

Liberty Equality Mobility

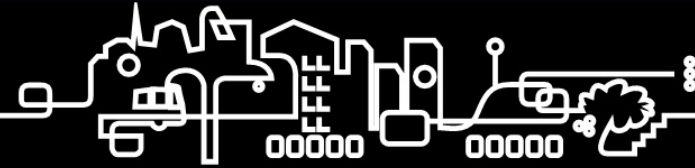
WHITE PAPER

This white paper has been written by the French association
« Forum des services mobiles sans contact »

and published in November 2009 under the name:
« Liberté, Mobilité, Citoyenneté : le téléphone mobile NFC au
service des territoires ».

The original French version can be loaded on our web site:
<http://forum-smisc.netlocal.net/livre-blanc-nfc/index.htm>

For more information, please email to: infos@forum-smisc.org



NFC mobile phones to benefit regions



Initiated by the French government, the Mobile Contactless Services Forum is a non-profit making association mobilizing several large companies - MNO's, banks, retailers, medias, public transportation and technology industry - and several contributing workgroups for reinforcing synergies between stakeholders and offer a national perspective for mobile contactless (NFC) services development. <http://www.forum-smisc.org>



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From the « Mobile Contactless Services Forum » located in France

Developing public services on mobile phones

preface

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The mobile phone is currently the most widely used technology by the French public. Municipal governments, especially large cities, have been using it for several years to make new services available to citizens: SMS alerts, mobile internet portals, access to teleservices...

The arrival of contactless NFC technology on mobile phones has opened even more possibilities: payment, access control, buying concert tickets - the list goes on... This facilitates the dematerialization of administrative formalities and makes public services more user-friendly. Experimented in 10 large cities since 2006, these contactless NFC mobile phone technologies are at the point of reaching maturity.

The initiative of this mobile contactless services Forum to prepare a white paper describing the uses of NFC mobile phones in a local context is very interesting. I am convinced it will assist the emergence of novel innovative projects in the area of contactless mobile communication.

Enjoy reading!

Michel Destot,
Deputy Mayor of Grenoble,
President of the Association of Mayors
of large French cities (AMGVF)

The NFC mobile phone (r)evolution



NFC. Three letters that will (r)evolutionize our daily lives and soon be as well known as ADSL and GSM.

NFC stands for Near Field Communication, a short range communication technology. Its development started in the late 90's driven by Philips (NXP) and Sony that enables different devices and tags to talk to each other. Communication distances are short, less than 10 cm (less than 5"), meaning that the user's mobile phone must be very close to a tag in order to obtain the desired information or service.

NFC technologies are already a part of the urban landscape in the form of "contactless" maps. In addition, NFC chips will soon be integrated into mobile phones in France.

From the municipality standpoint, infrastructures are already in place, but for the citizen, this will be a radical change!

The mobile phone (or cellular phone) is a genuine PC, with a keyboard and network connection.

Above all, it is almost like an article of clothing:

89 %* of French people have one and they return home if it was forgotten.

> **The first (r)evolution:** accessing a service, reading local or distant information via Internet, by a simple voluntary action.

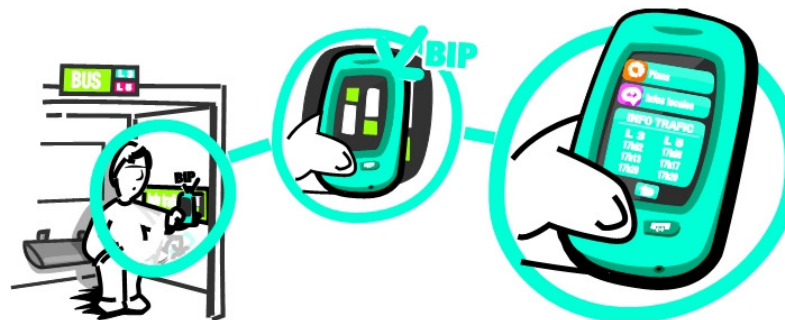
> **The second (r)evolution:** using mobile phones for protected on-line purchases.

> **The third (r)evolution:** the birth of many totally new services built around existing services.

These are the (r)evolutions we invite you to discover.

A technology compatible with regulations of the CNIL (French Data Protection Authority)

The CNIL has furnished an opinion on NFC mobile phones and communicating on advertising devices (urban furniture). The CNIL considers that bringing one's mobile phone to within several inches of a poster to receive information constitutes the free will and consent of the user.



* Source ARCEP "Monitoring mobile phone indicators - key figures as of June 30, 2009"

Several NFC initiatives

in Europe...

>> France

- 1 Paris region: intermodal transport applications on mobile phones (STIF*)
- 2 Paris: guided visits (Museum of Arts and Craftsmanship and the Centre Pompidou)
- 2 Rennes: intermodal transport applications (Korrigo) and human services with mobile phone and memory stick
- 2 Caen: payment by mobile phone and multiple applications
- 3 Saint-Lô: card for everyday life
- 3 Strasbourg: payment by mobile phone
- 3 3 Nice: transport applications on mobile phone, campus card, guided visits, etc.
- 4 Aubagne-Marseille: intermodal transport applications on mobile phone (Treizen)
- 4 Marseille: payment by mobile phone
- 5 Grenoble: transport applications on mobile phone
- 5 Lyon: transport applications
- 7 7 Bordeaux: intermodal transport applications on mobile phone, in-house management (agent card) and card for everyday life
- 4 Toulouse: guided tourist visits
- 8 Alsace: package of services for students
- 4 Besançon: card for everyday life

>> Spain

- 6 Malaga: intermodal transport applications on mobile phone
- 6 Valence: intermodal transport applications on mobile phone

>> Holland

- National: human services (managing at-home care)
- Roda: event ticket purchases (JC Ring stadium)
- Amsterdam: payment
- Rotterdam: leisure applications on mobile phone (cinema)

>> Belgium

- Brussels: payment by mobile phone

* STIF: Greater Paris Transport Authority

The Forum des services mobiles sans contact is absolved of any responsibility in case of errors or omissions concerning the projects mentioned.

>> Austria

- 10 National: intermodal transport applications and payment on mobile phone

>> Germany

- Sylt: tourism visits
- 12 Hanover: intermodal transport applications on mobile phone
- 12 Frankfurt: intermodal transport applications on mobile phone
- 12 Berlin: intermodal transport applications on mobile phone

>> Great Britain

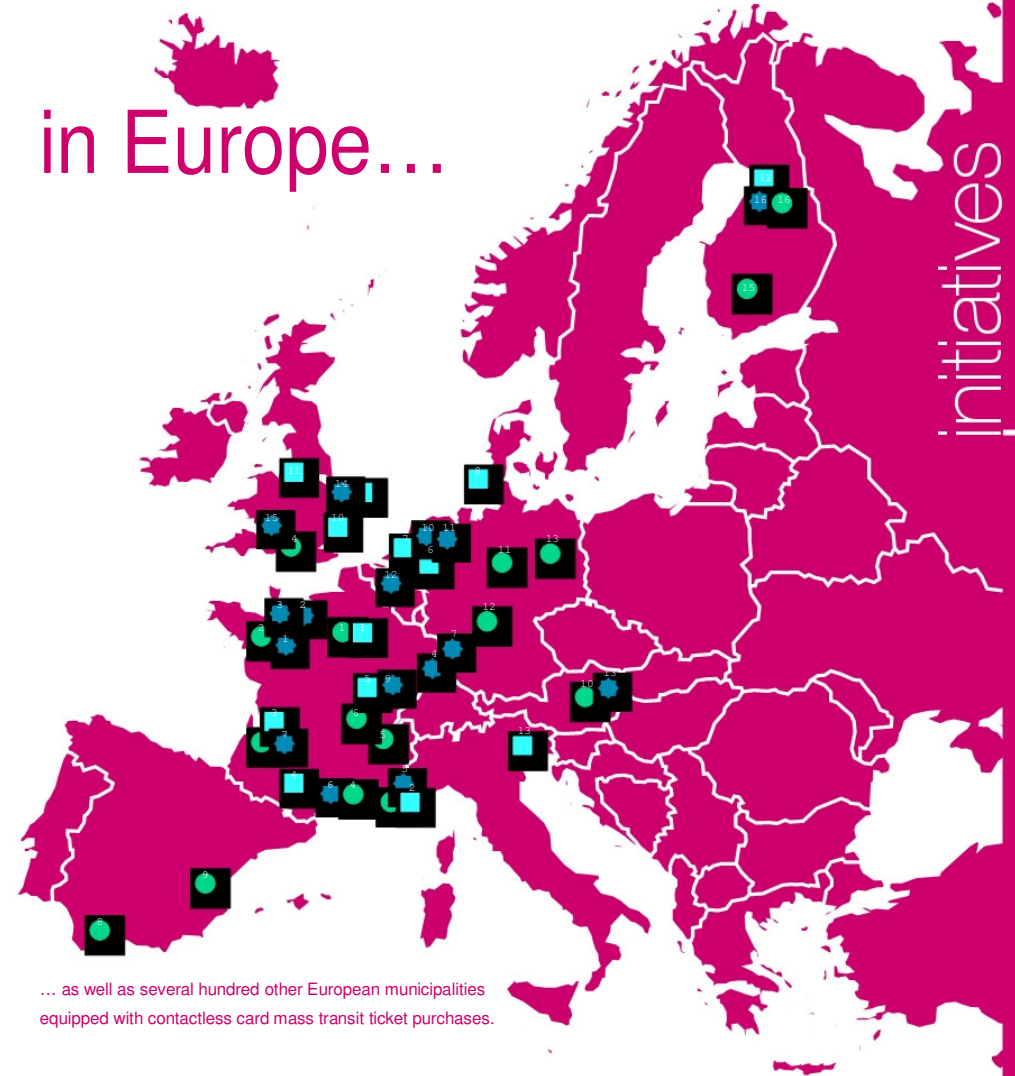
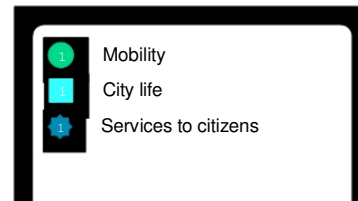
- 1 National: ticket purchases (access to soccer stadiums) individual medical services
- Wells: package of mobile phone services for students
- 12 London and Leeds: transport and leisure applications (access to all soccer stadiums) on mobile phone
- 12 Reading Borough: transport applications on mobile phone
- 12 Manchester: leisure applications (access to stadium)

>> Finland

- 12 Tampere: transport applications on mobile phone
- 12 Oulu: multiservices on mobile phone

>> Italy

- Dolomite: access control to ski resorts



... as well as several hundred other European municipalities equipped with contactless card mass transit ticket purchases.

When NFC rhymes with mobility



From buying a simple mass transit ticket with a mobile phone to accompanying the traveler all along his trip, NFC mobile phone technology will (r)evolutionize mass transit and make it more attractive.

2010

The goal of the STIF is to work with its partners to implement NFC mobile phone services for users in the Paris region.

* Source STIF press conference on June 16, 2009
www.stif.info/IMG/pdf/CP_STIF_NFC.pdf

Get on a train, a tram or a bus, or park a bike in a rental stand - the only ticket you need is a mobile phone. What we call "multimodal" use will be made that much easier with NFC mobile phones. This multimodality already exists for some parts of urban mass transit: in the Paris region with the Passe Navigo or London with the Oyster card. The telephone will extend these services to other cities and other means of transport (taxis, car pooling and more ...). In addition, this will be consistent with investment made by cities over the last few years, since contactless terminals and card readers already use NFC technology. In other words, the NFC phone is like installing

the Pass Navigo, Korrigo, Oura, etc. all on the same mobile phone. In the future, they could combine the advantages of a contactless card (simplicity, combatting passive fraud, etc.) with those of the mobile phone (screen, keyboard, network connection...). A technological breakthrough that will help local governments heighten the attractiveness of mass transit that is evidently more environment-friendly, and that will also change the lives of users.

A robot in your pocket

The first innovation is the possibility of purchasing and recharging a transit ticket without having to line up at a ticket window. The user can make a secure connection anywhere and at any time of the day or night. This feature could be of interest not only to occasional users of mass transit, but also to French and foreign visitors or business travelers, etc.

NFC is an international standard in use in projects in France, soon to be installed on most new mobile phones. >>>

The "Treizen" project, created in partnership with the General Council of the Bouches-du-Rhône region, the "Urban Community of the Aubagne Region, and the Etoile" involves the purchase and validation of the transit ticket with an NFC mobile phone on Aubagne-Marseille shuttle buses and the Aubagne urban mass transit system. The particularity of this project was that it was evaluated by psychosociologists. The "guinea pigs" included a large number of women, not especially "technology-literate" and who own a car.

The system received a warm welcome by users who judged it flexible and easy to use. The elimination of having to go to a ticket window and often having to put up with long queues was seen as a "higher level of comfort". The appreciable time saved is a real encouragement for using mass transit. Quite spontaneously, the people being interviewed expressed an interest in extending the project to the entire transit system of the Bouches-du-Rhône region, or creating other services, such as buying a newspaper or post office transactions.



>>> A European, American or Japanese traveler (a service available in Japan and South Korea since 2004) will be able to use his mobile phone to purchase a transit ticket, recharge it, prepare his itinerary in advance and all that remains to be done is validate it at the station or airport.

The second novelty involves the possibility of broadcasting local and context-oriented traveler information. At any time during his trip, the user can be informed of waiting times and any disruptions, by the use of "tags" located in bus stops for example. By simply placing his mobile phone in proximity to the tag, the user can obtain information. This service is easy to implement since the data has already been collated for circulation on the Internet or on electronic information boards.

Thus, adopting NFC technology is of major importance for municipalities and the mass transit sector. This is because NFC also rhymes with sustainable development, attractiveness of mass transit, multimodality and modernity.

Mobile phone transit applications are being deployed in Nice. Although they have already been piloted in France, in particular in Grenoble, Bordeaux, the Paris region and Rennes, Nice has another goal entirely: the last step before rolling out NFC mobile phone services in France.

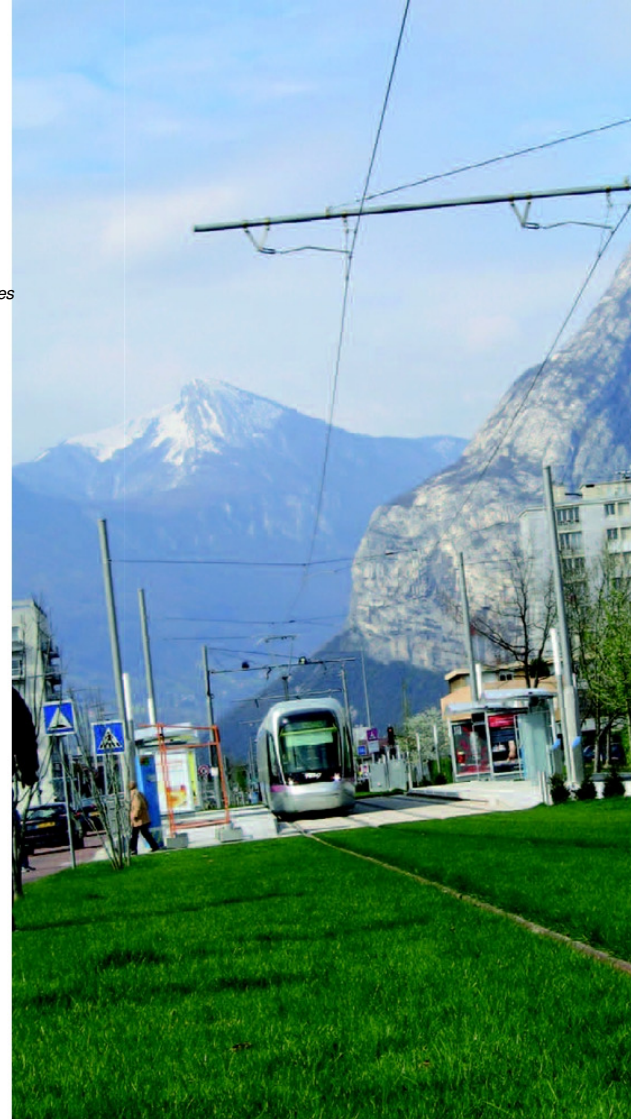


For me, adding the Korrigo card on mobile phones can only bring advantages in terms of multimodality and user comfort. >>



Daniel Delaveau,
Mayor of Rennes,
President of
"Rennes Metropole"

In 2007, 200 users of mass transit in Grenoble could travel with their ticket charged with their mobile phone on 3 tramway lines and 28 bus lines serving 26 municipalities in the greater Grenoble area. The experiment was conducted with the semi-public company SEMITAG that manages mass transit in the greater Grenoble region. It tested the purchase of tickets with mobile phones, their validation on existing terminals and the use of NFC tags to provide traffic information and alerts.



Regional trains, bus or parking lot, the mobile phone is the only ticket needed!

Rennes is the economic capital of the Region of Brittany and is the workplace of more and more commuters living far from the city. The originality of the Rennes experiment was the life-size test of the benefits of NFC phones in terms of extending multimodal and intermodal transit. The test subjects could use their mobile phone to purchase train or bus tickets, even access selected parking lots. These features were highly appreciated by the 50 or so test users.

- Study report "Digital for added mobility in regions": www.valoifre.caissedesdepots.fr/spip.php?rubrique316&prev=95
- Veolia transport video www.forum-smisc.org
- United Kingdom, consultation on ticket purchase orientation document, Transport Ministry www.dft.gov.uk/consultations/open/smartticketing/



Jean-Paul Huchon,

President of the Regional Council of the Ile-de-France (Paris region) and President of the STIF (Greater Paris Transport Authority)

What STIF projects are in the pipeline for NFC mobile phones?

The STIF would like to develop alternatives to classical distribution channels and enable all travelers to buy their tickets anywhere and at any time. The STIF thus requested transit organizations to start Internet ticket sales and would also like to accelerate the development of ticket sales using NFC mobile phone technology. This project is conducted in the context of improved public service and economic efficiency.

What are the targets of the project?

It is intended primarily for occasional travelers: tourists and inhabitants of the region who are not automatically acquainted with their transport possibilities.

The results of all pilots conducted have shown an interest for this type of service, with a satisfaction level often higher than 90 %. These new forms of purchasing over the Internet or by NFC mobile phones will continue to be developed, of that I have no doubt.

How does NFC help to reinforce the attractiveness of mass transit and multimodality?

Taking a train, a commuter line, a subway or a bus with the same ticket is already possible with a Passe Navigo! Velib' (bike rentals) also work with Navigo. NFC mobile phones provide these possibilities to occasional users. This service extends the transport modernization policy conducted by the STIF.



NFC players dedicated to municipalities

A system of "players" is being created in order to deploy NFC services. Between financial players backing technological innovations and mobile phone operators who open accessibility, local governments are at the heart of this system. In partnership with all the other players, these authorities will enable citizens to use and profit from NFC technologies and to propose a number of "dematerialized" services to them.

2 questions to...



Roland Ries, President of the Group of Authorities Responsible for Transit (GART), Senator and Mayor of Strasbourg, First Vice-President of the "Strasbourg Urban Community"

What are the prerequisites for the successful deployment of NFC in the transit sector?

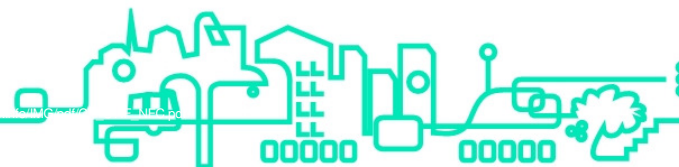
The needs of mass transit users must be correctly taken into account and their individual freedom maintained. Municipalities must be reassured of the reliability of the service both for the user and to reduce the risks of fraud. Since mass transit is the responsibility of organizing authorities, the economic model and financial movements must be seamless and transparent, and legal responsibilities clearly determined. Finally, there must be an after sales service that is efficient and rapid,

including the loss or theft of the mobile phone, operating problems or termination of the phone subscription.

What exactly is the GART task force working on?

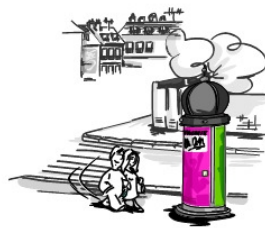
The GART task force was created after the organizing authorities found out about work being done by phone operators and transport authorities, in order to maintain the interests of municipalities and users. The goal of these organizing authorities was to be in a position of making proposals and via the GART, they met with all players concerned.

In parallel, they began drafting a common functional document (DOFOCO) that could be the reference for all players for creating ticket purchase applications on mobile phones.



Cityzi: a logo for NFC mobile phone services.

In order to facilitate acceptance of NFC, the French Association of Contactless Mobile (AFSCM) proposes a simple and easily recognizable "cityzi" logo that can easily be integrated in NFC mobile phone services for municipalities and citizens.



Open sesame for information

A genuine personal remote control, the NFC mobile phone facilitates access to information wherever inhabitants, users and tourists need it.



Mobile phones can now decode tags. When they are read, the phone is activated via the camera function and specific free software enables access to a variety of digital content: an Internet page, a video, etc. These 2D tags (there are several systems that are not mutually compatible) are most often found in paper magazines or posters. With NFC mobile phones,



Mobulles: local information for residents of Toulouse.

With more than 3000 tags throughout Toulouse, this municipality is the first large French city to deploy tags on a large scale. They are attached to bus stops, parking meters or municipal information boards,

in regions

this function will be standardized and considerably simplified. Just placing a mobile phone several inches from an NFC tag triggers the opening of an application, Internet access, the download of information, a video or even sending a text message ... NFC tags are weather-resistant and can be placed around the city on a variety of supports including buildings, urban furniture, and vehicles. >>>



In order to optimize the contribution of NFC mobile phones, the tourism sector must give careful thought to all the needs of the tourist for his mobility: transport, ticket purchases, visits, restaurants, shopping...



Philippe Fabry,
New Technologies Manager,
Atout France

and provide very local information to users: city map, news and events in the neighborhood where the user is standing, services located in immediate proximity (athletic and cultural facilities, bike rental stations, etc.), information on the bus line they are using and more.

This service was started several months after opening a participative Web site to enhance urban life and be interactive. The service also proposes classified ads to promote exchanges among residents of the same neighborhood.

Rotterdam: a movie no farther than your telephone

In Rotterdam, movie posters are now interactive. When the user's mobile phone is close to a poster, not only is a brief summary of the film displayed, but the theaters in which it is playing and the number of available seats can also be determined. If seats are available tickets can be bought on line. The solution is built around NFC tags incorporated in the posters. Proximity of the phone opens a protected connection with an Internet site.

>>> A technological breakthrough that promises large scale expansion of uses and reinforcement of existing synergies between mobile telephones and the Internet. Tags enable a much larger scale circulation of information to travelers than with traditional display panels.

For example, distant bus stops, even in the country, could have an NFC tag for access to the same services as in large cities.

This practical information could be combined with geographic or cultural information (local map, the closest services, local history and more) and protected services (concert tickets, reservations, etc.). The world of culture and museums is interested in this feature that will help make the mobile phone a personal multimedia guide, inexpensive and accessible to the largest number of users.



Tags placed on museum showcases or in proximity to monuments will give each person the possibility of planning his own cultural journey (ticket purchase, opening hours, cultural information and more) in addition to a list of all nearby facilities (hotels, restaurants, transport). The NFC phone will above all contribute to the emergence of new forms of citizenship and encourage day to day dialogue between elected officials and inhabitants. NFC tags placed on street lights, traffic lights or public benches could, for instance, enable an inhabitant to easily notify city hall of a problem or incident on a street.

These data are geolocalized to within several inches and will be invaluable for the rapid intervention of municipal services. In the realm of public surveys, the traditional poster could be extended by a tag to download the information file, see a video on the proposed project and even give an opinion ... In the city of tomorrow, NFC mobile phones will be a promising link between the physical world, daily life and the virtual universe, by multiplying the number of exchanges, interactions and participation of citizens in the life of their city. n



The NFC tag will enable us to "bookmark reality;" in other words to link objects, day to day places and the Internet, including social networks.



Prof. Serge Miranda
University of Nice Sophia-Antipolis

NFC games at the Museum of Arts and Craftmanship

NFC transforms the phone into a magic wand that interacts with objects that communicate. For two full years, the Paris Museum of Arts and Craftmanship has experimented in the area of video games via the PLUG project. Visitors with their NFC phone play in teams and must discover clues to answer quiz questions. They can also call each other to arrange meetings and exchange information by bringing their phones close together. This game is family-oriented with children mastering the phone while parents focus their attention more on the actual museum.

plug-futur-en-seine.it-sudparis.eu/





Michel THIEN,
Mayor of Limas, Vice-President
of the General Council of the Rhône
Department

Why is the Rhône region interested in RFID chips?

The Erasmus center was created by the local Authority of Rhône to explore the potential uses of emerging technologies by municipalities. Among them are RFID (radiofrequency identification), and more generally the Internet of objects that simplifies man-machine interactions. We are particularly interested by two areas: services to dependent persons and museography. In the latter case, the visit is personalized or digital information is linked to objects exhibited.

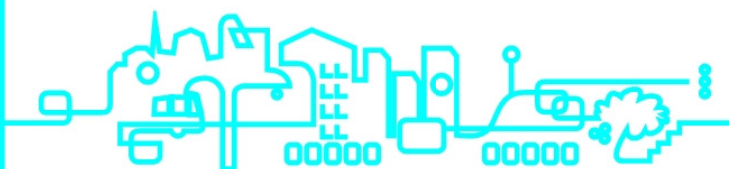
What can NFC phones contribute to culture and tourism?

In museums, for example, it can manage access (ticket purchases) and interaction with works in order to obtain information adapted to user profiles. Users can follow simple procedures to take exhibit contents with them or to rapidly obtain practical information.

Will "à la carte" culture call into question the human cultural "go-between" ?

NFC technology may change the prohibition of using mobile phones in a museum, but will be more competitive with self-guided visits than with go-betweens. As has already been seen, the latter are the first to profit from the possibilities offered by technologies to "enrich" their interaction.

www.erasme.org



Interview with...



Pascal Baisnée, President of the TES unit (Protected Electronic Transactions)

What is the basis of protecting NFC exchanges?

The protection of exchanges is based on mutual authentication between NFC mobile phones, whose unique NFC number is not the same as the phone number, and the reader, for example a payment terminal. This exchange lasts a few hundredths of a second and involves a very short distance, thereby limiting the risks of fraudulent interception.

How can each service provider manage his applications?

A technical system is being implemented between mobile telecom operators and service providers proposing NFC applications. The user can download standard services, that are easy to manage and fully protected. He will also have access to a centralized service center.

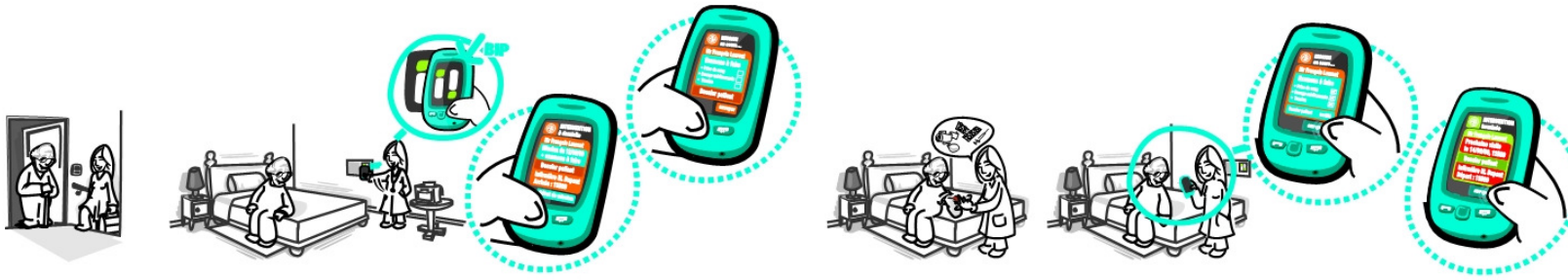
What happens if a mobile phone is stolen?

In the case of theft, loss or fraudulent use of the mobile phone, the user can inform his provider to block the system. He can then simply reload his personalized services in a new mobile phone

www.pole-tes.com

NFC: one standard, several solutions

Before the large scale distribution of NFC phones to the general public starts in 2010, there already exist intermediate solutions that benefit from contactless NFC services: cards, memory sticks, stickers attached to the mobile phone and more. Only the NFC mobile phone will provide citizens and municipalities with innovative and interactive services, in particular facilitating trips, leisure activities, relationships with local government and services for citizens.



A package of public services on NFC mobile phones

Combine several cards in a single package, extend existing services, create new services ... NFC mobile phones offer huge potential for local public services.

79%

of French people believe that public teleservices will be a time-saver. The NFC phone will provide services without the need for a computer, when and where the user needs them.

* Source: Cap Gemini - Sofres survey

www.ins-sofres.com/points-de-vue/F7C6C69ED43748179DB613D4F4002F2C.aspx

The "mobile wallet" opens very interesting possibilities to municipalities to facilitate the lives of both citizens and their employees. The public servant card, like that used by the Bordeaux city hall, could easily be installed in a mobile phone with new functions available: access control and "time clock" for work, professional payment card for small purchases, access control for certain sensitive computer applications, reservation and access to meeting rooms, etc.

For citizens, the NFC phone will considerably simplify access to digital>>>



Simplify domestic help

In the area of personal at-home services, NFC mobile phones open interesting possibilities to improve and render the relationship between professionals and people requiring assistance, more human. Placing a mobile phone near an NFC tag will enable the professional to identify himself, will simplify control of allocation expenditures or management of schedules.

NFC mobile phones provide concrete advantages to recipients of these services, such as dematerialization of transactions with public services, or simplifying control of allocation expenditures. Social workers are now free of administrative tasks and can devote themselves to what they are really about: helping people who need assistance. The entry of NFC technologies in the area of domestic services is a reality and a (R)evolution for regions with respect to exercising their social responsibilities.

The ADMR is the association of at-home services that includes 3600 at-home services associations and 85,000 participants in 90 French "départements". It has already rolled out a large scale contactless solution involving 40,000 participants and 250,000 clients and is currently testing NFC mobile phones.



In our era of multichannel answering, the mobile phone is a "must" vector to personalize administrative information and services rendered to users. >>



Nicolas Conso,
Head of the Innovation
Department, Division of
Modernization of the State

>>> public services. For example, the university access card will be in the student's mobile phone. It will open access to the university campus, as well as authorizing access to the multimedia premises at predetermined hours, reserving a book in the library or payment in the cafeteria. The phone can also accumulate advantages in the form of cost reductions that are currently offered in "youth cards" by many municipalities for use by teenagers in certain stores or local services (driving license, training sessions, etc.). This scenario could rapidly become reality in Lyon, Besançon or Aix-en-Provence where students already have a contactless card and where most services can be installed in the mobile phone. In general, all functions contained in "city cards", such as in Thionville, Bordeaux, Metz or Nantes, will be able to migrate to NFC mobile phones: parking payment and resident parking management, access to the pool and fitness rooms, movie ticket purchases, local cultural facilities and of course mass transit.

The NFC mobile phone is thus a real "wallet" with all the advantages of this familiar

object ... at a much smaller size. A wallet to the extent that its use is up to the user, to "load" what is usually found in a real wallet: cash, credit cards, professional access cards and loyalty store cards. All this without countless cards being carried around. A considerable advantage over its cousin the wallet: having only one entity to contact in case of loss or theft. The mobile operator will immediately block the phone's SIM card and thus access to all the services it contains. The client can then request the operator to download all his former services on the new mobile phone.

NFC mobile phones will help enrich the offer of public services by opening new areas such as health, assistance to the elderly or the handicapped, but also waste management, economic and tourism development and more. The mobile phone promises to give rise to a new generation of public services!



In Oulu, delivering meals to homes simplified

The city of Oulu in Finland has conducted several experiments in dealing with social services for residents older than 80.

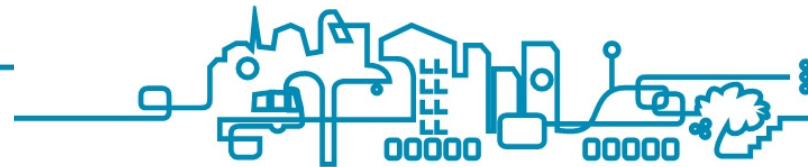
For example, to order a meal, the user simply sweeps his NFC mobile phone over pictures of the meals they desire. The tags are embedded in the menus and the information is then sent to meal suppliers.

This experiment was conducted with dependent persons and the results were conclusive, since the tag is much easier to use than a keyboard by the elderly who often suffer from joint problems.

A package of service for students in Alsace

Access buildings, photocopy course material, buy a snack in the cafeteria, take a bus or tram...

"My campus pass" enables 60.000 students and employees of the Alsace University Student Organization to benefit from a range of services clustered on a single card. In the near future, students will be able to consult their grades, rent a bike or sign in for exams. These functions are built around NFC standards and can be easily installed in mobile phones.





Christian Estrosi,
Minister of Industry,
Mayor of Nice and
President of Nice Côte d'Azur.

What is the role of municipalities in the NFC experiments of 2010 ?

Experiments with innovating services is one of the means to make Nice Côte d'Azur a vanguard region of the Mediterranean Union and improve the quality of life for its citizens. The city and its surrounding region will play the role of pathfinder and several services are involved (tourism, transit, etc.). It also involves ensuring the consistency and value of the services proposed to the citizen.

Why does Nice stand out from previous experiments?

For the first time, a real package of interoperable services will be proposed. A charter signed by the city, the surrounding region, the University of Nice Sophia-Antipolis, the three major mobile phone operators (Orange, Bouygues Telecom and SFR) and Veolia Transport. The project is being conducted on a large scale, with at least 3000 NFC phones deployed, as well as NFC stickers to include a much broader public. The most important thing is that Nice has no intention of stopping the system after the experimentation phase.

Why is the Nice experiment so important for the future of contactless mobile phones in France?

Nice, the Contactless Mobile City, will enable the testing and implementation of business models in services. This is a dress rehearsal that will facilitate the use of contactless technology throughout the country. In addition, we will have feedback from the public concerning new mobile technologies.

Nice 2010... Digital city NFC city



Nice is starting a "dress rehearsal" before the massive rollout of NFC in France. Mobile telecom operators have pledged to market NFC mobile phones in Nice and its surroundings. Contactless players are present in the region and will enrich NFC support services (telephones, cards, memory sticks, tags, etc.) to enable everyone to use the technology.

Transports

- Real-time information on schedules and disruptions.
- Ordering, payment and receipt of a transit ticket.
- Validation of a ticket with a mobile phone.

Information

- Neighborhood maps.
- Tourist information.
- Commercial, municipal or regional information.

Tourism

- Creation of an intelligent visit itinerary of the old city of Nice, based on reading interactive NFC tags to access contextual and topic-based content.

Education

- Use of the mobile phone as access card to the library and various premises of the campus of the University of Nice Sophia-Antipolis.
- Payment of restaurant and other education services with mobile phones.

Retail

- Payment in participating stores with a card or an NFC mobile phone.
- Handling reduction coupons with an NFC terminal (mobile phone, memory stick...).
- Access to product information via tags

Parking

- Payment for parking.

Human services

- Creation of a CIUS (Center of Innovation and Uses for Health) focused on remote medicine applications and gerontology in particular using NFC.

NFC for citizens

In a few months, the first large scale NFC deployments will take place in Nice and other regions of France. Several thousand people will have access to a contactless package of services on their mobile phone. These experiments are essential for mass adoption and the success of contactless mobile technology in France.

The results will bring to light the most relevant uses, gather the opinions of users and validate the business models of the different types of use cases. The mobile contactless services Forum, created by the government in 2008, intends on playing the role of integrator in this process. The forum will facilitate dialogue between public and private players, political

The "Forum des services mobiles sans contact" in several key figures

2008

Creation of the Forum of mobile NFC services

39

members of the Forum

1

site of exchange and information between players in order to promote NFC services.

66-67

Commitments 66 and 67 of the 2012 Digital France plan call for the creation of a package of contactless mobile services.

decision makers and users, and will help with the emergence of a win-win model for the citizen-end user, for municipalities and the French economy in general.

In order for NFC technologies to be a tool for modernizing citizen relations and a vector to attract business to different regions, the Forum proposes assistance to elected officials in the acceptance and use of these innovations

The mobile contactless services Forum is mobilizing all public and private players to jointly develop uses of NFC that are both useful and simple, but also open and protected, so that they are accessible to the largest number of users



Jean-Yves Granger,
President of the Forum des services mobiles sans contact

For more information...

⇒ Find all information on NFC on the web site of the Forum:
www.forum-smsc.org

To consult as well:
French Association of Mobile Operators (AFOM)
www.afom.fr

> French Association of Contactless Mobile (AFSCM)
www.afscm.org

> European Association Pay Mobile (AEPM)
www.aepm.fr

> Ergosum Group
www.picom.fr/ergosum/

> Group of Authorities Responsible for Transit (GART)
www.gart.org

> NFC Forum (in English)
www.nfc-forum.org

> GSMA (GSM Association) (in English)
www.gsmworld.com



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NFC. These three letters will soon be as familiar as GSM and ADSL. Installed in a mobile phone, this contactless technology will simplify universal access to mass transit, public services and will facilitate the circulation of information where the citizen-user really needs it.

The goal of this white paper, at the initiative of the Forum des services mobiles sans contact (mobile contactless services Forum) is to inform elected officials of this NFC mobile phone (R)evolution.

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