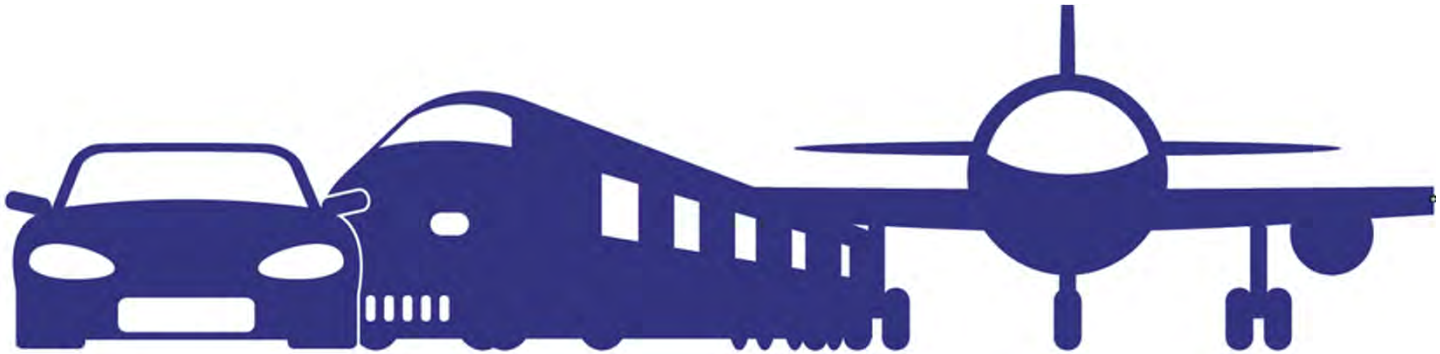

Ideas and Proposals for the Transfer-Workshop Cluster 2 Communication & Mobility

ASCAMM TECHNOLOGY CENTRE is a leading organization specialised in DESIGN, MATERIALS, PRODUCTION TECHNOLOGIES, INDUSTRIAL ICT and POSITIONING & NAVIGATION, which has been developing its activities for 25 years.

•Over 10 years of experience

- 45 international projects
- 10 coordinated by F.Ascamm
- 16 of 6MP
- 10 of 7MP
- Over 80 spanish companies have been involved

•First private center of Catalonia in the 6MP returns

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STEP 1: Description of the Showcase

Title: “Location based Intelligent Charging for EV"

- location based demand management + intelligent micro-grid systems to balance demand on a given geographical location
- Seamless positioning (including indoor: parkings, tunnels…)
- Exploit positioning information to provide added-value services, which enhance user acceptance and business model alternatives
- Address different operational environments:
  - Motorbikes rental for tourists
  - Garbage collection
  - Security fleets
  - Car-sharing
  - …

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STEP 2: Tecnical Concept

“Location based Intelligent Charging for EV”

Project three pilars:

- Energy demand management
- OBU: Sensing, Location & Telematic Unit
- Location based Added valued applications and services

Battery real time State-of-Charge and position information in order to predict and manage energy micro-grids demand	Ubiquitous EV localization even in the most challenged areas (urban and indoor)	Added-value services that enhance the EV driving experience and support the mobility needs of its users

Requirem. and context → Service Prototype Design → Service Prototype Dev & Int → Validation (Pilots) → Roadmap & recomm

STEP 3: Partnering Concept

“Location based Intelligent Charging for EV”

- Positioning
- Services Developers
- Utility
- EV
- Services providers
- End Users

STEP 4: Potential Implementation / Pilot

“Location based Intelligent Charging for EV”

- Different pilots for analysing different business cases, from the different actors point of view (fleet operators, utilities...)

Public EV fleets





Private EV fleets




Private EV Users


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STEP 5: Roll-out

“Location based Intelligent Charging for EV”

- Better knowledge of EV market and value chain and business models
- System prototype based on the implementation of an on-board unit, providing EV positioning and updated battery status
- Energy demand management application that benefits from the EV on-board information and achieves an optimized electricity load balance and demand distribution
- Added-value services for the end-user, which would increase user acceptance of EV while ensuring user privacy
- To link the project results with the ITS and Smart Grid community and other European projects by sharing technical results and conclusions
- Business plan addressing EV market forecasts, standardization and regulation evolution and analyzing main drivers and barriers for its market penetration.

STEP 6: Looking for partners:

“Location based Intelligent Charging for EV”

- Current “Pilot” partners (EV Fleets or Living Labs)
- Supplier of charging points (inductive charging concept)
- Experts of privacy’s standards
- (...)

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