

Green eMotion Survey on EV Standardization

Input for WP7.2

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<p>Why this survey?</p> <p>The harmonization of standards is an essential issue for the mass rollout of Electric Vehicles (EVs) and Plug-in Hybrid Electric Vehicles (PHEVs) across the EU. This increases the economic efficiency of the sector and increases the usability of electric vehicles and the recharging infrastructure. I.e. this would allow the user of the EV to use the same interfaces internationally for the connection of the vehicle to the recharging infrastructure and, for example, to address the payment of the recharging in similar ways as the “roaming” for his cell phone.</p> <p>To support this harmonization by the Green eMotion project, we collect the standards being used and the issues and needs related to standardization. This survey is one of the first steps in this process. Green eMotion categorizes standards in 4 areas, which we also use in this survey:</p> <ul style="list-style-type: none"> • Standards on vehicle • Standards on charging point • Standards on connection to the grid • Standards on communication
<p>Instruction</p> <p>Please use the text box below the questions for your answer and give additional information appropriate or related to the topic.</p> <p>For the updated list of standards please refer to the Excel table (as included in Green eMotion Deliverable 7.1 - Part1) that you will receive along with this survey template.</p> <p>Whenever possible, please specify the standard details involved in case of a standard series (i.e., IEC 61851-1 instead of only IEC 61851).</p>
<p><i>All your input on this topic is highly appreciated !</i></p>

GENERAL INFORMATION
Company:
Country:
Date:
Project: (please specify if the project is inside or outside Green eMotion):
Notes:

Standards on vehicle
<p>Which of the following standards on vehicle do you already use or intend to use? IEC 61851-X (EV conductive Charging System), IEC 62196-X (please specify Type of connector/inlet vehicle side), J1772 (Conductive Charge Coupler), UL2251 (Safety of Plugs), IEC 61982-X (Secondary batteries for the propulsion)</p>
<p>Answer:</p> <p>Please also specify where and how you use it (which mode and type of socket).</p>
<p>Which other standards or non-standard solutions on vehicle do you (plan to) use?</p>
<p>Answer:</p> <p>Please also specify where and how.</p>
<p>Which standards or extension to standards on vehicle do you miss?</p>
<p>Answer:</p>
<p>Do you have other issues or needs with respect to standards on vehicle, and which ones?</p>
<p>Answer:</p>

Standards on charging point
<p>Which of the following standards on charging point do you already use or intend to use (in for example identification, charging, billing, wiring, power quality, protection)?</p> <ul style="list-style-type: none">IEC 61851-X (please specify Mode of charging),IEC 62196-X (please specify Type of plug/outlet),J1772 (Conductive Charge Coupler),IEC 60364-X-X (Protection),UL2594 (Safety of EV Supply Equipment)
<p>Answer:</p> <p>Please also specify where and how you use it (mode, type of socket, AC/DC, 1/3 phase).</p>
<p>Which standards or non-standard solutions on charging point do you (plan to) use?</p>
<p>Answer:</p> <p>Please also specify where and how.</p>
<p>Which standards or extension to standards on charging point do you miss?</p>
<p>Answer:</p>
<p>Do you have other issues or needs with respect to standards on charging point, and which ones?</p>
<p>Answer:</p>

Standards on connection to the grid
<p>Which of the following standards on connection to the grid do you already use or intend to use?</p> <p>J2847-X (Communication with EV), IEEE P1901 (Broadband over Power Line Networks), J1772 (Conductive Charge Coupler), IEC 60364-X-X (Protection), J2293-X (Energy Transfer System), IEEE P2030 (Draft Guide for Smart Grid Interoperability)</p>
<p>Answer:</p> <p>Please also specify where and how.</p>
<p>Which other standards or non-standard solutions on connection to the grid do you (plan to) use?</p>
<p>Answer:</p> <p>Please also specify where and how.</p>
<p>Which standards or extension to standards on connection to the grid do you miss?</p>
<p>Answer:</p>
<p>Do you have other issues or needs with respect to standards on connection to the grid, and which ones?</p>
<p>Answer:</p>

Standards on communication
<p>Which of the following standards on communication do you already use or intend to use? ISO/IEC 15118-X (please specify..., V2G communication interface), IEC 61850-X (Communication network and systems in substations), ZigBee SEP 2 (Common messaging), J2931-X (PLC communications), J2847-X (Communication of EV), IEC 62056-X (data exchange for meter reading)</p>
<p>Answer:</p> <p>Please also specify where and how.</p>
<p>Which other standards or non-standard solutions on communication or data collection do you (plan to) use?</p>
<p>Answer:</p> <p>Please also specify where and how.</p>
<p>Which standards or extension to standards on communication do you miss?</p>
<p>Answer:</p>
<p>Do you have other issues or needs with respect to standards on communication, and which ones?</p>
<p>Answer:</p>
<p>Which type of EVSE (EV Supply Equipment) management system (a centralized/de-centralized ICT infrastructure that gathers data from EVSE and EVs) do you plan to use?</p>
<p>Answer:</p>
<p>In this EVSE: what type of data do you collect, communicate, and which standards or solutions do you use for that (like transmission physical standard, network, information protocol, data content, financial services standards for billing, etc.)?</p>
<p>Answer:</p>

Other questions and comments
According to your experience, which use cases are specifically important to be used in the standardization?
Answer:
What are the standards with respect to EV that are (being) standardized in/for your country?
Answer:
What are the top (three) standardization topics that really need to be addressed and that are the biggest challenges for the introduction of EVs?
Answer: <ol style="list-style-type: none"> 1. 2. 3.
What kind of methodologies or best practices do you use to assure that development conforms to standards?
Answer.:
Do you have any other comments, topics, issues or needs that have not been addressed with the previous questions?
Other comments:
Contact details
Maybe we need further information on the answers and comment you and your organisation has given. Please list below the person(s) and e-mail address(es) we can contact in case we like to have more information.
Your contact person(s):
Please return this survey to joost.laarakkers@tno.nl
Thank you for your effort!