

CONTACTLESS TECHNOLOGIES

Payment and identity: an essential role

Top-of-the-range contactless technologies (cards, key-rings, bracelets, inlays and other items containing RF microcontrollers) have attained a maturity that is now speeding up their adoption in two major markets: identity and payment. Frost & Sullivan forecasted that in 2006, the identity applications launched by governments (passports and American federal cards mainly) will equal the transport market, estimated at 80% of the contactless market two or three years ago. The number of contactless RF microcontrollers could exceed 150 million units this year.

Electronic documents: all set for take-off

A large number of countries (more than 30 to date) including the United States, France, Germany, Austria, Sweden, Russia, Singapore, Portugal, Poland and more recently Denmark, have decided to use electronic biometric passports compliant with ICAO specifications. This kind of passport contains a contactless chip. Jacques Seneca, the Chairman of Eurosmart, said recently that this market looks set to be one of the key phases in the smart card industry's development, and would represent around 25 millions units by the end of the year. 2006 also marks the deployment in the United States of the first Personal Identity Verification or PIV cards, also equipped with contactless chips, which use biometric identifiers. These cards are used for controlling access to the public buildings of the various American administrations, and there would appear to be over 10 million of them. There are also several hundred thousand identity cards, both contact and contactless, designed especially for transport employees. These are known as TWICs, standing for Transportation Worker Identification Credentials. In the long term, it is even possible that these cards will become the official standard for identity purposes. On 11 May 2008, a new driving license in the US will have to comply with security requirements detailed in the 2005 Real ID Act. It could well adopt the contactless smart card technologies already used in PIV cards and passports.

Payment: commercial deployments in the United States and Asia continue, and "pilots" are proliferating

In the United States, the major banks are continuing the deployment of their contactless cards by calling on compatible MasterCard, Visa and Amex technologies. Inside Contactless, one of the top suppliers of circuits (specialized contactless microcontrollers), has already sold more than 10 million contactless chips this year. Between 12 and 15 million were delivered last year by suppliers as a whole. The contactless card will probably pass the 30 million thresholds this year. In Asia, the main mobile phone contactless payment operators have agreed to unify a system that up till now consisted of four different systems, though they all used the same technology: Sony's FeliCa. Europe, meanwhile, is pursuing various experiments. According to Guido Mangiagalli, Visa Europe's consumer market development manager, the European market looks set to take off in 2007 or 2008.

Several important pilots were launched in 2006, and they should be followed by still more by this year, including in France. In the United States, MasterCard broke new ground by offering 5,000 football fans the chance to adopt a bracelet equipped with its PayPass technology in order to get into the New Jersey Giants Stadium. But Europe is not to be outdone, since MasterCard has set up a pilot with the Turkish Garanti Bank, a pioneer in loyalty programs and two fast-food chains. This project was the third pilot launched in Europe, after Visa's in Germany and Great Britain. At present there are around a hundred pilots throughout the world, some of which have already reached the commercial deployment stage.