Dear SME,

Thanks for agreeing to help out with this effort. Our task is to match each of the following communication protocols to the requirements that have been extracted from the known use cases. In order to help us get the right information to the right people and to properly summarize things for the CPUC, we're asking for your help in getting some basic information. Please complete the following to the best of your ability.

Section 1: Who and What

Please select your name from the following list or enter it manually: Harmeet Sin

Please select your protocol from the following list or enter it manually: OCPP

What is the current (approved by standards/industry group) version of your protocol? 1.6

When was it approved? Enter Month / 2015 Is it currently being revised ? Yes

What is the anticipated date for the approval/release of the next version? March / 2018

Section 2: When and Why

Please input a short narrative of the problem that your protocol was created to address, and when it first was adopted.

Promote global development, adoption, and compliance of Open communication protocols in the EV charging infrastructure. Use of open standards future proof infrastructure investment and mitigate the risk of stranded assets. Key attributes of OCPP

-Fundamental commitment to open processes and products
-Free to use: no constraints on the use of the standard
-Development is open and market driven to meet existing and emerging technical

Section 3: Current Status:

Please summarize the current usage and level of adoption of this protocol. If possible, please discuss the number and location(s) of current implementations of the protocol.

Close to 100 worldwide members of Open Charge Alliance
Implemented and adopted by hardware and software vendors worldwide making OCPP the most widely deployed EVSE infrastructure protocol globally

Section 4: Actors Currently in Play:

In order to decouple protocol specific nomenclature and to reduce the number of actors to the minimum relevant number, we've come up with the following list. Please indicate what actors are able to communicate directly with each other by using your protocol.

| | EV Driver (EVD) | Power Flow Entity (PFE) | Utility Customer of Record (UCR) | EV Battery System (EVBS) | EV Power Converter System (EVPC) | Energy Connection System (ECS) | Energy Meter (EM) | Building Management System (BMS) |
|---|---|---|---|---|---|---|---|---|
| EV Driver (EVD) | - | ☐ | ☐ | ☐ | ☐ | ✔ | ✔ | ☐ |
| Power Flow Entity (PFE) | ☐ | - | ☐ | ☐ | ☐ | ✔ | ✔ | ☐ |
| Utility Customer of Record (UCR) | ☐ | ✔ | - | ☐ | ☐ | ✔ | ✔ | ☐ |
| EV Battery System (EVBS) | ☐ | ☐ | ☐ | - | ☐ | ☐ | ☐ | ☐ |
| EV Power Converter System (EVPC) | ☐ | ☐ | ☐ | ☐ | - | ☐ | ☐ | ☐ |
| Energy Connection System (ECS) | ☐ | ✔ | ✔ | ☐ | ☐ | - | ☐ | ☐ |
| Energy Meter (EM) | ☐ | ✔ | ✔ | ☐ | ☐ | ☐ | - | ☐ |
| Building Management System (BMS) | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | - |

Please add any notes needed to clarify the above table

What physical layer(s) does this protocol use for communication between devices?

Cellular, WiFi and Ethernet

What language is used for communicating between devices (i.e. html, xml, etc.)

XML, JSON

Section 5:  Actors Anticipated to be in Play (As appropriate):

If the next version of your protocol is expected to allow for additional communications, please indicate them in the following.

| | EV Driver (EVD) | Power Flow Entity (PFE) | Utility Customer of Record (UCR) | EV Battery System (EVBS) | EV Power Converter System (EVPC) | Energy Connection System (ECS) | Energy Meter (EM) | Building Management System (BMS) |
|---|---|---|---|---|---|---|---|---|
| EV Driver (EVD) | - | | | | | ✓ | ✓ | |
| Power Flow Entity (PFE) | | - | | | | ✓ | ✓ | |
| Utility Customer of Record (UCR) | | ✓ | - | | | ✓ | ✓ | |
| EV Battery System (EVBS) | | | | - | | | | |
| EV Power Converter System (EVPC) | | | | | - | | | |
| Energy Connection System (ECS) | | ✓ | ✓ | | | - | | |
| Energy Meter (EM) | | ✓ | ✓ | | | | - | |
| Building Management System (BMS) | | | | | | | | - |

Please indicate any additional functionality or limitations to functionality that are germane to the consideration of this protocol:

Compliance and Certification, Improvements to smart charging, events and component model and interop with ISO/IEC 15118 load management and "Plug and Charge"

What physical layer(s) does this protocol use for communication between devices?

Cellular, Wifi, Ethernet

What language is used for communicating between devices (i.e. html, xml, etc.)

Section 6: DC, Single Phase, or Polyphase:

| | |
|---|---|
| Does your protocol include functionality to manage the flow of DC energy? | Yes |
| Does your protocol include functionality to manage the flow of AC energy? | Yes |
| Does your protocol include functionality to manage the flow of polyphase AC energy? | No |
| Does your protocol include functionality to manage the flow of energy from the vehicle back to the grid? | No |

If needed, please add any explanatory details to the answers in section 6: