Public Private Partnership in the domain of Internet of Things and Smart Cities

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Co-founder NFC-Interactive
Goals of our research group at LaBRI (Bordeaux Computer Science Research Lab.)

- contribute to define and provide systems that make it possible to take advantage of the mobile resources of a wireless network to achieve a job/mission (degraded mode of operation)
- develop scenarios / applications on top of these resources

Target systems
Secured fleets/swarms of autonomous communicating mobile terminals
Physical systems/fleets

Underlying dynamic graphs

Dream target

(image courtesy the Smart Surface project)

Source: http://www.cds.caltech.edu/~murray/projects/darpa01-mica/
A project must address a scientific/technological issue

Scenario 1: **CARUS**

*Cooperative Autonomous Reconfigurable UAV Swarm*

Investigate: swarming, construction of a global view from local views, retasking
A successful project (seen from the Univ.) must show all the following results:

- CARUS, an Operational Retasking Application for a Swarm of Autonomous UAVs: First Return on Experience

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CARUS: Cooperative Autonomous Reconfigurable UAV Swarm

DEMONSTRATION EN VOL ZONE D'ESSAIS DRONE DU CAMP DE SOUGE
A project must be supported, funded, technically led and have a coordinator.
Scenario 2: ASIMUT

ICET 2 project

Aid to Situation Management based on MUltimodal, MUltiUAVs, MUltilevel acquisition Techniques

Coordination: THALES Systèmes Aéroportés SAS.
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Technical and scientific lead: LaBRI, Université de Bordeaux
Name: Serge Chaumette
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Investigate: multi-level swarming and load sharing
From a PPP project to the creation of a company
**Consortium**

**PROJECT CONSORTIUM**

- City of Caen
- City of Saint-Lô
- Cities of France
- City of Helsinki
- City of Oulu
- Cities of Finland
- City of Bilbao
- City of Gião
- City of Paterna
- City of Pobla de Vallbona
- City of Seville
- City of Valencia
- Province of Guipuzcoa
- Cities of Spain

- 5 Grands Groupes
- 13 PME
- 5 Instituts de Recherche
- 11 Villes en France, Finlande, Espagne

Date de démarrage: Juillet 2009
Fin de projet: Décembre 2012

**Assises de l’Embarqué- Paris, 28 Octobre**

**Smart Urban Spaces**
Example: Museum Quest, an interactive quiz to support museum visits

Mobile Device

Clue

Piece of Art

Smart Urban Spaces

Assises de l’Embarqué- Paris, 28 Octobre
From a PPP project to the creation of a company

- Bring the products closer to the market and manage the IP
  - SATT Aquitaine (AST) mandated by the University of Bordeaux

- Transform the project into a company
  - above entities + IRA (Incubateur Régional d’Aquitaine), pépinière éco-creative, etc.

- Put the product on the market
  - above + AEC, ADI, etc.

- Set bridges with the industry
  - above entities + Clusters, Fondation Université de Bordeaux, etc.

- Someone to be the CEO → Nicolas Bournet
  One cannot be on the business and the technical sides at the same time

- Funding
  Founders, AST, IRA, BPI, Région Aquitaine, etc.
Creation of a start-up: NFC-Interactive

http://www.nfc-interactive.fr/

- Co-founders: N. Bournet, S. Chaumette, D. Dubernet & J. Ouoba

- Four initial products:
  - Museum Quest, City Visit, Small Event Ticketing, ZekMop (Smart Poster)
  - NFC consultancy based on the expertise acquired during the project

  ➔ Creation: June 2014

- Other products: student card, NFC wristband, private purse, maintenance,
  dematerialization of communication tools, etc.

Assises de l’Embarqué- Paris, 28 Octobre
The second France-China Leaders High-Level Meeting for Business Leaders will take place on

13th & 14th November 2014 in Bordeaux

Questions?

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