



Topic: Clean Vehicles and alternative fuels

Submission date: 2006

Name of measure/service etc:

OSMOSE-CONCEPT (www.mobilosmose.com)

Location: Côtes d'Armor, France

Initiator and partners:

MOLDCONCEPT & CONSEIL GENERAL 22

Short description of the activity:

This system is based on innovative personal vehicle, which uses clean fuels and is "intelligent", it can be guided, is used in patrols (pools of vehicles) and communicates with its environment. The project encompasses new forms of vehicles and new energy sources with emphasis on new batteries for exploiting solar energy.

This system aims to tackle the issue of alternative to cars in areas where public transport cannot be implemented in a regular way. The research on new energy sources also tackles the issue of energy independency, clean air and noiseless vehicles.

Background and objectives:

The main problems in Côtes d'Armor in terms of transport are the repartition of the population and the existence of several small urban centres and a high density rural area. It is therefore challenging to set up alternatives to the use of the private car and to offer an efficient public transport service. One of the main issue that transport policy faces in Côtes d'Armor is to develop new seamless mobility services for citizens, using clean energy sources and completing public transport systems. The size of the cities in the area does not allow developing traditional "mass" public transport systems and needs to make a place for a rational use of cars.

The local transport policy of the county council relies on innovation as a way forward to solve these issues and thus integrates a large part of experimentation and testing of innovative solutions. In this context a new concept has been developed for personal mobility, the OSMOSE concept, based on fleets of small clean vehicles.

As in this county council many companies work in the field of electronics and telecommunications, Côtes d'Armor now associates them to the development of new mobility services and intelligent transport systems (ITS). The local transport policy therefore aims at offering alternative to the car and being a field for experimentation of ITS systems developed by local companies and research laboratories.

Experimentation, development and installation of ecologic and economic individual urban transport system are the objectives of this initiative.

Implementation:

Research, development, adaptation, experimentation, test and homologation of a new urban mobility system and an ecologic energy module based on clean energy and non fossil fuels.

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Picture 1: Example of a vehicle of the OSMOSE System

The vehicles can be electric, hybrid or running on gas, depending on the choices made by the owner. The first use of such vehicles will be in vehicle pools for an alternative to car and feeding users to traditional public transport systems.

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The vehicle already exists and has been shown during the 3^d ITS congress in Saint Brieuc; more research is needed for developing new specificities such as on-board systems and clean energy. Several companies are already partners in the project which will be developed from 2007 onward. The press has published articles on the OSMOSE systems.

Conclusions:

Results are expected in several areas:

- Air pollution and noise abatement with clean and silent vehicles
- Access to mobility for all citizens with fleets of vehicle accessible to all
- Complement the traditional public transport systems and the flexible transport system TIBUS for remote areas and city centres.

The systems will also be experimented for freight delivery in the narrow streets of the city centre.



Website address for more information:

www.mobilosmose.com

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