

Certification Program Update

Lonneke Driessen – Director Standardization OCA



www.OpenChargeAlliance.org

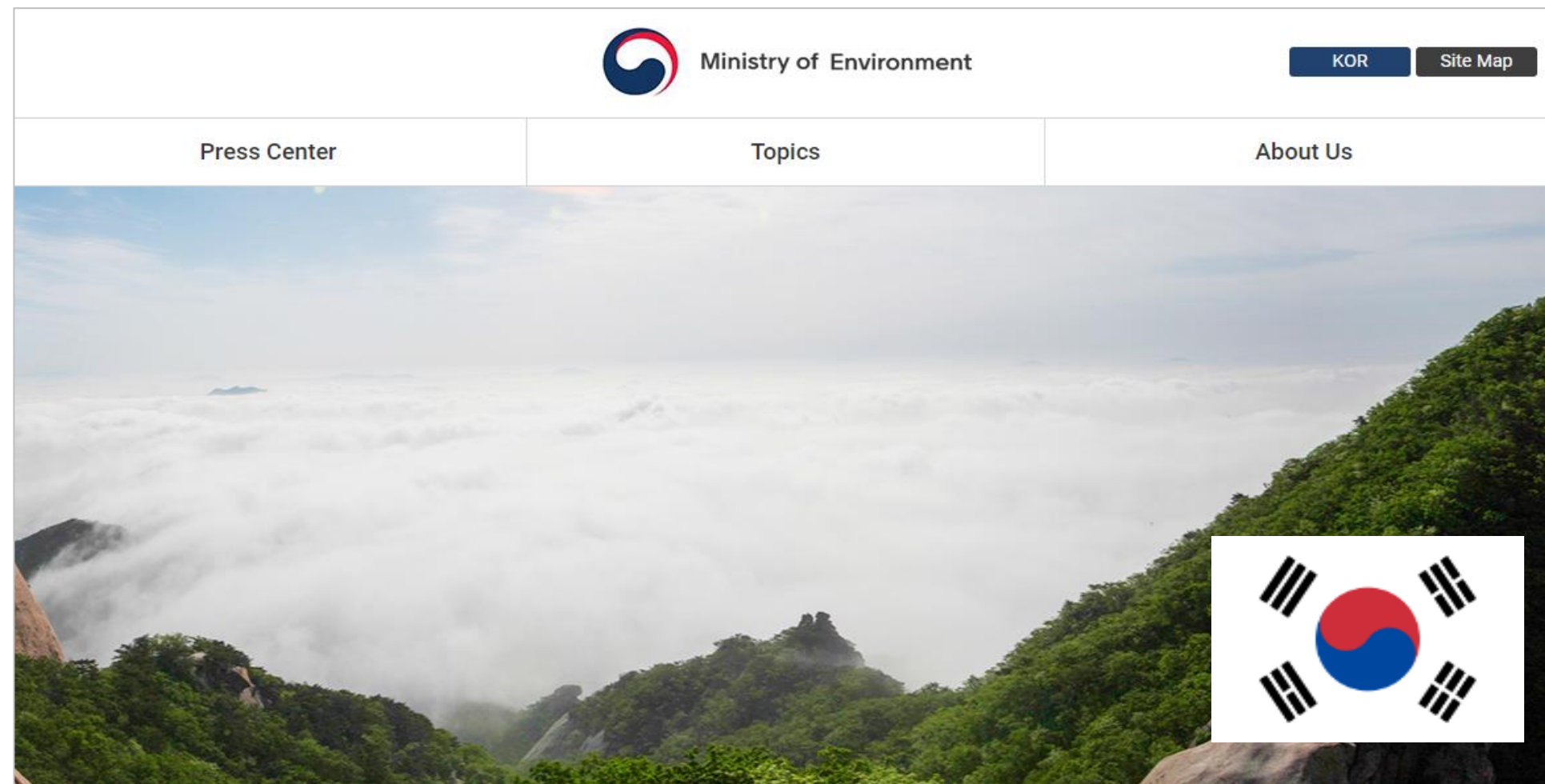


Why OCPP Certification ?

- 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



Why OCPP Certification ?



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

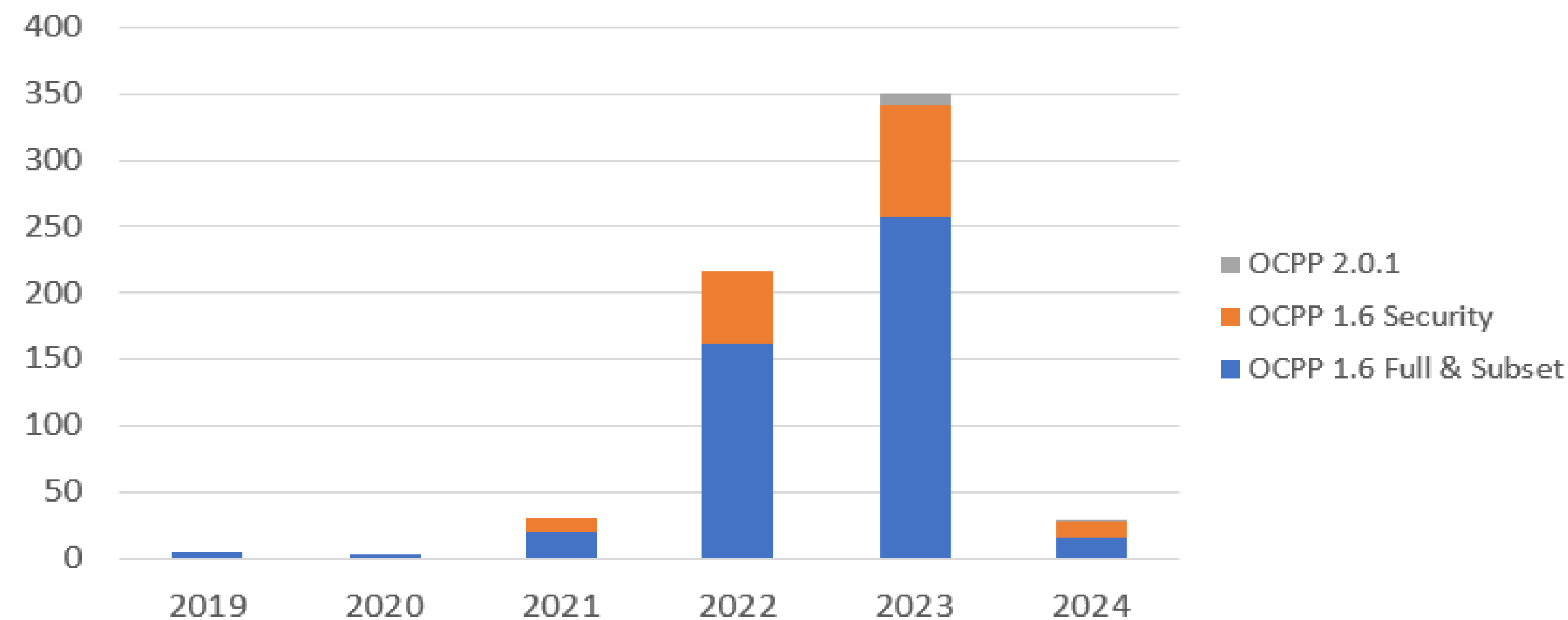
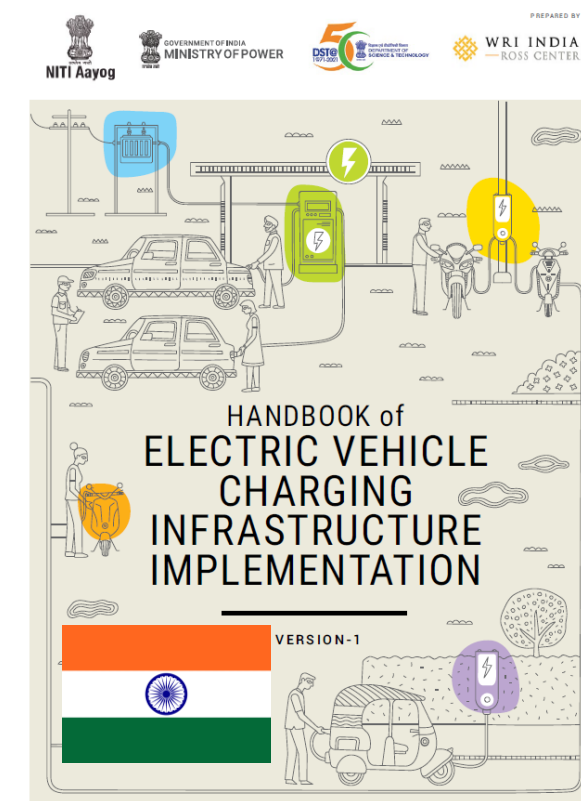
Contact: FHWA.PressOffice@dot.gov

Tel: (202) 366-0660



DCFC Program
Program Opportunity Notice (PON) 4509
Up to \$16 Million Available
NYSDERDA 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 2.0.1 Certification is available!

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

Our OCPP 2.0.1 front runners



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	1.0.0
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_OCPS 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



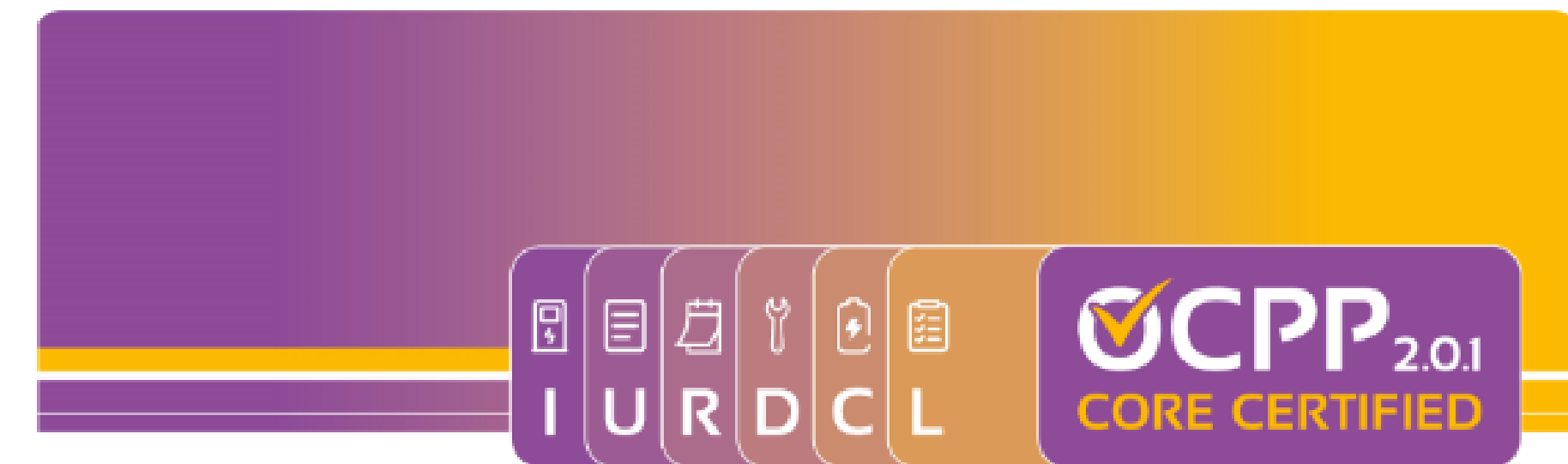
Types of OCPP Certificates – OCPP 2.0.1

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





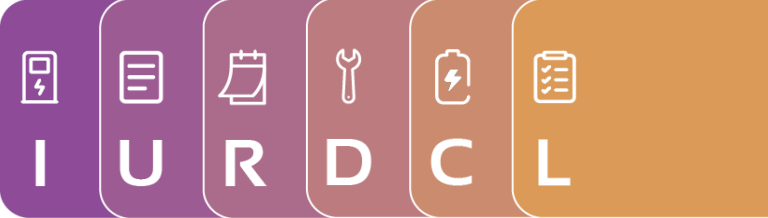
Functionality

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





DEKRA USA
Concord, CA

DNV USA
Rochester, NY



DEKRA
USA
Reston, VA

DNV NL,
Arnhem



DEKRA NL,
Arnhem

DNV SP,
Singapore

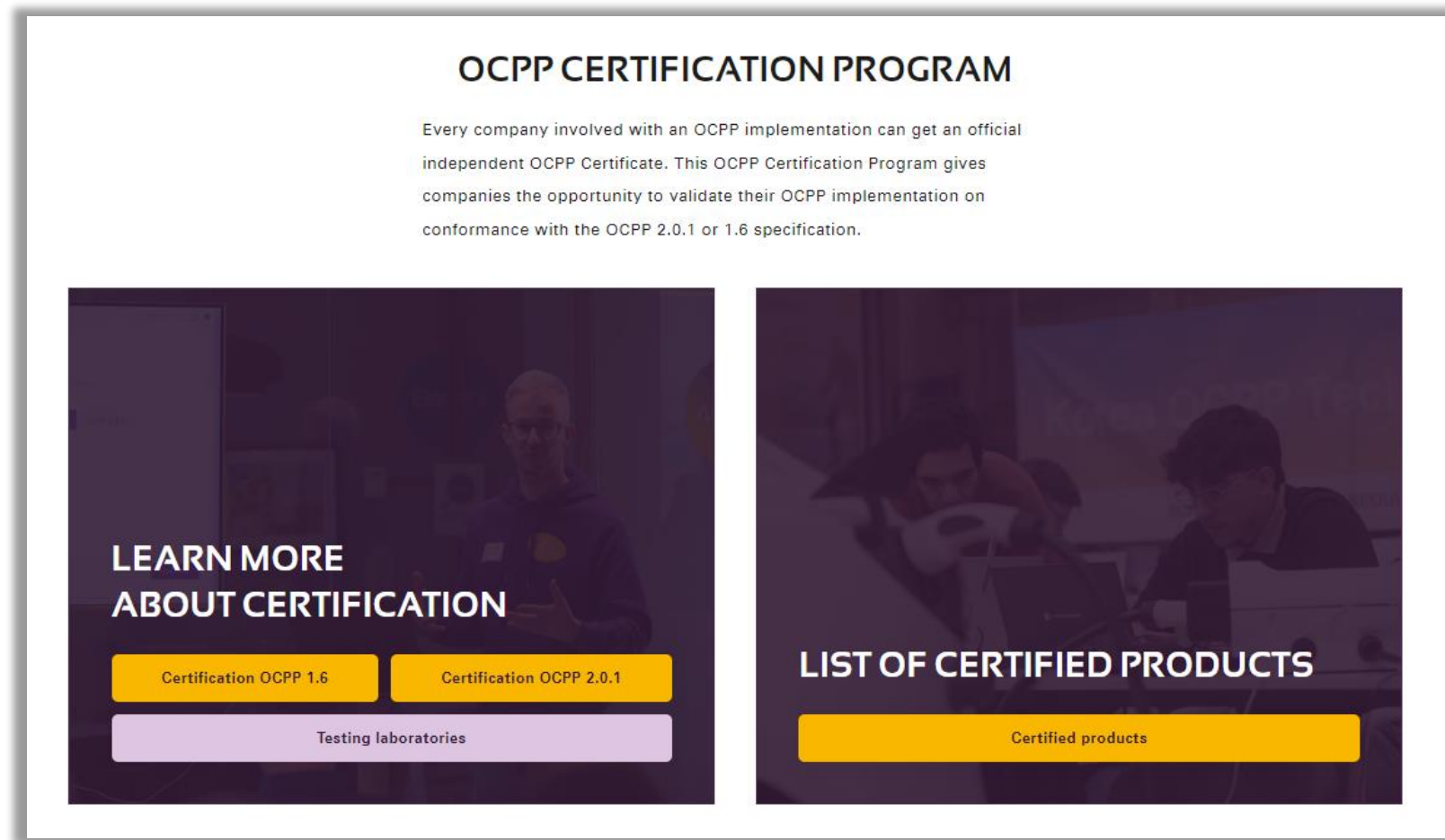


KSGA Korea ,
Seoul



KTC,
Gunpo, Gyeonggi-do

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



PICS for OCPP 2.0.1

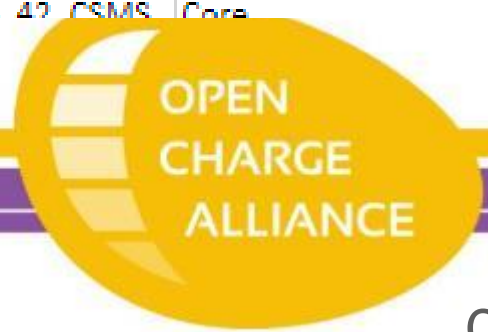
CORE		
Id	Feature	Supported / present
C-11	Unlocking connector for Charging Station with detachable cable (UnlockConnector).	Yes
C-13	Reset per EVSE	No

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
C-13
Reset per EVSE
C-13
Reset per EVSE

TRUE
FALSE
FALSE
FALSE
TRUE



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	

COMPLIANCE TOOL

- Choose SUT
- Configuration
- Test Run
- Reports

The screenshot shows the OCPP Toolkit web interface. It has a sidebar with navigation options: Choose SUT, Configuration, Test Run, and Reports. The main area is titled 'Session Active' and contains several control panels. The 'Session Control' panel has a 'Stop Session' button and a 'Connection to the SUT' indicator. The 'Certification Profiles' panel has checkboxes for various profiles like Core, Advanced Security, Local Authorization, Smart Charging, Advanced Device Mgmt, Reservation, Advanced UI, and ISO 15118 Support. The 'Test Case Control' panel shows the selected test case 'TC_E_03_CSMS' and has buttons for 'EXECUTE', 'STOP ALL', and 'Show Test Case'. There are also checkboxes for 'Reset CSMS before testcase' and 'Reset CSMS after testcase'. The 'Log Control' panel has checkboxes for 'Auto Scroll', 'Auto Clear', and 'Pretty Print JSON'. The 'End Point URL' field is empty. A log window at the bottom shows a series of messages with timestamps, status indicators (INFO, MSG-IN, PASS, STOPPED_TESTCASE), and JSON payloads. The interface is clean and professional, using a purple and yellow color scheme.

The OCTTs are available for members and non-members



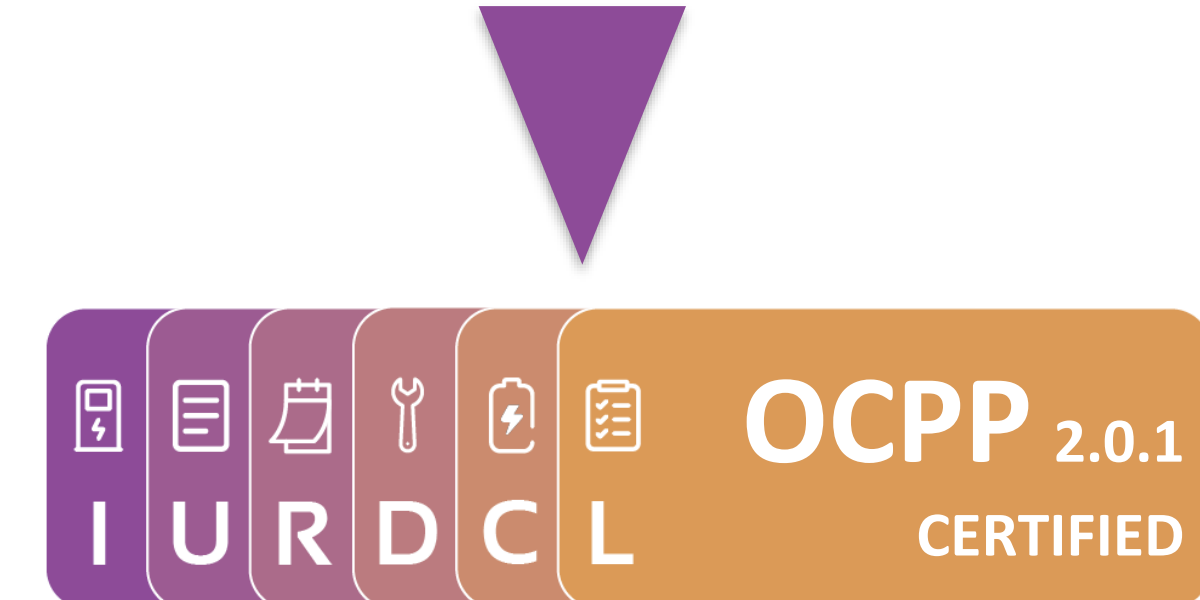
OCPP 2.0.1 certification roadmap



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



If you are ready for certification, contact these labs!





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