

Certification Program Update

Lonneke Driessen – Director OCA



www.OpenChargeAlliance.org

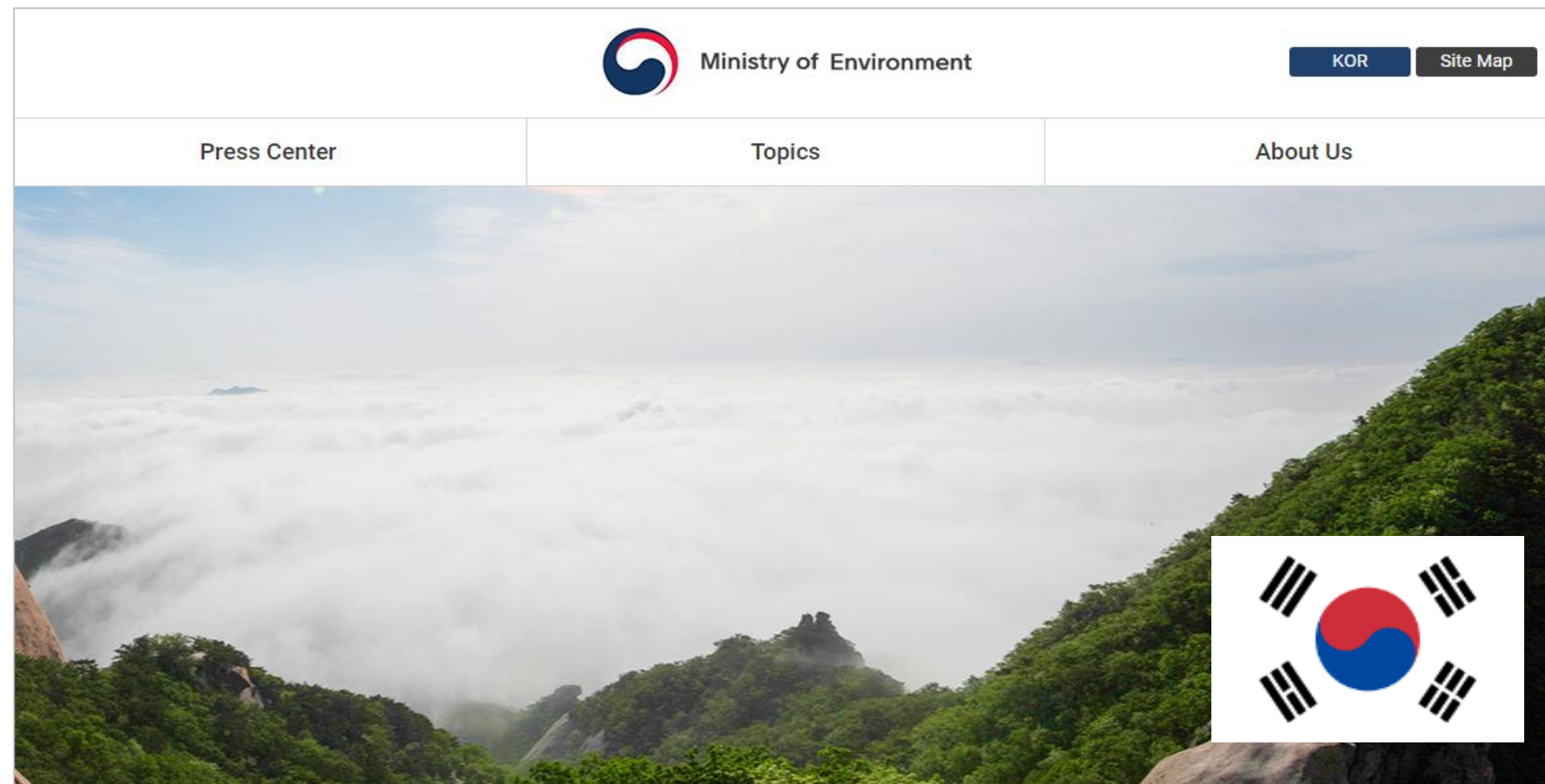


Why OCPP Certification ?

- To validate that a system has implemented OCPP correctly
 - For Buyers to check before they purchase a system
 - For Vendors to promote their systems to Buyers
 - To make integrating systems between Vendors faster and more efficient



Certification and funding



Biden-Harris Administration Announces Latest Steps to Deliver a National Network of Convenient, Reliable, Made-in-America Electric Vehicle Chargers

Wednesday, February 15, 2023

EV Charging Standards and Build America, Buy America Implementation Plan Positions States to Deploy First \$1.5 billion in EV charging formula funding

EV Charging Competitive Grant Program for Communities Coming Soon

FHWA 06-23

Contact: FHWA.PressOffice@dot.gov

Tel: (202) 366-0660

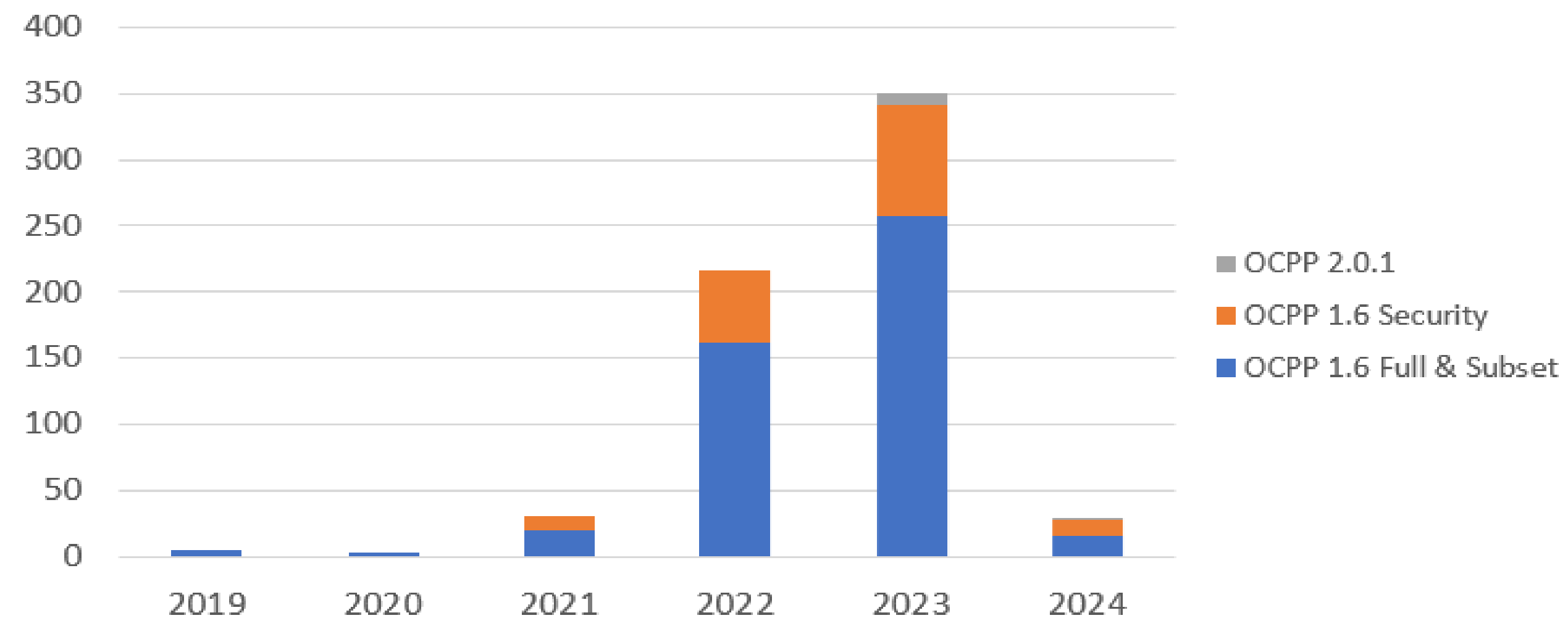
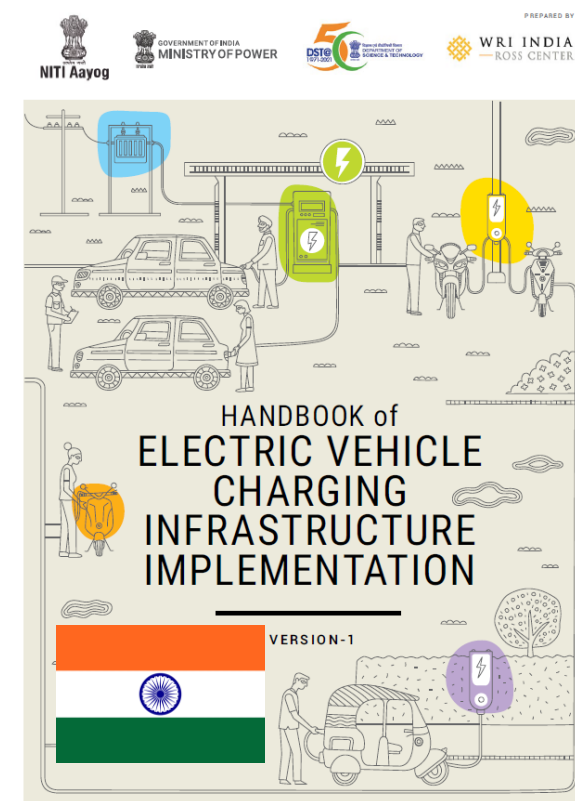


NEW YORK STATE | **NYSERDA**

DCFC Program
Program Opportunity Notice (PON) 4509
Up to \$16 Million Available

NYSERDA reserves the right to extend and/or add funding to the Solicitation should other program funding sources become available.

Round 3 Proposals Due: March 14, 2023 by 3 PM Eastern Time



OCPP Certification is available for 1.6 and 2.0.1

OCPP 1.6 Certification
opened in November 2019
For Charging Stations and CSMSs



OCPP 2.0.1 Certification is open as of June '23 for
'Core' and 'Advanced Security' profiles
For Charging Stations, CSMSs and Software Stacks



Certification for the additional profiles is expected
to open in April 2024



Certificates on the website

CERTIFIED PRODUCTS

Below you will find the products which completed the OCA certification successfully.

To verify the PDF signature (2.0.1 only) visit our [verification page](#)

CERTIFIED COMPANIES

| Organisation | Cert. number | OCPP 2.0.1 | Country | Product type | Product designation | Certificate type | Software version |
|---|--------------------|------------|-------------------|------------------------------------|-----------------------------|--------------------------|------------------|
| I-Charge Solutions International Co. Ltd. | OCA.0201.0015.CSMS | OCPP 2.0.1 | Hong Kong | Charging Station Management System | ICS CSMS20 | Core & Advanced Security | 1.0 |
| Driivz Ltd | OCA.0201.0001.CSMS | OCPP 2.0.1 | Israel | Charging Station Management System | Driivz CSMS Operator Portal | Core & Advanced Security | 7.15.0 |
| Instituto Tecnológico de la Energía (ITE) | OCA.0201.0004.CSMS | OCPP 2.0.1 | Spain | Charging Station Management System | HysGrid+ OCPPJ 2.0.1 Server | Core & Advanced Security | 1.0.0 |
| IoCharger | OCA.0201.0005.CS | OCPP 2.0.1 | China | Charging Station | IOCAH10 | Core & Advanced Security | 2305 |
| KEVIT | OCA.0201.0007.CSMS | OCPP 2.0.1 | Republic of Korea | Charging Station Management System | KEVIT CSMS 2.0 | Core & Advanced Security | 2.0.1 |
| KEVIT | OCA.0201.0010.CS | OCPP 2.0.1 | Republic of Korea | Charging Station | DP240A | Core & Advanced Security | 2.0.1 |

OCPP 2.0.1 CORE CERTIFIED

Certificate Holder: Driivz Ltd.
Certificate Number: OCA.0201.0001.CSMS
Product Type: Charging Station Management System
Product Designation: Driivz CSMS Operator Portal
OCPP Software Version: 7.15.0
Certification Date: August 8, 2023

This certificate attests that the above mentioned product successfully completed certification testing in conformance with the reference specification OCPP 2.0.1 (Part 2 - Specification Edition 2 FINAL, 2022-12-15 including Errata, v1.0, 2023-06-30). 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 / June 23, 2023 | DNV 20230623_Test Report_OCPP 2.0.1_CSMS_Driivz |

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

Authenticity of this certificate can be verified at www.openchargealliance.org



Types of OCPP Certificates

For a Charging Station and Charging Station Management System

**Full Certificate
OCPP 1.6**



| Functionality | |
|-------------------------------------|-----------|
| Core | Mandatory |
| Firmware Management | Mandatory |
| Smart Charging | Mandatory |
| Reservation | Mandatory |
| Local Authorization List Management | Mandatory |
| Remote Trigger | Mandatory |

For a Charging Station

**Subset Certificate
OCPP 1.6**



| Functionality | |
|-------------------------------------|-----------|
| Core | Mandatory |
| Firmware Management | Optional |
| Smart Charging | Optional |
| Reservation | Optional |
| Local Authorization List Management | Optional |
| Remote Trigger | Optional |

For a Charging Station and Charging Station Management System

**Security Certificate
OCPP 1.6**



| Functionality | |
|--------------------|----------------------------|
| Security General | Mandatory |
| Security Profile 1 | Optional |
| Security Profile 2 | Either 2 or 3 is Mandatory |
| Security Profile 3 | |

See: OCPP Certification Procedure

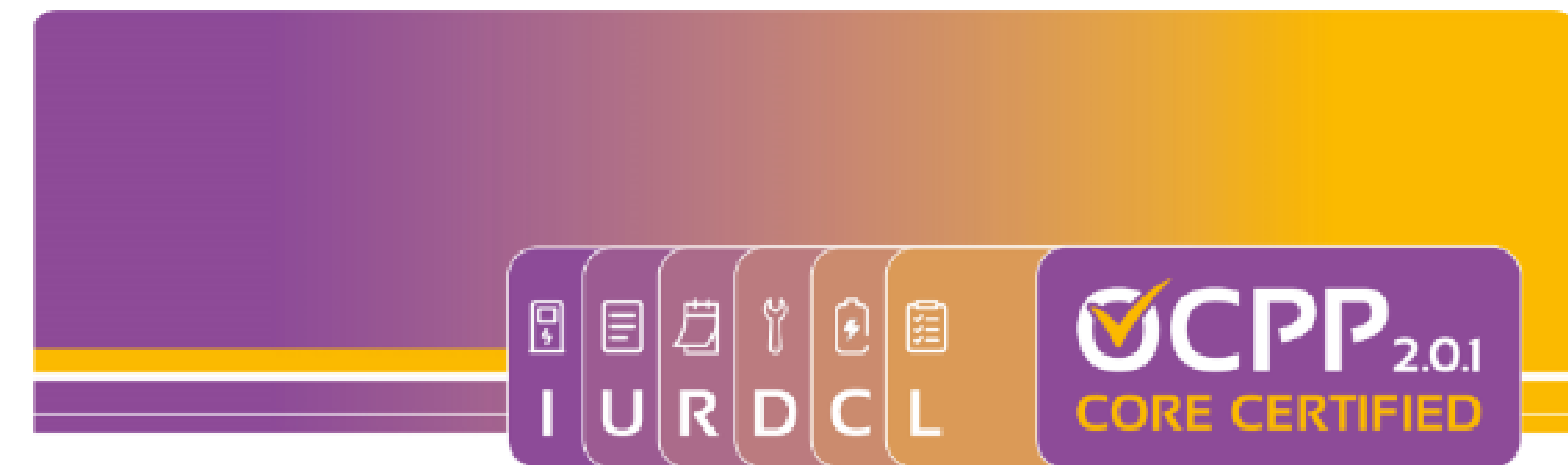


Types of OCPP Certificates – OCPP 2.0.1

For a Charging Station Management System, Charging Station and Charging Station Software Stack



| Functionality | |
|-------------------------------------|-----------------|
| Core | Mandatory |
| Advanced Security | Optional |
| Local Authorization List Management | Optional |
| Smart Charging | Optional |
| Advanced Device Management | Optional |
| Reservation | Optional |
| Advanced User Interface | Optional |
| ISO 15118 support | Optional |



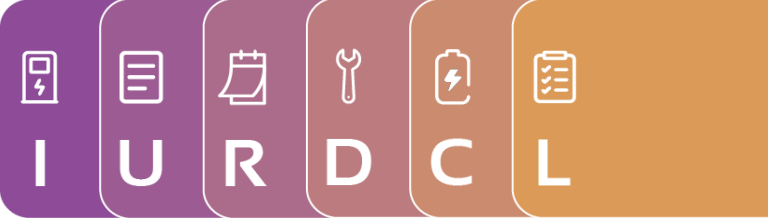


| Functionality | |
|--|-----------------|
| Core | Mandatory |
| Advanced Security | Optional |
| Local Authorization List Management | Optional |
| Smart Charging | Optional |
| Advanced Device Management | Optional |
| Reservation | Optional |
| Advanced User Interface | Optional |
| ISO 15118 support | Optional |

See: OCPP Certification Procedure



OCPP 2.0.1 Certification fees (maximum)

| | | OCA participant | | Non participant | |
|-----------|--|------------------|------------------------------------|------------------|------------------------------------|
| | | Charging Station | Charging Station Management system | Charging Station | Charging Station Management system |
| OCPP1.6 |  | 7.000 € | 4.800 € | 10.500 € | 8.300 € |
| OCPP2.0.1 |  | 7.500 € | 4.800 € | 11.000 € | 8.300 € |
| |  | tbd | tbd | tbd | tbd |





DNV USA
Rochester, NY

DEKRA USA
Concord, CA



DEKRA
USA
Reston, VA

DNV NL,
Arnhem



DEKRA NL,
Arnhem

DNV SP,
Singapore



KSGA Korea ,
Seoul



KTC,
Gunpo, Gyeonggi-do

The Certification Labs use the OCPP Toolkit for OCPP 1.6 and OCTT for OCPP 2.0.1



Session Active

Welcome Milan

UTC Time: 08:19:05 Z

Test Case Document HTML Test Case Document PDF

Session Control

Stop Session

Connection to the SUT

Certification Profiles

Core
Advanced Security
Local Authorization
Smart Charging

Advanced Device Mgmt
Reservation
Advanced UI
ISO 15118 Support

Test Case Control

TC_E_03_CSMS Local start transaction - Cable plugin first

EXECUTE STOP ALL Show Test Case

Reset CSMS before testcase
Reset CSMS after testcase

Log Control

Auto Scroll
Auto Clear
Pretty Print JSON

End Point URL :

[Test] Boot Notification

```
{
  "eventType": "Updated",
  "seqNo": 262989975,
  "timestamp": "2022-11-01T08:18:53.476Z",
  "transactionInfo": {
    "chargingState": "Charging",
    "transactionId": "c5d920df-5cb9-4371-b837-edcf47b0f80a"
  },
  "triggerReason": "ChargingStateChanged"
}
```

2022-11-01 08:18:53:479 INFO Waiting for response message of type TransactionEventResponse

2022-11-01 08:18:53:712 MSG-IN [
 3,
 "d1461ae3-8ba2-45b2-b853-ca25817023cc",
 {
 "updatedPersonalMessage": {
 "format": "UTF8",
 "language": "en",
 "content": "€0.50/sess +€0.29/Kwh "
 }
 }
]

2022-11-01 08:18:53:721 INFO Received response message of the expected type.

2022-11-01 08:18:53:723 INFO The value of resetAfterTestcase is false

2022-11-01 08:18:53:735 PASS PASS

2022-11-01 08:18:53:737 INFO The test case has ended.

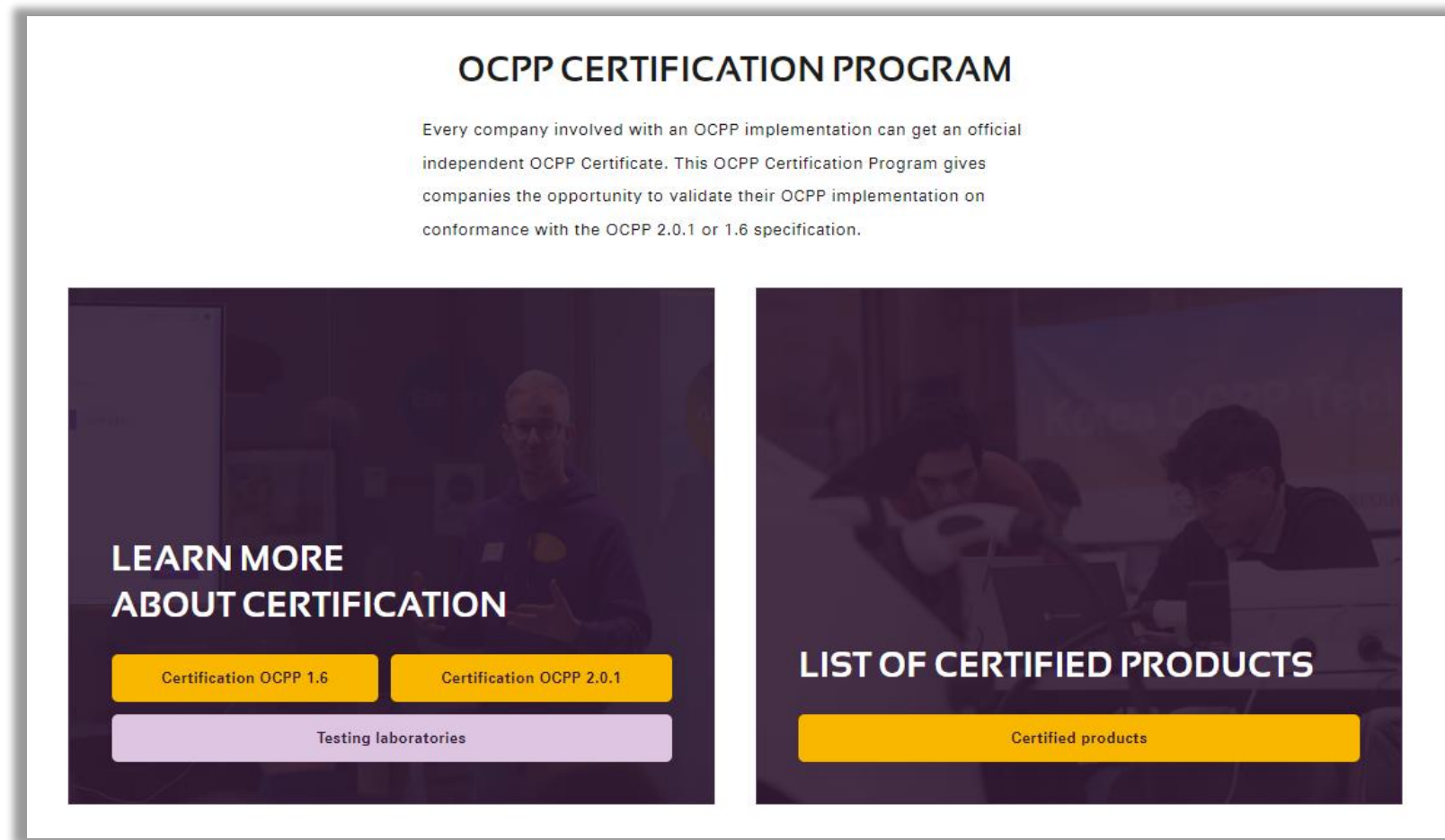
2022-11-01 08:18:53:738 STOPPED_TESTCASE

The screenshot shows the OCPP Toolkit interface. It has a sidebar with navigation options: Choose SUT, Configuration, Test Run, and Reports. The main area is divided into several control panels: Session Control (Stop Session, Connection to the SUT), Certification Profiles (checkboxes for Core, Advanced Security, Local Authorization, Smart Charging, Advanced Device Mgmt, Reservation, Advanced UI, ISO 15118 Support), Test Case Control (TC_E_03_CSMS, EXECUTE, STOP ALL, Show Test Case, Reset CSMS before/after testcase), Log Control (Auto Scroll, Auto Clear, Pretty Print JSON), and End Point URL. A log window at the bottom shows a sequence of messages, including a 'MSG-IN' with a JSON payload and a 'STOPPED_TESTCASE' status.

The OCTTs are available for members and non-members



Information on is the OCA website



- Certification Procedure Document → *Describes the Certification Procedure (1 document for 1.6 and 2.0.1)*
- Test Procedure & Test Plans → *Describes the Test Procedure (version specific)*
- PICS (Protocol Implementation Conformance Statement) → *Describes what vendor wants to certify (version specific)*
- List of Labs & Contact Details → *The same labs for both versions*

Managed
by the
Compliance
Working Group



Example: PICS for OCPP 2.0.1

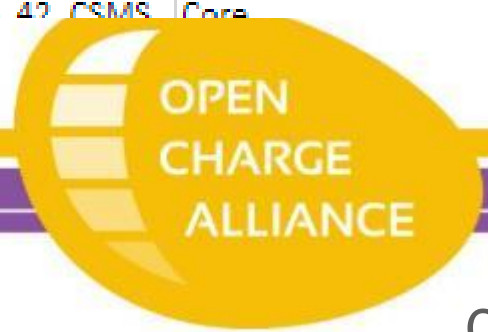
| CORE | | Supported / present |
|------|---|---------------------|
| Id | Feature | |
| C-11 | Unlocking connector for Charging Station with detachable cable (UnlockConnector). | Yes |
| C-13 | Reset per EVSE | No |

| A | B | C | D | E | F | G | H |
|--------------|-----------------------|---|--|---------|---------------------------------------|--------|--|
| Testcase | Certification Profile | Name | CSMS Status | Feature | Feature Name | Status | Perform test for certification (based on PICS) |
| TC_A_01_CSMS | Core | Basic Authentication - Valid username/password combination | Mandatory test for a mandatory feature | | | | TRUE |
| TC_A_02_CSMS | Core | Basic Authentication - Username does not equal ChargingStationId | Mandatory test for a mandatory feature | | | | TRUE |
| TC_A_03_CSMS | Core | Basic Authentication - Invalid password | Mandatory test for a mandatory feature | | | | TRUE |
| TC_A_09_CSMS | Core | Update Charging Station Password for HTTP Basic Authentication - Accepted | Mandatory test for a mandatory feature | | | | TRUE |
| TC_A_10_CSMS | Core | Update Charging Station Password for HTTP Basic Authentication - Rejected | Mandatory test for a mandatory feature | | | | TRUE |
| TC_A_04_CSMS | Core | TLS - server-side certificate - Valid certificate | Mandatory test for a mandatory feature | | | | TRUE |
| TC_A_06_CSMS | Core | TLS - server-side certificate - TLS version too low | Mandatory test for a mandatory feature | | | | TRUE |
| TC_A_19_CSMS | Core | Upgrade Charging Station Security Profile - Accepted | Mandatory test for a mandatory feature | | | | TRUE |
| TC_B_01_CSMS | Core | Cold Boot Charge Point - Accepted | Mandatory test for a mandatory feature | | | | TRUE |
| TC_B_02_CSMS | Core | Cold Boot Charge Point - Pending | Mandatory for optional feature | C-44 | BootNotification Pending | | FALSE |
| TC_B_30_CSMS | Core | Cold Boot Charge Point - Pending/Rejected - SecurityError | Possibly mandatory, depending on your system | | | | TRUE |
| TC_B_31_CSMS | Core | Cold Boot Charge Point - Pending/Rejected - TriggerMessage | Possibly mandatory, depending on your system | | | | TRUE |
| TC_B_06_CSMS | Core | Get variables - Single value | Mandatory test for a mandatory feature | | | | TRUE |
| TC_B_07_CSMS | Core | Get variables - Multiple | Mandatory for optional feature | C-45 | Multiple elements GetVariablesRequest | | TRUE |
| TC_B_09_CSMS | Core | Set variables - Single value | Mandatory test for a mandatory feature | | | | TRUE |
| TC_B_10_CSMS | Core | Set variables - Multiple | Mandatory for optional feature | C-46 | Multiple elements SetVariablesRequest | | TRUE |
| TC_B_12_CSMS | Core | Get Base Report - Success - ConfigurationInventory | Mandatory for optional feature | C-17 | ConfigurationInventory | | TRUE |
| TC_B_13_CSMS | Core | Get Base Report - Success - FullInventory | Possibly mandatory, depending on your system | | | | TRUE |
| TC_B_20_CSMS | Core | Reset - Charging Station - Without ongoing transaction | Mandatory test for a mandatory feature | | | | TRUE |
| TC_B_21_CSMS | Core | Reset - Charging Station - With ongoing transaction - OnIdle | Mandatory test for a mandatory feature | | | | TRUE |
| TC_B_22_CSMS | Core | Reset - Charging Station - With ongoing transaction - Immediate | Mandatory test for a mandatory feature | | | | TRUE |
| TC_B_25_CSMS | Core | Reset - EVSE - Without ongoing transaction | Mandatory for optional feature | C-13 | Reset per EVSE | | FALSE |
| TC_B_26_CSMS | Core | Reset - EVSE - With ongoing transaction - OnIdle | Mandatory for optional feature | C-13 | Reset per EVSE | | FALSE |
| TC_B_27_CSMS | Core | Reset - EVSE - With ongoing transaction - Immediate | Mandatory for optional feature | C-13 | Reset per EVSE | | FALSE |
| TC_B_40_CSMS | Core | Set new NetworkConnectionProfile - Accepted | Mandatory test for a mandatory feature | | | | TRUE |

Yes
No

C-13
Reset per EVSE

FALSE



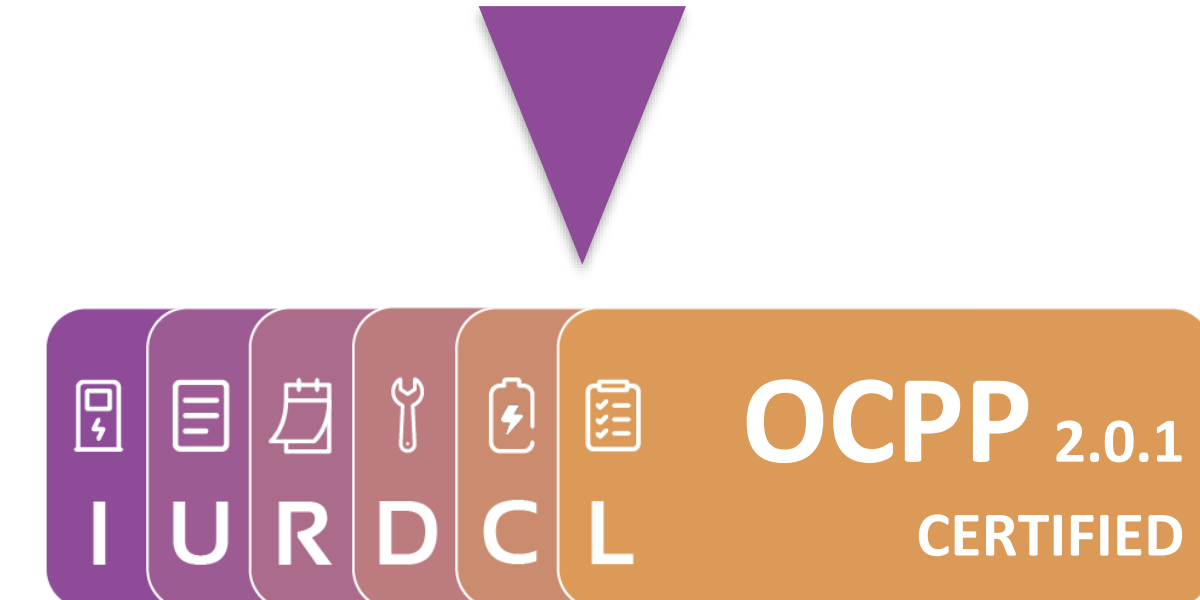
OCPP 2.0.1 certification roadmap



OCPP 2.0.1 certification opened in **June '23** for 'Core' & 'Advanced Security'



OCPP 2.0.1 certification is expected to in **April '24** for the 6 additional profiles



Currently Sprinting...

- We are again “sprinting” towards opening for the remaining OCPP 2.0.1 Certification Profiles
- Validation of OCTT with real implementations & prepare the implementations for a real certification run
- Open OCPP 2.0.1 Certification Program for remaining Certification Profiles in April 2024





We are looking forward to seeing you at the
OCPP Certification Program!!