The EUREKA ITEA 2 SUS, Smart Urban Spaces, research project sought to adapt near field communication (NFC) technology in order to make city-based services accessible from our mobile phones and tablets. Half of all smart phones are expected to support NFC by 2015. The project designed and then tested this technology in real life.

Paying for bus, tram and train journeys can now be made with just a mobile device, which opens up as well the possibility of paying for multi-modal transport journeys in one go. Other applications include for example interactive museum visits or making all other kinds of small payments. In effect, services offered by cities will be accessed and used more easily with this technology.

“I think this is just one of the first moves towards smart cities,” explains project coordinator Jean-Pierre Tual, from French high-tech group Gemalto. “Certainly NFC is likely to be one of the technologies that will be used in cities in the future. From the perspective of my company, I think that NFC very clearly offers an excellent opportunity for developing innovation that will ensure business growth.”

A SMARTER WAY OF LIFE

NFC technology is contactless. It enables users to book tickets, pay for transportation or pay for shopping simply by placing a mobile against an electronic terminal. NFC Mobile payments in Europe are forecast to top €14.6 billion by the end 2014. The results of the project are already on track for fast exploitation by a number of industrial partners. For instance, the combination of NFC chips, mobile software and security management tools have enabled several applications to be successfully tested in Caen, France, including information, ticketing, identification and payment.

This early success has led to other opportunities. “We have been working in consortium with certain SME groups, most of whom are now ready to embark on the commercialisation of these technologies. It is now ready to be standardised and

“I think that NFC together very clearly offers an excellent opportunity for developing innovation that will ensure business growth.”
now ready to be standardised and mainstreamed: payment services are now looking to integrate such technologies, and there are a lot of transportation operators that can move towards the use of NFC for building bundles of urban services on top of basic ticketing.”

The ITEA 2 SUS project carried out 47 pilots clustered in four main areas: ticketing, education and day care, transport and city visits. For the education and day care pilot, the Finnish city of City of Oulu trialled the technology within elementary schools in order to check attendance and the delivery of services such as lunch and library lending.

It was this successful interaction between cities, businesses and research institutes that has enabled the project to have already made a noticeable impact. SUS has been acknowledged with an award for excellence from the ITEA Cluster, a European strategic initiative in the field of software technologies which served as a platform for the coordination and funding of the project. Many kinds of operators are currently testing the technology worldwide, including all major mobile network operators, railways companies and even large administrations such as the government of Singapore.