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<th>16-TRAN-01</th>
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<td><strong>Project Title:</strong></td>
<td>SB 350 Transportation Electrification (Publicly Owned Utilities)</td>
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<tr>
<td><strong>TN #:</strong></td>
<td>215671</td>
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<tr>
<td><strong>Document Title:</strong></td>
<td>ChargePoint Comments on VGI Standard - Dec 7 Slides</td>
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<td><strong>Description:</strong></td>
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<td><strong>Filer:</strong></td>
<td>System</td>
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<td><strong>Organization:</strong></td>
<td>ChargePoint</td>
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<td><strong>Submission Date:</strong></td>
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ChargePoint Comments on VGI Standard - Dec 7 Slides

Attached are modified slides presented as a comment at the workshop on December 7, 2016.

Additional submitted attachment is included below.
ChargePoint’s perspective on ISO/IEC 15118

VGI Communications Standards
Joint Staff Workshop (CEC, CPUC)
CEC - Rosenberg Room - Sacramento, CA

Craig Rodine – Director, Standards
7 December 2016
Summary

+ The ISO/IEC 15118 series of standards is a mature, viable technology for present and future EV charging infrastructure.

+ ChargePoint is investing in further development of 15118: R&D projects, standards development, and supporting auto OEM EV roadmaps.

+ 15118 does not fully address some business and technical aspects of the EV charging infrastructure framework that’s been effective and successful in CA and throughout North America.

  • For example: roles and motivations of site owner and service provider

+ Transitions and scale matter: need to support today’s EV drivers, site hosts, and a potential continuing majority of EVs supporting non-standard communications
VGI Ecosystem and IEC/ISO 15118 Scope (narrowest interpretation)

Key
- ISO/IEC 15118
- EV-EVSP (prop or open std)
- Various: API, app, browser, telematics, ...

Utility

OEM

EVSP/EVCSO network

IEC/ISO 15118 scope
IEC/ISO 15118 Scope (effective, intended use)

Key
- **ISO/IEC 15118**
- **EV-EVSP (prop or open std)**
- Various: API, app, browser, telematics, ...
- **SA** Secondary Actor (per ISO 15118)

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IEC/ISO 15118 Scope (potential alternative use)

Key
- ISO/IEC 15118
- EV-EVSP (prop or open std)
- Various: API, app, browser, telematics, ...
- SA Secondary Actor (per ISO 15118)

Utility

OEM

EVSP/EVCSO network

IEC/ISO 15118 scope

SA
IEC/ISO 15118 VGI prototype application (CEC EPC 14-078)

**Key**
- ISO/IEC 15118
- EV-EVSP (prop or open std)
- Various: API, app, browser, telematics, ...
- Secondary Actor (per ISO 15118)

**Network**
- OpenADR 2.0b
- ISO/IEC 15118
- 15118 support: CNMP, OCPP, X
- NEMA roaming (not in project scope)

**Components**
- Utility
- OEM
- EVSP/EVCSO network
- SA

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Concluding points

+ We see no technical show-stoppers, but there is work to be done on business models and system architecture to integrate ISO/IEC 15118 into California’s EV charging networks.

+ We also urge the Commission to require the development and public availability of a model of EV charging load and its impact on the grid, including controls on, for starters (not exhaustive):
  - Number of EVs deployed and growth rates
  - Concentration of EV charging loads on grid circuits
  - Customer (driver and site owner) incentives and % participation
  - Value ($) of DR and Energy services to all stakeholders
Thank You

For further information on this topic, please contact Craig Rodine:

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