

## MOTESPay

### The challenge

For many consumers, the mobile phone is an integral part of their everyday lives and has become far more than a communication device. As the capabilities of a mobile phone have soared, consumers' expectations have increased accordingly. One of these expectations is the option to use a mobile phone to pay for goods and services.

Atos Worldline is a leading operator of electronic transactions in payment, e-services and CRM. Atos Worldline realised that the potential for mPayment was enormous, and that to make it a reality it would have to come together with other innovative and far-sighted companies. In 2005, Atos Worldline joined POLE TES, an e-Secure Transactions Competitiveness Cluster in Caen Basse-Normandie, with a number of partners. The Cluster now boasts a 77-strong membership, which covers all areas of e-Secure transactions, including 24 major industrial group world leaders, 41 SMEs, three research and further education institutes and nine third-party institutions. The Cluster combines technological, legal, economic and marketing expertise to create solutions for exchange security. Crucially, it is an innovative and collaborative environment that allows Atos Worldline to optimise the development cycle; from research and develop to product marketing. One of the purposes of the Cluster is to become the reference centre for research and innovation in NFC mobile services and to meet the increasing demand from telco's, banks, retailers and transport authorities (i.e. mPayment, mLoyalty, mTicketing apps). One of the Cluster's key goals is to help the city of Caen to join the European Living Lab network (<http://www.livinglabs-europe.com>).

In response to these trends, Atos Worldline joined forces with NXP, Caisses d'Epargne, Banques Populaires, Arkea Group (Credit Mutuel), Groupement des Cartes Bancaires, Ensicaen (School Engineer) and Caen-Basse Normandie University to create the mobile payment system, MOTESPay. Atos Worldline's role is to design, build and operate the MOTESpay architecture on both the client side (handset, laptop and payment terminal) and server side according to the consortium specifications.

### The solution

MOTESPay is based on identity Public Key Infrastructure (PKI) management architecture, named MOTES. Digital certificates issued by a bank are loaded on to a second Secure Element (SE) beside the SIM card. This SE, created by NXP, is called Smart MX and has been chosen by bank partners for this trial as it offers a security level similar to existing banking contact chip cards. The digital certificates are linked to a cardholder number or a Primary Account Number (PAN) on an online server, which is processed by Atos Worldline on behalf of the bank. Atos Worldline also runs the banking servers.

Another advantage of MOTESPay is in the use of the PKI. As the digital certificates can be tailored for and used with other applications, this opens the door for use within many other online services. Some of these services include payments schemes (SEPA Direct Debit), loyalty programmes (Private payments cards), access to banking portals for home banking transactions where authentication is needed and eGovernment applications based on strong authentication and electronic signature.

The MOTESPay architecture is independent from the implementation of the SE in the handset (in the SIM card or in a separate entity). The place of the SE in the handset for this trial is not definitive, and can change for the commercial phase. This issue

relies on agreements between banks and mobile operators at country or local level in terms of risk management and business models.

### **The benefits**

MOTESPay offers consumers a raft of benefits and can be used for purchasing a wide range of goods and services. The MOTESPay-equipped mobile can be used in proximity payments (NFC point of sale), or remote payments via an NFC reader connected to the user's PC.

Users will have no problem using MOTESPay because the application has been specifically designed for a mobile phone – a near-ubiquitous platform that users are already very familiar with. Banks can authenticate their customers using digital certificates while providing banking and payment services.

Caisse d'Epargne Basse-Normandie is the first bank to trial the MOTESPay application, and is running a pilot scheme from June to December 2007, with 100 cardholders and around 50 merchants. It will issue its customers MOTESPay-equipped handsets for free during this scheme. Other banks have already shown interest and are expected to run similar pilot schemes;