

# **Protocol Implementation Conformance Statement**

#### There are three PICS

- 1. PICS for OCPP1.6
- 2. PICS for OCPP1.6 Security
- 3. PICS for OCPP1.6 Performance

General information about Device Under Test (DUT)

| Vendor name                      |              |      |  |
|----------------------------------|--------------|------|--|
| Device Under Test (DUT)          | Charging Sta | tion |  |
| Communication                    |              |      |  |
| Type / model                     |              |      |  |
| OCPP Software version (DUT)      |              |      |  |
| Support for milliseconds in OCPP | Yes          | No   |  |
| messages                         | 163          | INO  |  |
|                                  |              |      |  |
| Hardware feature set             |              |      |  |
| Socket(s) / connector(s)         |              |      |  |
| Fixed cable                      | Yes          | No   |  |
| Communication technology         |              |      |  |

## **RFID** readers

**Feature** 

#### Optional features (if applicable)

Other relevant values for testing. Please enter additional value name, including minimum and/or maximum values:

|  | • |
|--|---|
| Authorization Cache                        |   |
| Unknown Offline Authorization              |   |
| MaxEnergyOnInvalidId                       |   |
| MinimumStatusDuration                      |   |
| If supported by a Charging Station, the    |   |
| station is to be delivered to the test lab |   |
| with value set to 0.                       |   |
|  |   |
| WebSocketPingInterval (only for            |   |
| websocket implementations)                 |   |
| Support reservations of entire             |   |
| Charging Station                           |   |
| Choice transaction stopped when            |   |
| cable disconnected on EV side              |   |
|  |   |

Supported / present



### Other relevant settings and limits

The table below should contain all relevant limits and non-OCPP settings that are relevant for the test laboratory and for the correct functioning of the Charging Station:

| Limit / setting                         |                       | Va     | alue  |
|---|-----------------------|--------|-------|
| GetConfigurationMaxKeys                 |                       |        |       |
| MeterValuesAlignedDataMa                | axLength              |        |       |
| MeterValuesSampledDataM                 | laxLength             |        |       |
| Minimum MeterValueSamp                  | leInterval supported  |        |       |
| Maximum MeterValueSamp                  | oleInterval supported |        |       |
| Minimum HeartbeatInterval               | supported             |        |       |
| Maximum HeartbeatInterva                | l supported           |        |       |
| StopTransactionMaxMeter\                | /alues                |        |       |
| StopTxnAlignedDataMaxLe                 | ngth                  |        |       |
| StopTxnSampledDataMaxL                  | ength                 |        |       |
| WebSocketPingInterval                   |                       |        |       |
|   |                       |        |       |
| Local Authorization List                |                       |        |       |
| LocalAuthListMaxLength                  |                       |        |       |
| SendLocalListMaxLength                  |                       |        |       |
|   |                       |        |       |
| Smart charging                          |                       |        |       |
| ChargeProfileMaxStackLevel              |                       |        |       |
| ChargingScheduleAllowedChargingRateUnit |                       |        |       |
| ChargingScheduleMaxPeriods              |                       |        |       |
| MaxChargingProfilesInstalled            |                       |        |       |
| Firmware Management                     |                       |        |       |
| Supported file transfer prote           | ocols                 | http   | https |
|   |                       | ftp    | ftps  |
| Other relevant values                   |                       |        |       |
| Name Minimum                            |                       | Maximu | ım    |
| Name Minimum                            |                       | Maximu | ım    |
| Name Minimum                            |                       | Maximu | ım    |
| Name Minimum                            |                       | Maximu | ım    |
| 1401110                                 |                       |        |       |
| Name                                    | Minimum               | Maximu | ım    |

### IP configuration

The test laboratory will provide information on the network configuration that has to be configured on the Charging Station beforehand.



### 1 PICS OCPP 1.6 certificate

The Table below states the mandatory and optional functionalities for certification. When a functionality is supported by the DUT, all applicable use cases must be supported, unless stated otherwise.

| Functionalities                        | OCPP 1.6  | Description   |
|--|-----------|---|
|  | Fully     |   |
|  | supported |   |
| Core                                   |           | Basic Charging Station functionality for booting, authorization (incl. cache if available), configuration, transactions, remote control.  |
| Firmware Management                    |           | Support for (remote) firmware update management and diagnostic log file download.   |
| Smart Charging                         |           | Support for Smart Charging (all profile types, including stacking), to control charging.  |
| Reservation                            |           | Support for reservation of a connector of a Charging Station.   |
| Local Authorization List<br>Management |           | Features to manage a local list in the charging station containing authorization data for whitelisting users.   |
| Remote Trigger                         |           | Support for remotely triggering messages that originate from a Charging Station. This can be used for resending messages or for getting the latest information from the Charging Station. |



# 2 PICS OCPP 1.6 security certificate

Security extension (based on whitepaper, JSON only).

## Supported cipher suites

| Cipher suite                            | Supported |
|---|-----------|
| TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256 |           |
| AND                                     |           |
| TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384 |           |
|   |           |
| TLS RSA WITH AES 128 GCM SHA256         |           |
| AND                                     |           |
| TLS RSA WITH AES 256 GCM SHA384         |           |
|   |           |

#### Certificate Profiles

| Name               | Implemented | Description  |
|--------------------|-------------|--|
| Security Profile 1 |             | Unsecured Transport with Basic Authentication Profile 1 is optional  |
| Security Profile 2 |             | TLS (1.2 or higher) with Basic Authentication Security profile 2 or security profile 3 or both must be implemented     |
| Security Profile 3 |             | TLS (1.2 or higher) with Client Side Certificates Security profile 2 or security profile 3 or both must be implemented |



# 3 PICS related to performance for OCPP1.6

| Name                                    | Value | Unit    | Description   |
|---|-------|---------|---|
| OCPP triggered function timeout         |       | seconds | The timeout used for when waiting for an OCPP function with its corresponding request message (e.g. time between receiving RemoteStartTransaction.conf and StartTransaction.req). Messages to the DUT can be handled within this timeout. |
| OCPP response timeout                   |       | seconds | The timeout used for exchanging OCPP response messages. Messages to the DUT can be handled within this timeout.   |
| Response time<br>RemoteStartTransaction |       | seconds | The response time for the RemoteStartTransaction message.   |
| Communication technology used           |       |         | (If multiple technologies available in a Charging Station)  |