

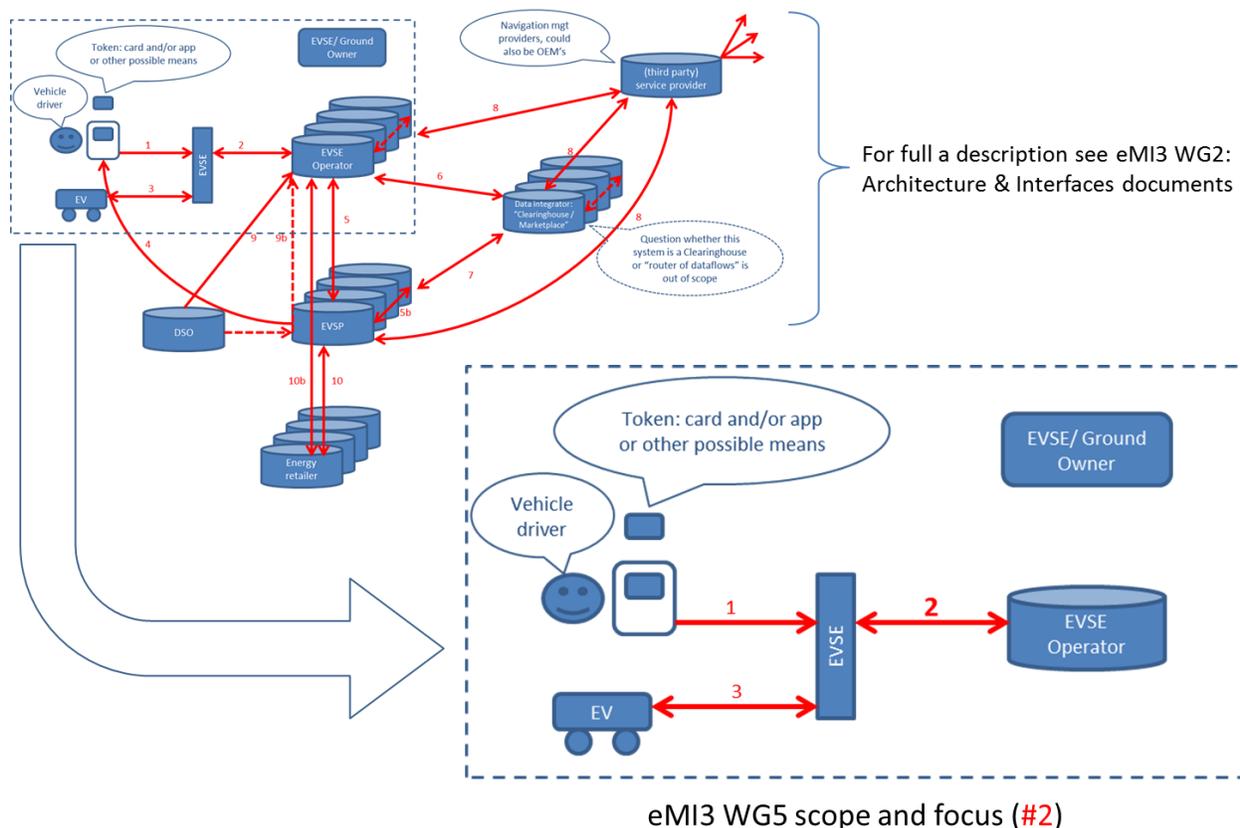


# eMI3 WG5 – Communications Protocol Call for Nominations

September 3rd, 2013

The Communications Protocol Working Group (WG5) of the eMobility ICT Interoperability Innovation (eMI3) Platform hereby calls for nominations of protocols that provide a standard means of managing Electric Vehicle (EV) Charging Stations, also known as Electric Vehicle Supply Equipment (EVSE), which are connected to and controlled by an EV Charging Network (CN). Charging Networks are operated by an EVSE Operator.

The diagrams below indicate the scope and endpoints of the EVSE management/control protocol within the eMI3 reference architecture (path marked '2').



WG5 is charged with the task of developing requirements for this protocol; performing a technical review, comparison and evaluation of candidate protocols against the requirements; harmonizing the

candidate protocols; and preparing the result for eventual standardization. (For a complete description of the eMI3 Platform mission, goals, structure, and process please refer to <http://www.emi3group.com>)

Candidate protocols should have the following properties and capabilities:

- Compatible with and practical for use over a variety of commercial, standardized underlying (L1/L2) communications media, for example WWAN (cellular), other RF M2M, WLAN/WPAN, Ethernet, RS232/485, and/or PLC.
- Compatible with end-to-end security to the same level, and using the same technologies and practices, as accepted e-commerce platforms, e.g. banking, point-of-sale, and WWW-based commerce.
- Documented in a high-level representation, such as WSDL, XML Schema, ASN.1, etc.
- Is encoded in a common format, such as SOAP, JSON, {B|C|D|X|...}ER, EXI, etc.
- Supports common functions between EVSE and EVSE Operator back office (including Roaming on another charging network), e.g. user authentication and authorization; EVSE monitoring (device availability, state, and health); EVSE maintenance (firmware and software download); remote EVSE control, including re-boot, start/stop, and energy management (“smart” charging); energy pricing; etc.

Since eMI3 is focused on near-term market expansion of PEV charging infrastructure (as an essential foundation for eMobility innovation), WG5 is particularly interested in candidate protocols that have been deployed in actual PEV Charging Networks. Submissions should provide data on the number of charging networks using the candidate protocol, the size of these networks, the area covered, and operational uses that the protocol supports.

Nominated protocols can be open access (e.g. an open *de facto* or *de jure* standard) or proprietary. However submissions must include a statement of intent to provide the protocol specification and all associated Intellectual Property (copyright, essential patents, etc.) under the eMI3 IPR Policy, which will be made available to interested parties.

Nominations should take the form of a memo in MS Word or PDF format clearly stating the name and a containing brief narrative description of the protocol, and in which trials or networks it is being used. Please include as much technical documentation and supporting artifacts (UML model, XSDs, etc.) as can be provided. If such documentation is in the process of being cleared for release, it may be submitted separately but must be received by WG5 during the nomination period.

Submissions should be sent via email with attached document(s), to:

Joost Laarakkers, WG5 Chair: [joost.laarakkers@tno.nl](mailto:joost.laarakkers@tno.nl)

with cc: to Silvio Weeren, eMI3 Chair: [silvio.weeren@de.ibm.com](mailto:silvio.weeren@de.ibm.com)

Nominations will be accepted for 60 days from the date of this announcement, until midnight CEST, November 2nd, 2013. WG5 will acknowledge receipt of all submissions and supporting documentation that are received during the nomination period.