business in Europe through number of services and number of transactions (> 1 million transactions per month)
- More than 2.600 vending machines equipped with m-payment modules
- Nearly 30% of parking fees in Vienna are SMS based
- 6-digit number of mobile transportation tickets sold in 2007

More than 20.000 NFC phones sold in Austria within first 8 months

- $\frac{1}{3}$ of NFC customers used the A1 NFC services since Sept. 2007
- NFC Tag for ordering ÖBB tickets has highest customer awareness ($\frac{1}{4}$ of NFC customers)

Thank You for Your
Attention.

