

**Certificate Holder:** Vattenfall Incharge  
**Certificate Number:** OCA.0201.0037.CSMS  
**Product Type:** Charging Station Management System  
**Product Designation:** Incharge portal  
**OCPP Software Version:** 20241002-2  
**Certification Date:** April 8, 2025

This certificate attests that the above mentioned product successfully completed certification testing in conformance with the reference specification OCPP 2.0.1 (Edition 3 FINAL, 2024-05-06 including Errata 2024-11). The optional OCPP protocol features that are covered by this certificate can be found in the Abstract of the Test Report that is part of this certificate.

Test cases have been performed as described in the test report referred to below. The results and remarks can be found in this complete test report.

| Applied   | Performed by / On                           | Document Evidence                            |
|---|---|--|
| Conformance testing according to the test specification referenced by the test report | DNV Singapore Ptd. Ltd.<br>October 28, 2024 | OCPP 2.0.1 PICS CSMS -<br>2.0.1 - Vattenfall |

The abstract of test report is an integral part of this certificate. This certificate is valid from the Certification Date specified above. This certificate is only applicable to the product designation described above and permits the use of the OCPP logo as laid down in the OCA certification logo license agreement on this product only.

This certificate shall neither be tendered nor accepted by any party as a guarantee covering quality of a product which includes OCPP. The Open Charge Alliance, and/or its agents, including, inter-alia, test laboratories, disclaim liability for any damages or losses incurred by the certified company or by any other party resulting from reliance on the results of OCPP certification testing.

For the Open Charge Alliance:

ONOPH CARON  
Chairman



## Abstract of the Test Report

### Test Report OCPP 2.0.1 Certification

|                             |                                    |
|-----------------------------|------------------------------------|
| <b>Test laboratory:</b>     | <b>DNV Singapore Ptd. Ltd.</b>     |
| Location:                   | Singapore                          |
| Test Report Reference:      | OCPP 2.0.1 PICS CSMS-Vattenfall    |
| <b>Product Designation:</b> | <b>Incharge portal</b>             |
| Vendor name:                | Vattenfall Incharge                |
| Device Under Test:          | Charging Station Management System |
| OCPP Software Version:      | 2024I002-2                         |
| Config ID:                  | 90E2F4AB                           |

### Test Result Summary for the Certified Functionalities

| Certification Profile               | Test Result | Description   |
|-------------------------------------|-------------|---|
| Core                                | Pass        | Basic Charging Station functionality for booting, authorization, configuration, transactions, remote control, including basic security. |
| Advanced Security                   | Not Tested  | Support for TLS with client authentication.   |
| Local Authorization List Management | Not Tested  | Support for local authorization list management and optionally of an authorization cache.   |
| Smart Charging                      | Pass        | Support for Smart Charging, to control charging.  |
| Advanced Device Management          | Pass        | Support for the OCPP Device Model and advanced logging and monitoring.  |
| Reservation                         | Not Tested  | Support for reservation of a connector of a Charging Station.   |
| Advanced User Interface             | Not Tested  | Support for tariff & cost and DisplayMessage functionality.   |
| ISO 15118 Support                   | Pass        | Support for ISO 15118 Smart Charging and Plug and Charge authorization.   |

## Optional Features

The OCPP specification contains many implementation options that can be selected by a vendor, often in the form of optional message fields or configuration variables, that can be used to support advanced functions. Whereas the certification profiles determine which OCPP functionality is implemented, the features describe how much of a certain functionality in a profile has been implemented. The tables below indicate per certification profiles, for each available optional feature within this profile, whether this has been implemented in this product and tested for conformance or not. Please refer to part 5 of the OCPP specification for the list of optional features and the reference to the relevant use cases in part 2 of the OCPP specification.

### Core

| ID     | Core Features   | Supported / Present |
|--------|---|---------------------|
| C-11   | Support for unlocking connector for charging station with detachable cable. | No                  |
| C-13   | Support for Reset per EVSE  | No                  |
| C-14   | Support for retrieving / deleting CustomerInformation - CustomerIdentifier  | No                  |
| C-15   | Support for scheduled firmware updates                                      | No                  |
| C-16   | Support for checking the TransactionStatus                                  | No                  |
| C-17   | Support for retrieving the ConfigurationInventory                           | No                  |
| C-29   | TriggerMessage  |                     |
| C-29.1 | Trigger message - MeterValues   | No                  |
| C-29.2 | Trigger message - TransactionEvent  | No                  |
| C-29.3 | Trigger message - LogStatusNotification                                     | No                  |
| C-29.4 | Trigger message - FirmwareStatusNotification                                | No                  |
| C-29.5 | Trigger message - StatusNotification  | No                  |

| ID   | Authorization Options for Local Start      | Tested During Certification |
|------|--|-----------------------------|
| C-30 | Authorization - using RFID ISO14443        | Yes                         |
| C-31 | Authorization - using RFID ISO15693        | Yes                         |
| C-32 | Authorization - using KeyCode              | Yes                         |
| C-33 | Authorization - using locally generated id | Yes                         |
| C-34 | Authorization - MacAddress                 | Yes                         |
| C-35 | Authorization - NoAuthorization            | Yes                         |

| ID   | Authorization Options for Remote Start                    | Tested During Certification |
|------|---|-----------------------------|
| C-36 | Authorization - using RFID ISO14443                       | Yes                         |
| C-37 | Authorization - using RFID ISO15693                       | Yes                         |
| C-38 | Authorization - using centrally, in the CSMS generated id | Yes                         |
| C-39 | Authorization - NoAuthorization                           | Yes                         |

| ID     | Core Features   | Supported / Present |
|--------|---|---------------------|
| C-44   | Support for sending a BootNotification Pending before Accepting | No                  |
| C-45   | Support for Multiple elements GetVariablesRequest               | No                  |
| C-46   | Support for Multiple elements SetVariablesRequest               | No                  |
| C-50   | GetBaseReport - FullInventory                                   |                     |
| C-50.1 | GetBaseReport - FullInventory - During onboarding               | Yes                 |
| C-50.2 | GetBaseReport - FullInventory - Manual trigger                  | No                  |

## Smart Charging

| ID   | Certification Profile: Smart Charging     | Supported / Present |
|------|---|---------------------|
| SC-4 | Support for TxDefaultProfile on EVSEID #0 | No                  |

## Additional Questions

The table below lists a number of questions that are needed for determining the complete list of conformance test for this product.

| ID      | Additional Questions for Lab Testing  | Answer |
|---------|---|--------|
| AQ-12   | Is a FullInventory requested during onboarding / booting test cases?        | No     |
| AQ-13   | Does your CSMS support Absolute values for the following Charging Profiles: |        |
| AQ-13.1 | TxDefaultProfile  | Yes    |
| AQ-13.2 | ChargingStationMaxProfile   | Yes    |

| ID      | Additional Questions for Lab Testing   | Answer |
|---------|--|--------|
| AQ-14   | Does your CSMS support Recurring values for the following Charging Profiles:                               |        |
| AQ-14.1 | TxDefaultProfile   | Yes    |
| AQ-14.2 | ChargingStationMaxProfile  | Yes    |
| AQ-16   | Does the CSMS reject unknown Charging Stations during websocket connection setup?                          | Yes    |
| AQ-17   | Can your CSMS be configured to first respond to a BootNotificationRequest with status Pending or Rejected? | No     |

## Performance Measurement Result

The tables below shows the list of key performance indicators that are measured during the conformance test. The first table indicates the values that the vendor indicates that are valid maximum values for this product. The second table lists the actual performance measurements during the tests performed in a controlled environment.

| Name                    | Max Value | Unit    | Description   |
|-------------------------|-----------|---------|---|
| OCPP response time      | 5         | seconds | The response time for when waiting for an OCPP response message after sending an OCPP request message. This entails all OCPP messages, excluding Authorize. Messages to the DUT can be handled within this timeout. |
| Response time Authorize | 1         | seconds | The response time for the Authorize message.  |

| Name                    | Min Value | Max Value | Average Value | Unit    |
|-------------------------|-----------|-----------|---------------|---------|
| OCPP response time      | 0.02      | 4.03      | 0.05          | seconds |
| Response time Authorize | 0.03      | 0.26      | 0.05          | seconds |

|  |                |
|--|----------------|
| Communication technology used during performance measurement | Ethernet/Cloud |
|--|----------------|

Statement of Approval

| Vendor     |                               |   |
|------------|-------------------------------|---|
| Name       | Ronald van der Scheun         | Date: 2025-03-10  |
| Company    | Vattenfall Incharge           | Signature:  |
| Department | Hardware and Asset Management |  |
| Position   | Product Owner                 |   |
| Location   | Amsterdam                     |   |

| Test Laboratory |                         |   |
|-----------------|-------------------------|---|
| Name            | Sukoco                  | Date: 2025-03-10  |
| Company         | DNV Singapore Ptd. Ltd. | Signature:  |
| Department      | Energy Systems          |  |
| Position        | Senior Consultant       |   |
| Location        | Singapore               |   |

|                  |                                  |
|------------------|----------------------------------|
| OCTT Version     | Release_2024-11                  |
| OCTT Instance ID | 57705d1d142e805573db8c1afb27f4ab |