ABBEVILLE PROJECT SITE

Definition of a service at request with driving accompaniment
by shared cars in rural environment
THE SARACEN SYSTEM

Renault DTSI/ DR
Associated partner: **Keolis**- SNCF

Acronym title of the site project:
SARACEN : Service At Request, Accompanied, in Country Environment
(SARRASIN : Service d'Accompagnement en Région Rurale en Automobile Sur Inscription Nominative)

The background at stake

The DATAR (Délégation à l'aménagement du territoire et à l'action régionale) preparing the *National Scheme for planning and developing the Country* (Schéma national d'aménagement et de développement du territoire) pointed out the very low demographic density of France made of a network of small towns and villages among broad expanses. Some of these areas are decaying and their economic and industrial activities are decreasing.
The report enhances three main features of improvement:

- daily trips mobility is to preserve to keep solidarity between territories
- industrial activities have to be protected because they structure and balance the areas. Only less than 20% of the rural jobs are linked to agricultural activities
- strong demand for diffuse and « green » tourism must be taken in account. It generates significant profits for the local and regional economy.

Future transportation system
Evolution scenarios and requirements

Objectives

The aim of the project is to build a forerunner scheme for the transportation of people living in very low dense areas. This system takes in account three main scales:

- local/regional
- intermodal with the national railways network
- international with a possible extent to Great Britain

The project is based on a few means of transport at request, microbus, taxi, car sharing, forms of car-pooling, non-traditional ways of accompaniment associated to mobile communication technologies.
The target is to achieve mobility to three main types of travelers:

- citizens, specially those in weak socio-economical situation
- professionals of health or social occupation and fields in relationship with teaching and training in occupational centers or manufacturing areas. The integration of young people into the job market is a priority.
- tourists sustaining high level of constraint in their trips, especially towards British and Belgian people coming often to visit the Bay of the Somme.

The project site

This global offer is to organize through the existing **central mobility unit** of Abbeville managed by the STRA public transport company, subsidiary of KEOLIS group, which belongs to the French railways company SNCF.

In a first step which would be the result of the research, the project would take place in three areas: in the city of Abbeville and two other small market towns to connect with located in Ponthieu Marquenterre. These points of a future larger network are potentially major trips generators for such a service to test. This has to be defined by the research.

Innovative aspects

The first point to deepen is how to gather and orchestrate different means of transportation in one whole system. The role of mobile communication technologies is prominent to bring reliability. The system has to make converge fixed solutions as railway and bus lines with stations with flexible and adaptable solutions mixing collective and individual means of transport. The architecture of the service and the system searches for intermodal and multimodal optimization.

The idea is to devote cars fleets to specific users who have high mobility deficiency by the intermediary lead of institutions or public authorities.

The function of such a system with actors has to be defined and precised. Some of them have been identified as the hospital. It is based on the ability of a group of drivers, professional or not, to accompany the users of the service.

The SARACEN system has to take place in areas where the classical service of public transports is irrelevant.

One main result of the research is the design of the service and technical architecture of the system.

Implementation

The operator are public authorities through the **central mobility unit** of Abbeville which is the mainspring of the system achieving information, booking, managing and allocating fleets and drivers, locating and dispatching the fleets, appointing and gathering the users, mapping out round trips, following up the routes and the durations.

The central mobility unit uses the software application OBITI that databased the schedules of all the routes and lines of transport operators and is able to move offer and demand nearer.

Integrated mobile technologies are to locate and manage the moves of the pool cars.

The co-operation with British partners is under discussion and there is no commitment for now. It is an obvious dimension of the project to reach.

Field evaluation

The geographical location of Abbeville's pilot (coastal, in the neighborhood of Great Britain) and its social fabric involve a large diversity of the needs of mobility.

Two key elements explain the useful development of a central mobility unit:

- a rural isolated population, often jeopardized, aged, without car, badly informed about the existing transportation services
- touristic influx specially during international events (for instance ornithological meetings and exhibitions) in the Bay of the Somme

Filinfo is a central mobility unit (information and booking) created at the beginning of 1998, and spreading over the 160 councils area of the Somme Department around Abbeville and much wider according to the requests.

For now half of the 11 000 calls per year to the central unit find a convenient response often in gathering the trips in a transportation provider. In 50% of the cases the central plays a go-ahead role in organizing the offer, and in 50% it only just can give information. It proposes two types of services at request, virtual lines and door to door for disable persons, inside 12 councils (*communes*) belonging to the transportation authority area of Abbeville.

This type of service to implement is based on no existing model or previous market study relevant for such approach.

It combines different know-how and knowledge to organize together in a system.

It would lead RENAULT and KEOLIS:
- to define precisely the service and describe the actors
- to develop and implement the necessary technologies
- to assemble the parts to build a modular service
- to validate the SARACENE system
- to make the appraisal pointing out the right conditions of running and ability to transpose such a system.

Use cases

Some needs are already identified. Whatever be the field of activity (health, employment, leisure,) mobility deficiency is typical of the population of Abbeville area.
The service to build has to match up a wide range of needs and types of uses.
The most principal ambitions of the use cases are:
- to provide people without driving license with an access to car
- to offer multipurpose trips to a local population lonely and « held captive » of one place
- to strengthen the industrial and employment fabric and tourism oriented networks of services
- to fall back the travelers towards the train stations of the line Boulogne- Amiens- Paris
- to be a strong tool to federate territories and open up rural areas

Contribution to Community social objectives

Social innovation

The SARACEN system to build is supposed to combine both short term and long-term effects. The short term ones are mobility's behaviors changes and the long term will be able to change the socio-economic fabric of the territories involved in the service.
The system intends to develop scenarios of service for organizations for employment and training, accompaniment for health purpose trips, rounds of reception duty for public information, local administrative areas councils,…
Many central mobility units are under project in France. These of Abbeville is the only one to have such a global vision of mobility management, taking in account both all kinds of means and all sorts of needs. It is the only one to have a rule of readjustment and adaptation from the carriers and from the users point of view as well:
- the carriers have the feed backs of the demands expressed and may change their routes and schedules
- the users adept their behaviors according to the transportation offers to be provided.

Moreover by its knowledge of micro-markets the central mobility unit brings to public authorities deciders, a strategic and foreseeing view for the development of their territories. It is a powerful tool for appraising the offer and the existing means. Through the data it allows transparency on suitability between offer and demand and makes readjustment of financial resources possible for a best use of public money, rationalizing public spending, and adaptation of the offers. It is an opportunity to think about the creation of new services in low-density areas. In that way the SARACEN system is able to bring flexibility, availability and reliability in balancing the solutions and the means between traditional, heavy and fixed modes and light virtual routes at request. The way of achieving the service through human scale relationships is prominent too.

Impacts

Obviously as previously written, the SARACEN system would have many positive impacts on the individuals or towards specific target groups (elderly people, households without car, young workers in training, tourists,…) or technical feature as intermodality.
Moreover it can change deeply the vision of regional mobility proposing a global overview and focused answers.

Action plan

The aim of the project is to launch an experiment during the year 2003. A pre-feasibility study has been held for to years to finalize the concept and to gather all the partners of the project as politician figures, decision makers, social actors, and diverse partners having an added value to take part to the experiment. This period was strategic too to identify potential and active funds to finance part of the system.
The SARACEN project is a pilot site for the TRASCOM program (Traveler assistance for combined mobility in regional areas) which helps to develop and implement technological features (global transportation portal, prototype of devices system including mobile phone) which will be the first part of the project. Technologically the system has settled its technical and functional specifications. Vehicles such as Kangoo personal car and Trafic Mini-vans will be equipped in April to support tests in Abbeville Region from May. Then the fleet will be tested at the end of the year. The existing inputs are the central mobility unit managing mobility locally with public transports and taxis, strong political will, communication networks and fleet management systems. TRASCOM project has been beginning since March 2002 and will last till March 2004. So we are half path.

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