

VI Expert Workshop:

V2X Business models, recent developments and international pilot projects overview

21st and 22nd March 2017 | Jeju Island, South Korea

Hosted by:

University of Ulsan



Organized by:

Operating Agent



Cristina Corchero
ccorchero@irec.cat
+34 933 562 615

Manel Sanmarti
msanmarti@irec.cat
+34 933 562 615

In the framework of:

The 4th International Electric Vehicle Expo IEVE 2017



<http://www.ievexpo.org/>

Workshop Objectives

The VI International Expert Workshop is organized by Task 28 of the IEA* Hybrid and Electric Vehicle Technology Collaboration Program (HEV-TCP) with the support of the University of Ulsan (South Korea) in the framework of The 4th International Electric Vehicle Expo (IEVE).

This International Workshop features high-level world-speakers and academics from research institutions, utilities, universities, car makers and communication protocol associations, among others, who will exchange their views and debate about V2X challenges and related topics.

Workshop objectives are as follow:

- ⇒ **V2X overview**
- ⇒ **V2G technology challenges and recent developments**
- ⇒ **Korean, USA and European V2X experiments and pilot projects**
- ⇒ **Regulatory challenges**
- ⇒ **Standards and communication protocols**
- ⇒ **V2G grid integration**
- ⇒ **User's engagement**

Venue

21st March 2017

22nd March 2017

Room 400 (4th floor) ICC, Jeju Island, South Korea

Technical visit (tbc), Jeju Island, South Korea

Registration to the workshop is mandatory (iea-hev@irec.cat).

Notice that the Workshop will be open to all audiences. Notice also that no registration fee will be applied.

Registration on arrival: to get your badge, please go to the IEVE register desk in the 3rd floor once you arrive at the ICC Jeju.

**(Information or material of the Technology Collaboration Programme (TCP) on Hybrid and Electric Vehicles (HEV TCP) (formally organised under the auspices of the Implementing Agreement for Co-operation on Hybrid and Electric Vehicle Technologies and Programmes), does not necessarily represent the views or policies of the IEA Secretariat or of the IEA's individual Member countries. The IEA does not make any representation or warranty (express or implied) in respect of such information (including as to its completeness, accuracy or non-infringement) and shall not be held liable for any use of, or reliance on, such information.)*

Program overview

Tuesday 21st March	
Plenary Sessions (Room 400, 4th floor, ICC Jeju)	
9h00-9h30	Welcome Challenges and opportunities of V2X applications, overview of Task 28 (Home Grids and V2X Technologies, IA-HEV) <i>M. Sanmartí (IREC, Task 28 Operating Agent)</i>
9h30-10h15	Outlook of EV and EVSE, policies and R&D projects in Korea and KEPCO <i>K. Park (KEPCO)</i> <i>Chair: M. Sanmartí</i>
10h15-10h45	Coffee break
10h45-11h15	Overview of Korean V2X techs and services <i>S. Chan (KEPCO)</i>
11h15-12h00	Overview of V2X Experiences in the US and Europe <i>A. Thompson (Vedecom)</i> <i>Chair:</i>
12h00-13h30	Lunch
Workshop Sessions: Standards, Business Models, V2X International demonstration projects, User's engagement	
13h30-14h00	Worldwide usage of CHAdeMO V2X and certification <i>H. Saeki (CHAdeMO Association, NISSAN)</i>
14h00-14h30	V2X DSO point of view, main challenges and opportunities for EV and grid integration. Pilot projects in Europe <i>N. Vidal (Enel)</i>
14h30-15h00	The V2G potential of Plug-in Hybrid Vehicles <i>M. Nicholas (UCD)</i> <i>Chair:</i>
15h00-15h30	Coffee break
15h30-16h00	Green & Smart Car Status and R&D Infrastructure of Korea <i>C. Lee (KATECH)</i>
16h00-16h30	Experiences on bi-directional charging <i>D. Urena (BFH)</i>
16h30-17h00	Development of Electric Vehicle Standards and Regulations in Thailand <i>K. Ruangjirakit (KMUTT)</i> <i>Chair:</i>
17h00-17h30	Workshop conclusion and wrap up <i>M. Sanmartí (IREC, Task 28 Operating Agent)</i>
Cocktail	
Wednesday 22nd March	
8h00-12h00	Battery swapping EV Bus and visit to the Renewable Energy Center at Jeju Internal Task 28 meeting (TBC)

About Task 28 Home grids and V2X Technologies

The IA-HEV Executive Committee (ExCo) approved Task 28 Home Grids and V2X Technologies at the Executive Committee meeting in May 2014 held in Copenhagen. It is expected to continue through May 2017. This task will explore the technologies and accompanying issues associated with the use of electric storage from plug-in electric vehicles (PEVs) for uses other than powering the vehicles.

Customers may use their PEV electric storage capabilities for other applications such as vehicle-to-grid (V2G), vehicle-to-home (V2H), vehicle-to-load (V2L), and vehicle-to-vehicle (V2V). Task 28 aims to address the technical and economic knowledge gaps preventing V2X technology to fully deploy.

Task objectives are as follow:

- Analyze the technical and economic viability of V2X technology, specifically, give responses to a number of identified questions.
 - When V2X will be available as a consumer application?
 - Which are the potential synergies with self-generated electricity in households? -Which is the value provided by V2X in terms of security of supply?
 - Which impact to expect on tax revenues?
 - Which are the roles of the different industry players?
 - Which is the impact of the different regulatory frameworks in different countries?
- Develop a set of best practices by connecting and synchronizing the existing V2X research and demonstration projects.
- Develop a policy-making toolbox and a technology roadmap definition in order to serve decision makers seeking to introduce V2X technology in their respective countries.
- Establish a worldwide technical information exchange platform enabling information sharing among scientific institutions and industrial representatives working in V2X issues.
- Promotion of new V2X technology demonstration projects.

LIST OF TASK MEMBERS:

