

A blurred background image showing a group of people in a workshop setting. A man in a dark polo shirt is speaking into a microphone. Another man in a dark suit is visible on the right side of the frame. The overall color palette is warm, with yellow and orange tones.

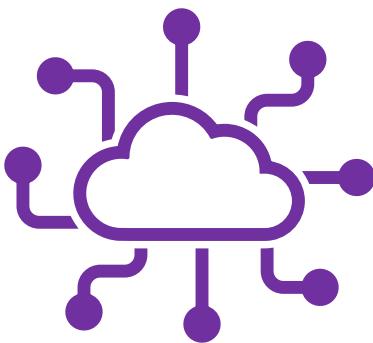
OCPP Workshop

ISUW 24

New Delhi, March 12th, 2024

Introduction to OCPP & OCA

Charging Station Operator



Charging Station

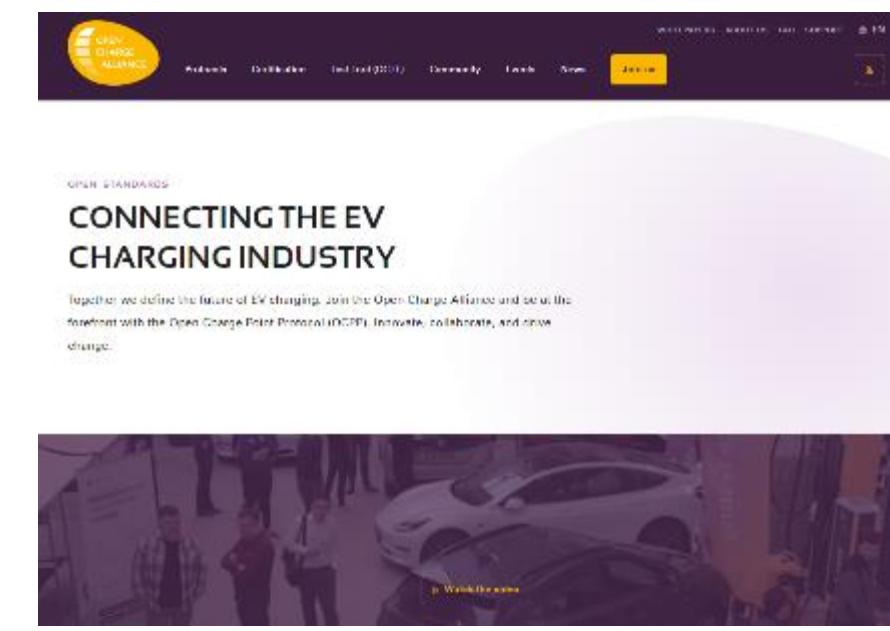


EV



J01 - Sending Meter Values	
Table J01 - J01 - Sending Meter Values	
1	Name
2	Description
3	Functional Block
4	Objective
5	Actions
6	Successive Requests
7	Preconditions
8	Functional Block
Figure 01: Structure Diagrams: Sending Meter Values	
1	Error handling
2	Responses

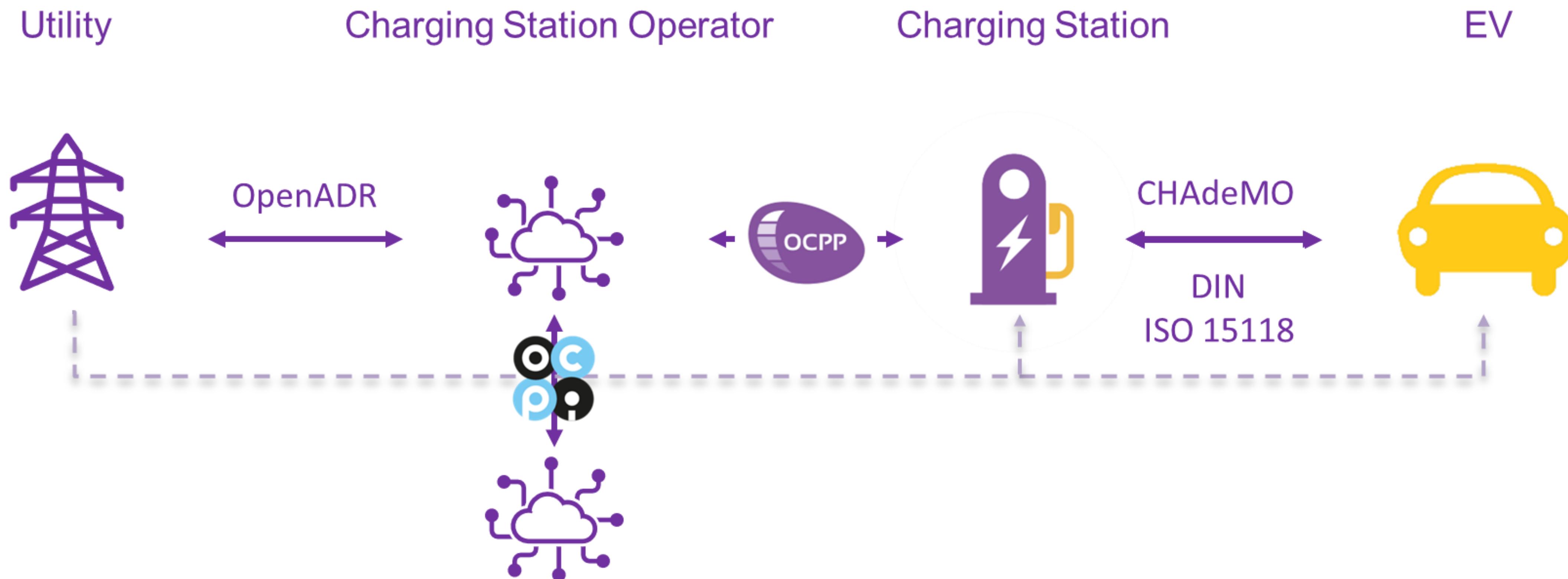
Development of the
OCPP protocol



Development of conformance
testing and certification

Promotion of OCPP

OCPP is a piece of the puzzle in EV charging



All information about OCA and OCPP is on the website

The screenshot shows the top navigation bar of the Open Charge Alliance website. It features a yellow oval logo on the left with the text "OPEN CHARGE ALLIANCE". To the right are links for "Protocols", "Certification", "Test Tool (OCTT)", "Community", "Events", "News", and a prominent yellow "Join us" button. Further right are links for "WHITEPAPERS", "ABOUT US", "FAQ", "SUPPORT", and a language selector set to "EN". On the far right is a user icon.

NEWS & UPDATES

[View all](#)

OCA AT THE INDIA SMART ENERGY WEEK(

THU 22 FEB 2024

India SMART UTILITY Week 2024

12 - 16 March 2024

New Delhi

A circular graphic for the India SMART UTILITY Week 2024, featuring a globe icon and the text "India SMART UTILITY Week 2024" and "12 - 16 March 2024 New Delhi".

PLUGFEST EU FEBRUARY 27-29: SIDE PROGRAM AVAILABLE!

THU 01 FEB 2024

A photograph showing a group of people seated in rows, facing forward, likely attending a meeting or presentation.

EVENTS

[View all](#)

MEMBERS ONLY EVENT

OCA TECHNOLOGYWG F2F MEETING

MON 26 FEB 2024

EWALD-RENZ-STRASSE 1A, 76669 BAD SCHÖNBORN, GERMANY

LIVE EVENT

**EU OCPP PLUGFEST IN BAD SCHÖNBORN, GERMANY:
FEBRUARY 27-29**

WED 28 FEB - THU 29 FEB 2024

EWALD-RENZ-STRASSE 1A, 76669 BAD SCHÖNBORN, DUITSLAND

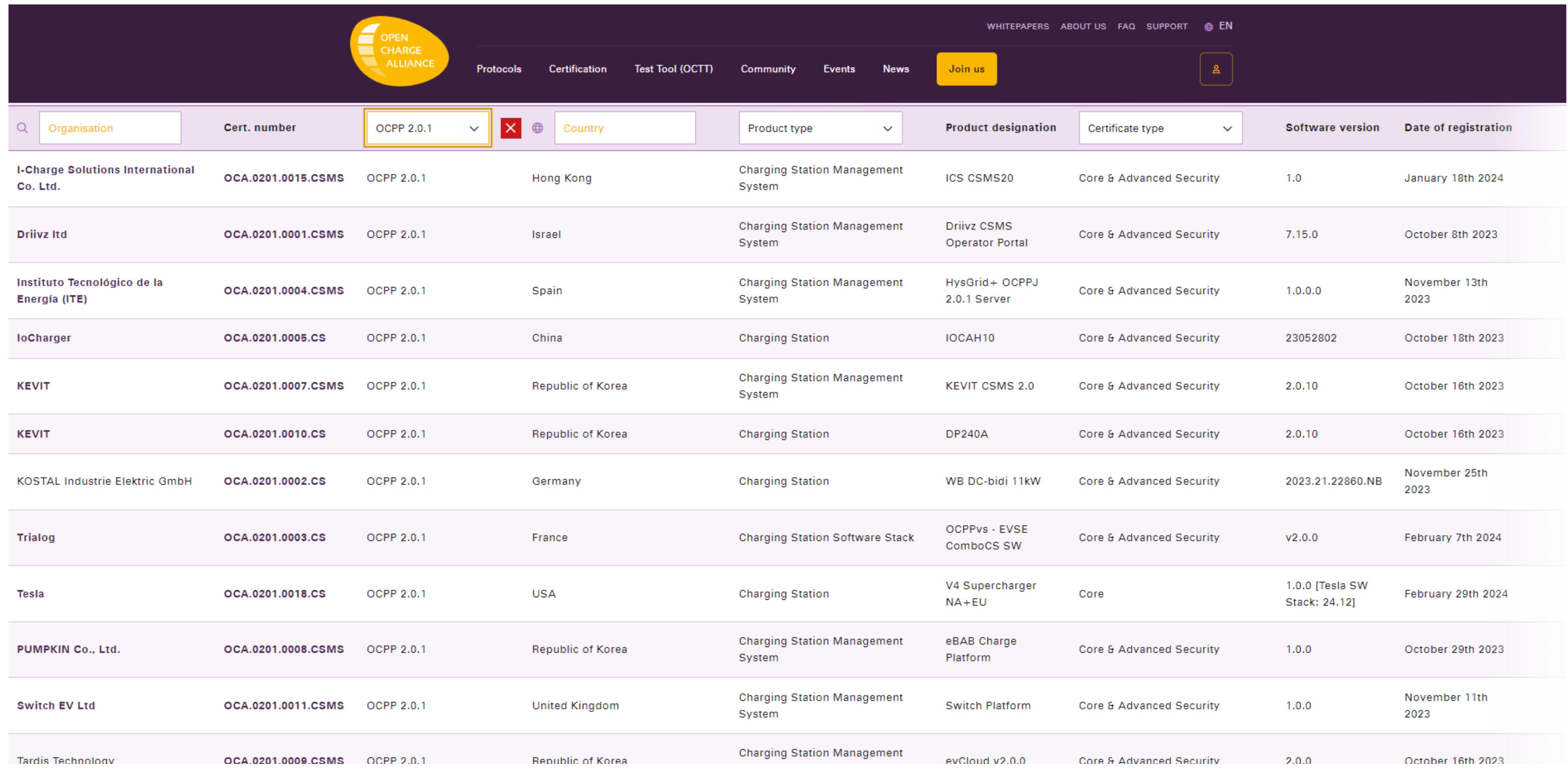
MEMBERS ONLY EVENT

OCA TECHNOLOGYWG F2F MEETING

WED 28 FEB 2024

EWALD-RENZ-STRASSE 1A, 76669 BAD SCHÖNBORN, GERMANY

You can filter the certified product list



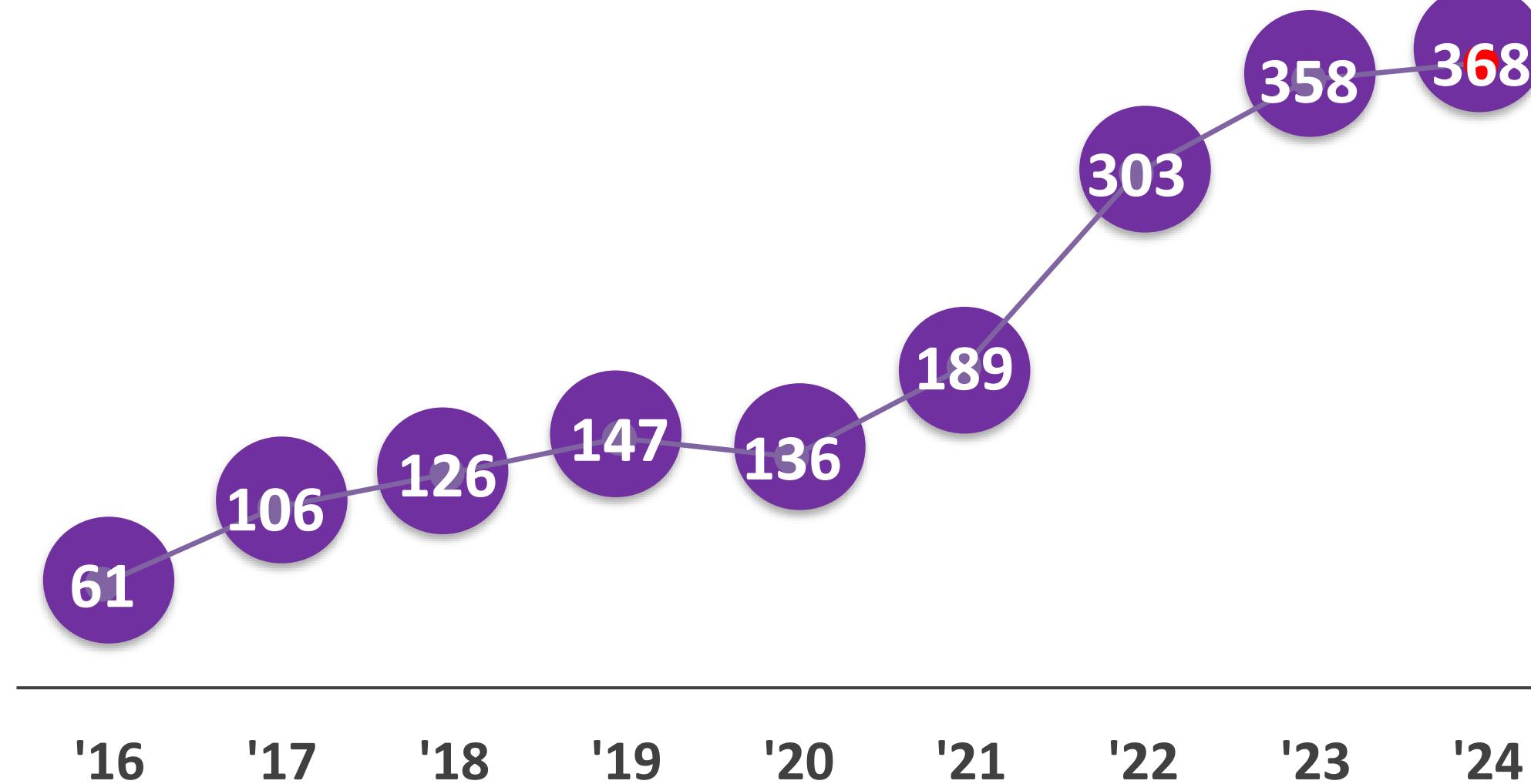
The screenshot shows the Open Charge Alliance website's product certification page. At the top, there's a navigation bar with links for WHITEPAPERS, ABOUT US, FAQ, SUPPORT, and EN. Below the navigation is a search bar with dropdown filters for Cert. number (set to OCPP 2.0.1), Country (set to Hong Kong), Product type (Charging Station Management System), Product designation (ICS CSMS20), Certificate type (Core & Advanced Security), Software version (1.0), and Date of registration (January 18th 2024). The main content area displays a table of certified products from various companies, each with its organization name, certificate number, protocol version, location, product details, and registration information.

Organisation	Cert. number	OCPP 2.0.1	Country	Product type	Product designation	Certificate type	Software version	Date of registration
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	January 18th 2024
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	October 8th 2023
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	1.0.0.0	November 13th 2023
IoCharger	OCA.0201.0005.CS	OCPP 2.0.1	China	Charging Station	IOCAH10	Core & Advanced Security	23052802	October 18th 2023
KEVIT	OCA.0201.0007.CSMS	OCPP 2.0.1	Republic of Korea	Charging Station Management System	KEVIT CSMS 2.0	Core & Advanced Security	2.0.10	October 16th 2023
KEVIT	OCA.0201.0010.CS	OCPP 2.0.1	Republic of Korea	Charging Station	DP240A	Core & Advanced Security	2.0.10	October 16th 2023
KOSTAL Industrie Elektric GmbH	OCA.0201.0002.CS	OCPP 2.0.1	Germany	Charging Station	WB DC-bidi 11kW	Core & Advanced Security	2023.21.22860.NB	November 25th 2023
Trialog	OCA.0201.0003.CS	OCPP 2.0.1	France	Charging Station Software Stack	OCPPvs - EVSE ComboCS SW	Core & Advanced Security	v2.0.0	February 7th 2024
Tesla	OCA.0201.0018.CS	OCPP 2.0.1	USA	Charging Station	V4 Supercharger NA+EU	Core	1.0.0 [Tesla SW Stack: 24.12]	February 29th 2024
PUMPKIN Co., Ltd.	OCA.0201.0008.CSMS	OCPP 2.0.1	Republic of Korea	Charging Station Management System	eBAB Charge Platform	Core & Advanced Security	1.0.0	October 29th 2023
Switch EV Ltd	OCA.0201.0011.CSMS	OCPP 2.0.1	United Kingdom	Charging Station Management System	Switch Platform	Core & Advanced Security	1.0.0	November 11th 2023
Tardis Technology	OCA.0201.0009.CSMS	OCPP 2.0.1	Republic of Korea	Charging Station Management	evCloud v2.0.0	Core & Advanced Security	2.0.0	October 16th 2023

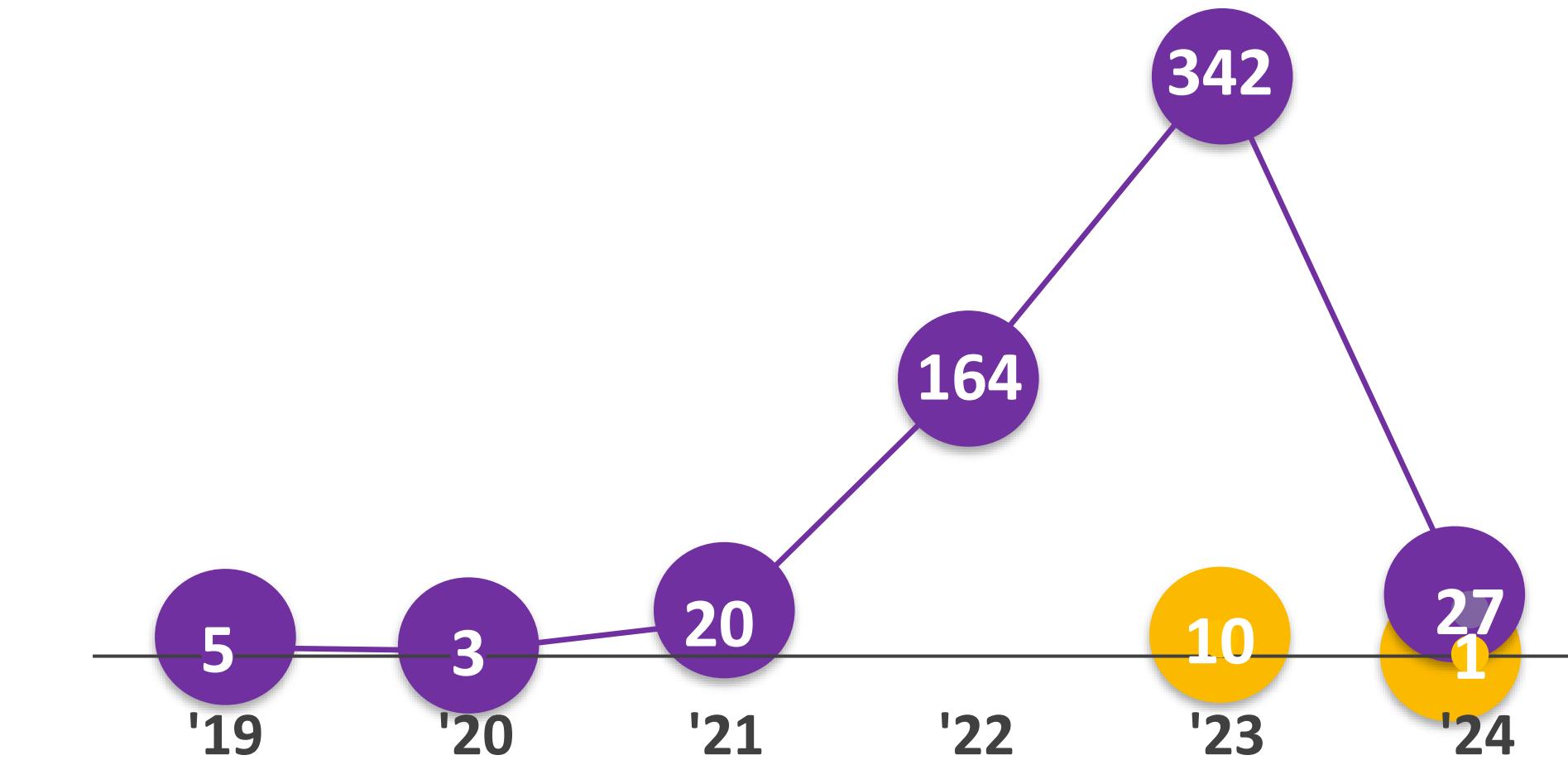


Facts & Figures

OCA Participants

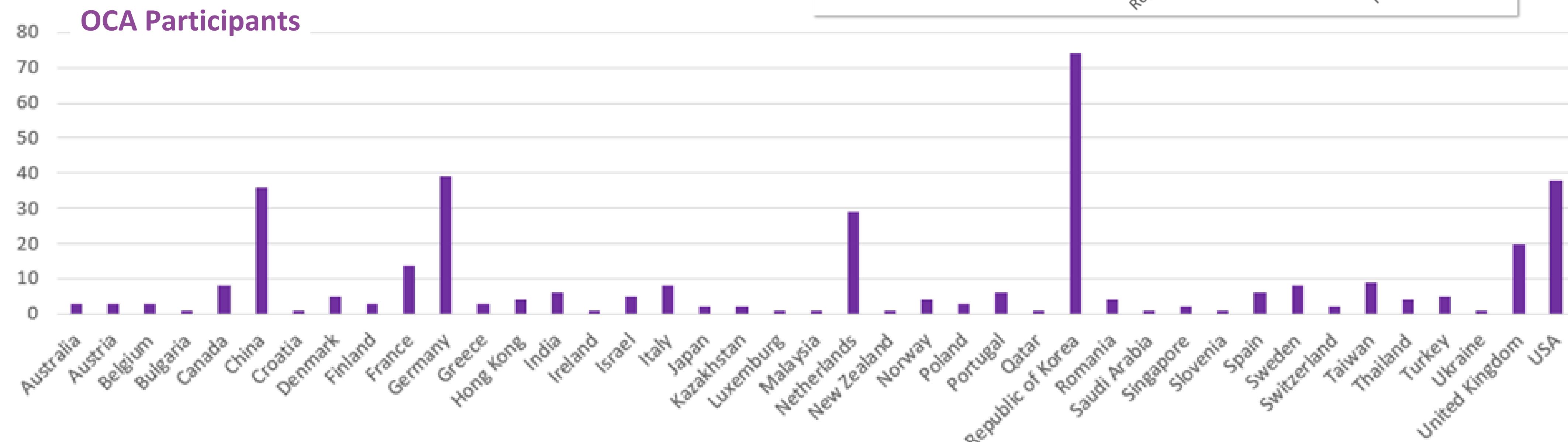
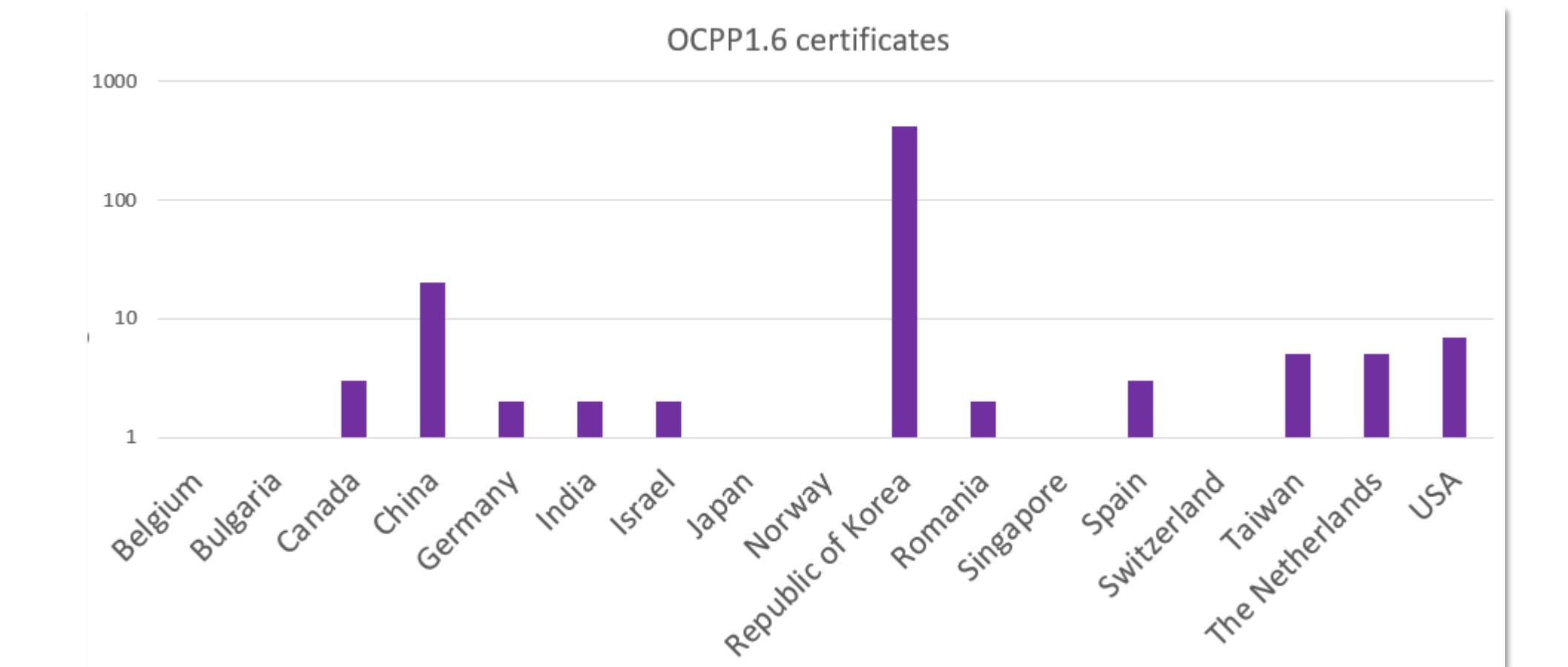


OCPP Certificates

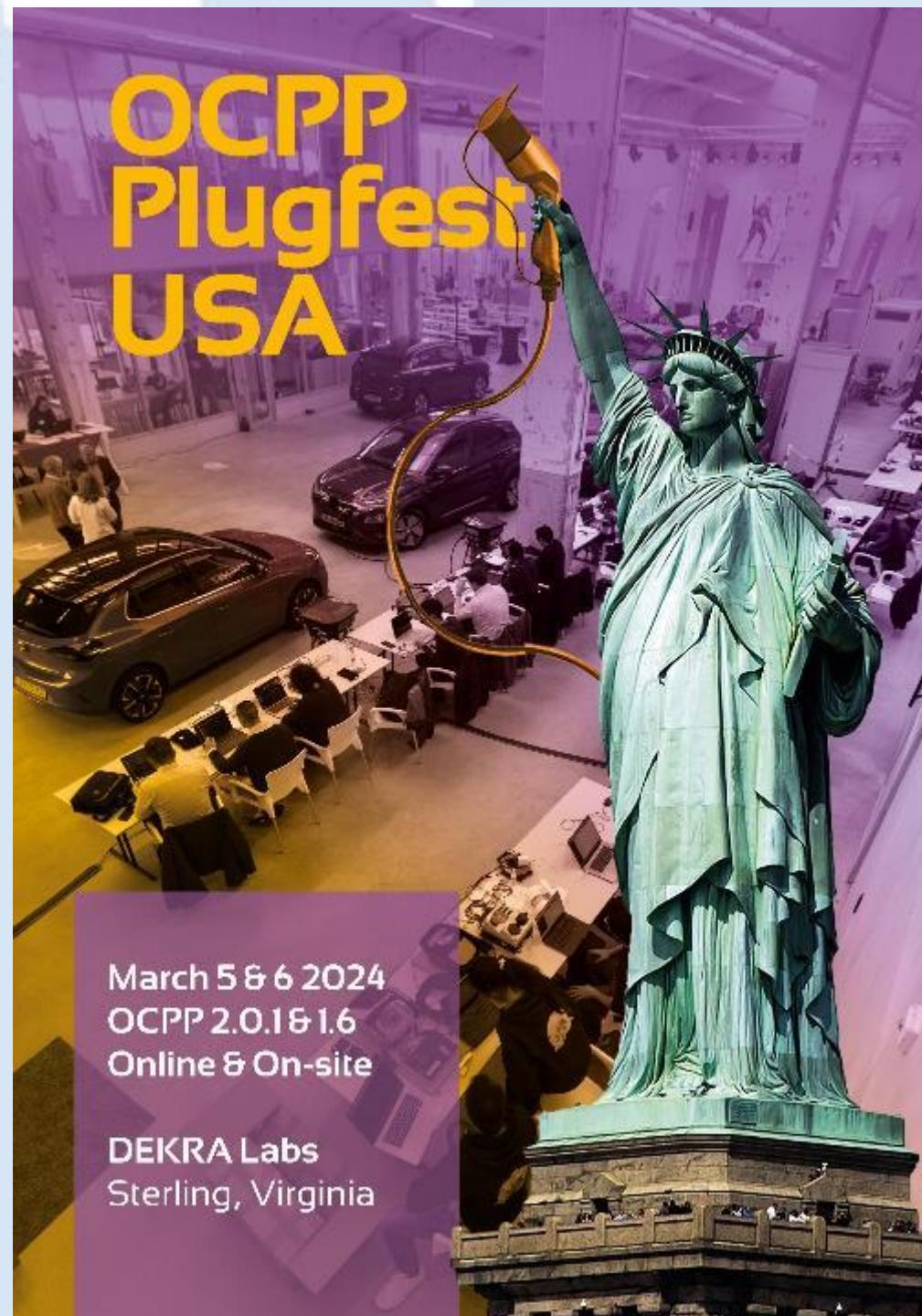


India: #2 in OCPP downloads

Top Downloads by Country	
United States:	707
India:	637
Germany:	544
Netherlands:	401
China:	337



OCPP Plugfests 2024 February - April

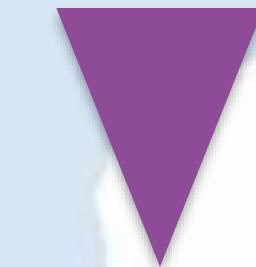


PIONIX



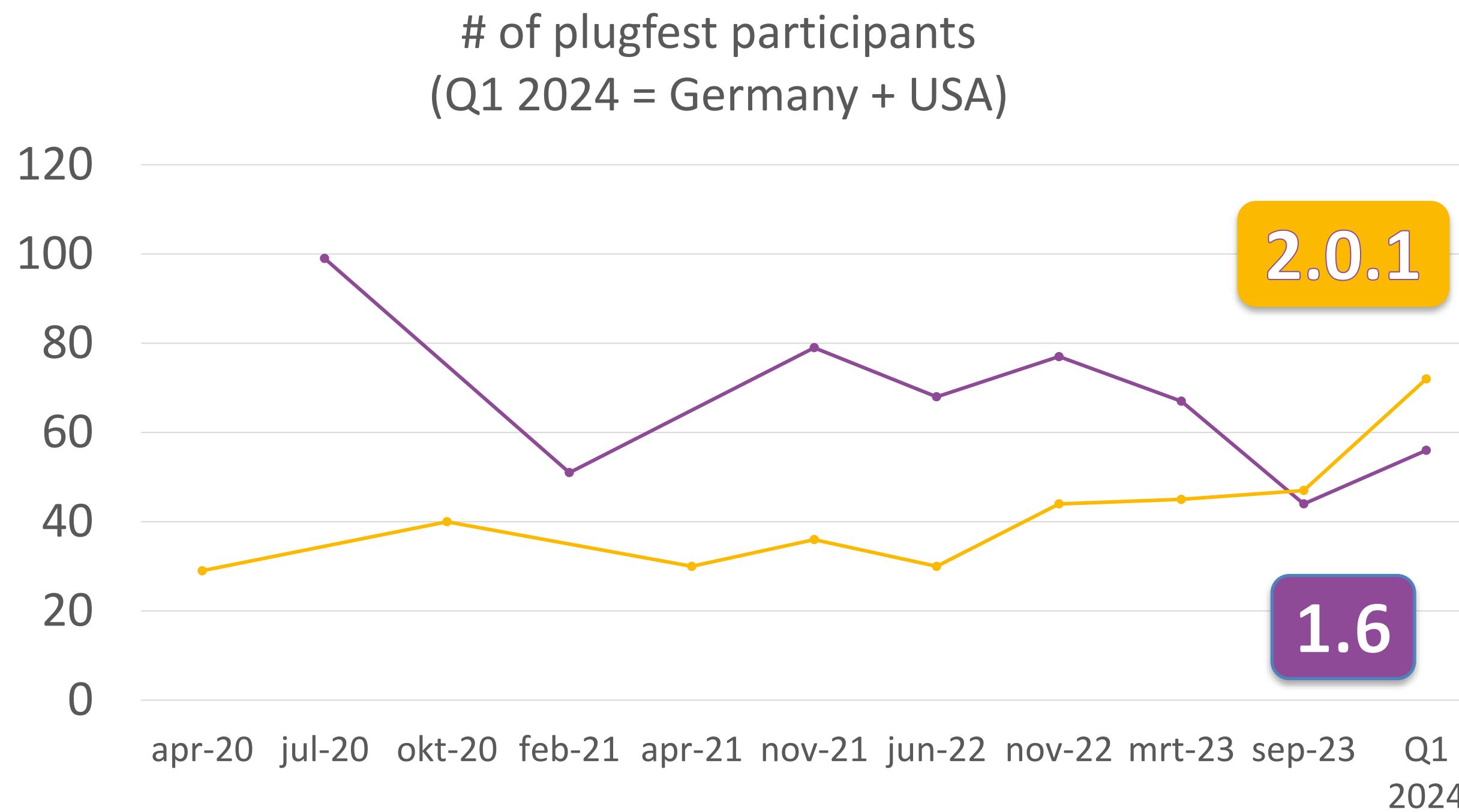
Korea – Ansan (near Seoul)

- April 18th / 19th
- Hosted by KERI
- Onsite (tbd)
- Online 1.6 & 2.0.1



Combined with KERI test week

Plugfest trends



OCTT now supports both 1.6 and 2.0.1!

The screenshot shows the OCTT interface. On the left is a sidebar with the Open Charge Alliance logo and navigation links: COMPLIANCE TOOL, OCPP Version & SUT, Configuration, Test Run, and Reports. The main area has a header "Welcome Milan" with a power icon. It displays "OCPP Version" with buttons for OCPP 1.6 (grayed out) and OCPP 2.0.1 (highlighted). Below that is "System Under Test" with buttons for CSMS (highlighted) and Charging Station. At the bottom right is a "CONTINUE" button.

Welcome Milan

OCPP Version

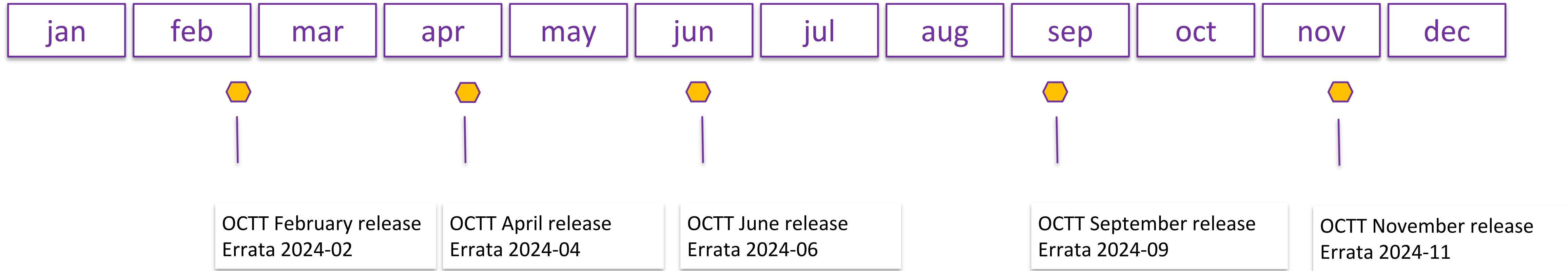
OCPP 1.6 OCPP 2.0.1

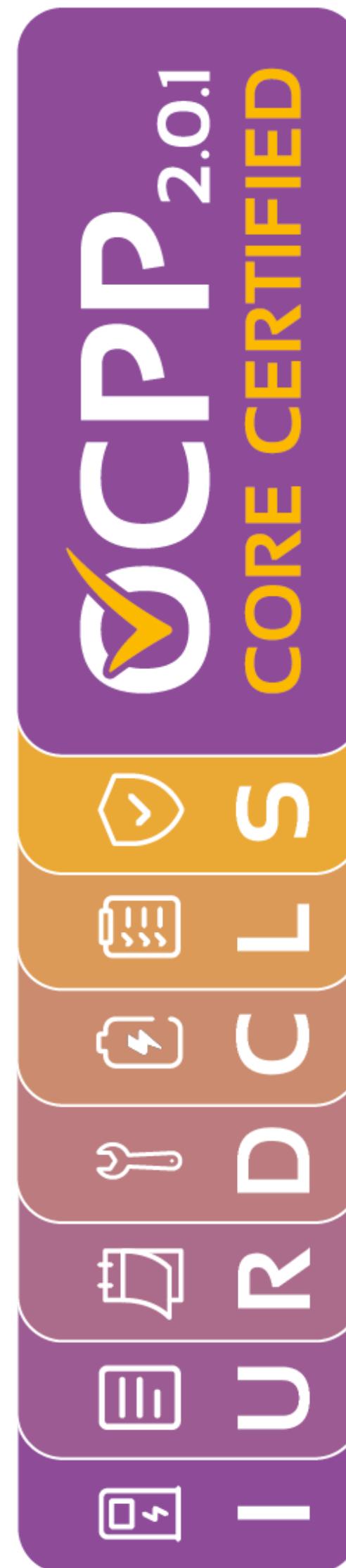
System Under Test

CSMS Charging Station

CONTINUE

Every 2 months we release a new OCTT version and errata



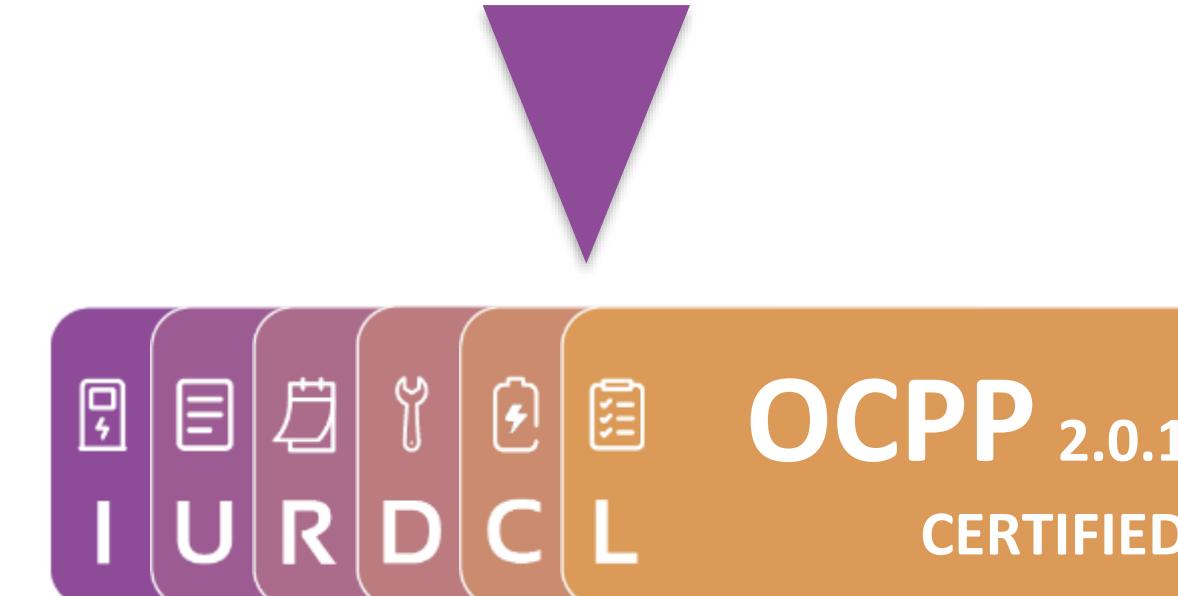


OCPP 2.0.1 certification roadmap

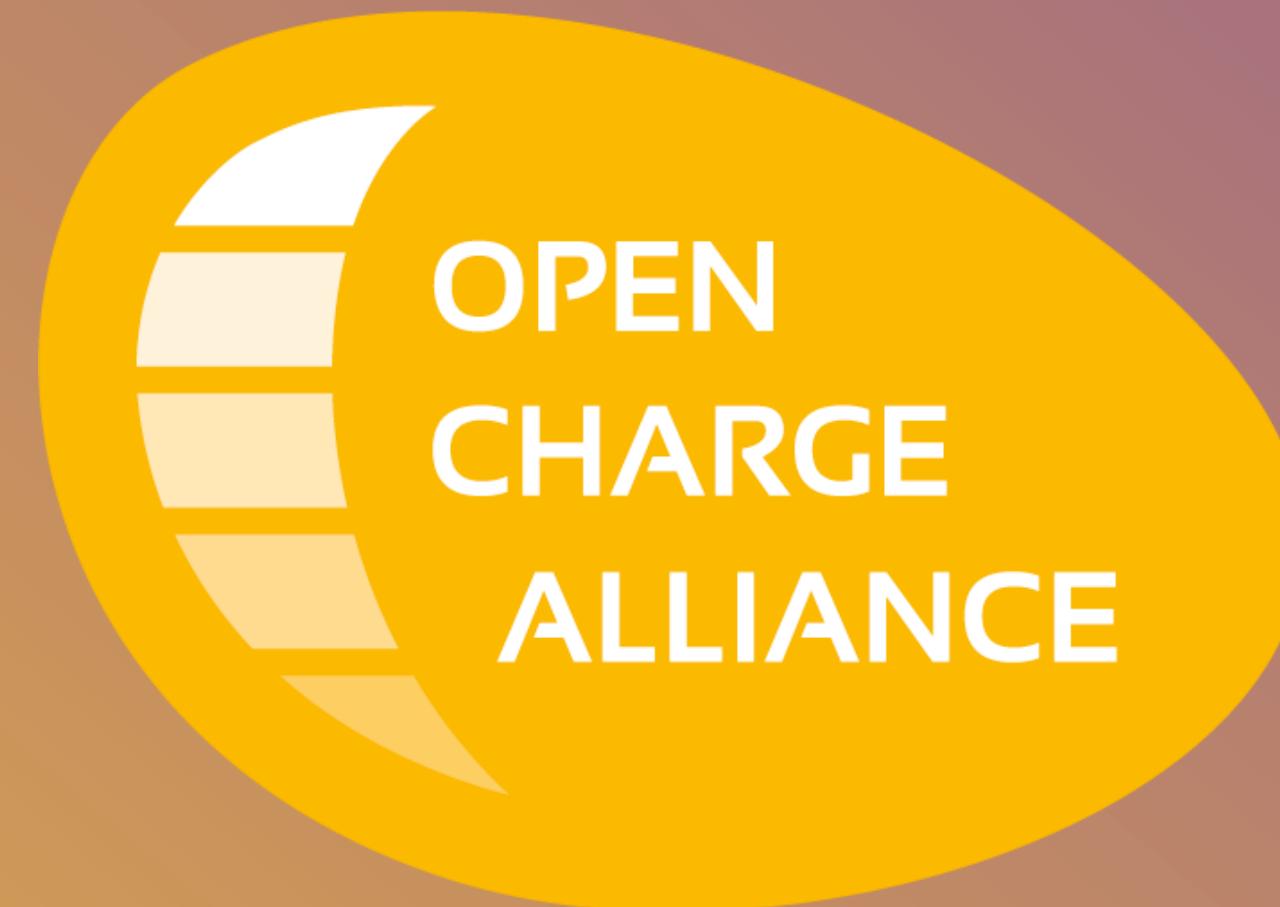
OCPP 2.0.1 certification opened in **June '23** for 'Core' & 'Advanced Security'



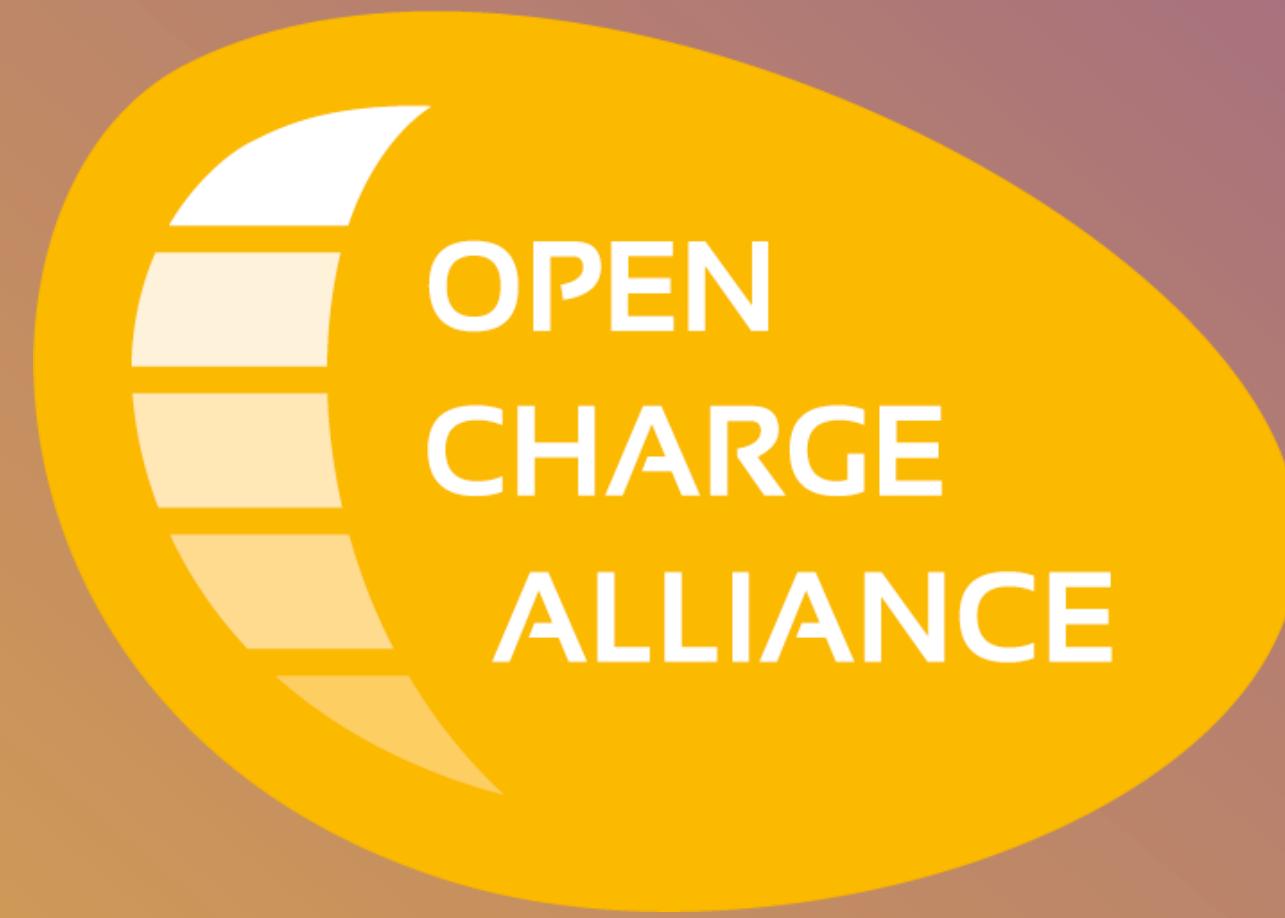
OCPP 2.0.1 certification will open in **February April '24** for the 6 additional profiles



OCPP as an IEC standard

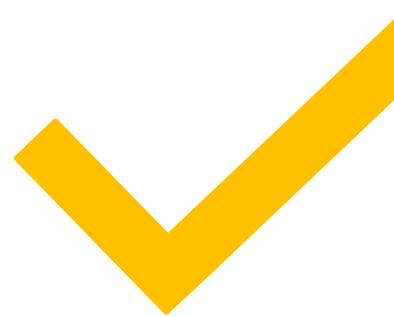


- OCA & IEC intend to submit OCPP for approval as an International Standard using the IEC Fast Track Procedure.
- If the IEC TC69 P member committees approve of the proposal, OCPP will be published 'as-is' as an International Standard.
- OCA will remain the maintainer of OCPP and intends to submit all future versions (e.g. OCPP2.0.1 ed4 (including future errata), OCPP2.1 and OCPP3.0) to IEC (TC69) for 'as-is' approval as an IEC International Standard following the Fast Track procedure.



Two steps

Step 1
OCA is accepted
as Liaison A
partner of IEC



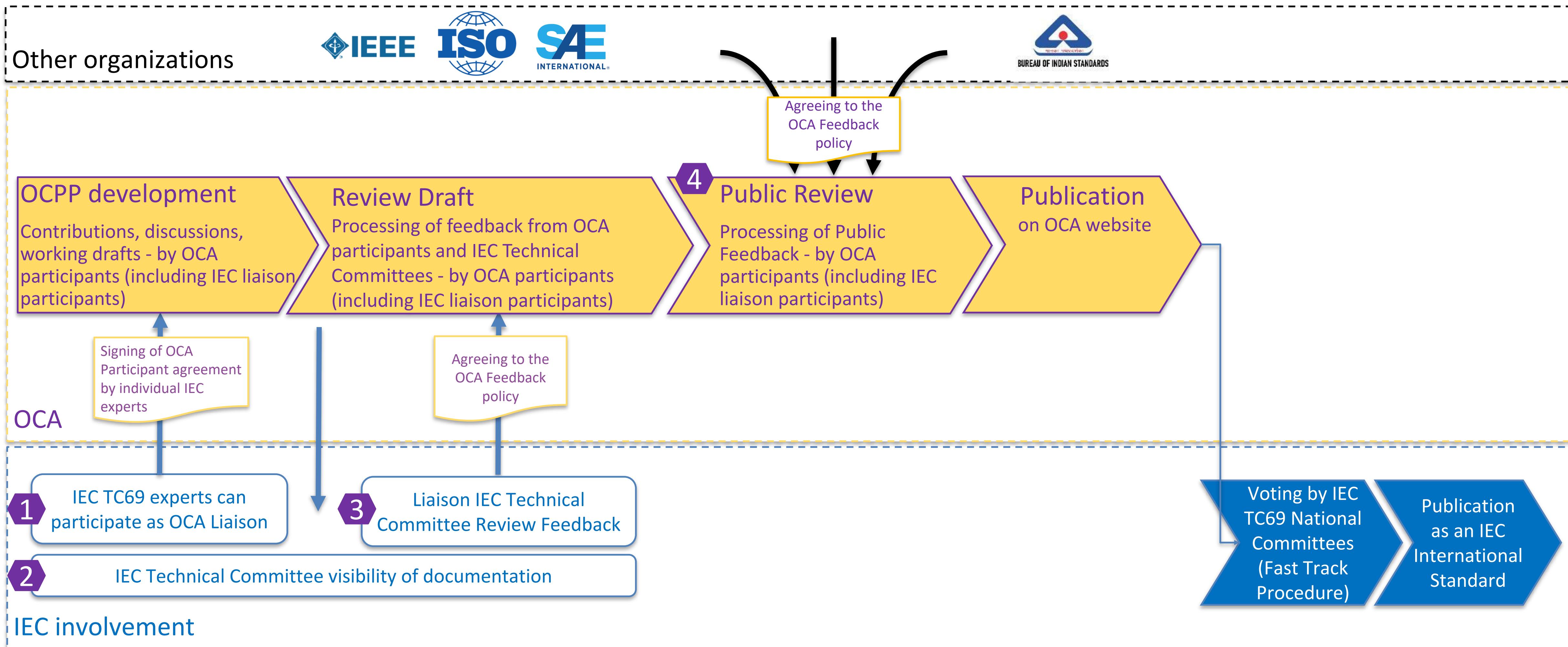
- Voting by IEC TC69 Participating National Committees
- September – November 2023
- 75% yes!

Step 2
OCPP is accepted
as-is as an IEC
International
Standard under
the conditions of
OCA



- OCA has proposed to include IEC in the future development of OCPP under OCA
- We are discussing with IEC management if the OCA offer is according to IEC procedures
- If the procedure is approved, TC69 National Committees can vote again

Proposal for inclusion of non-OCA participants in OCPP development

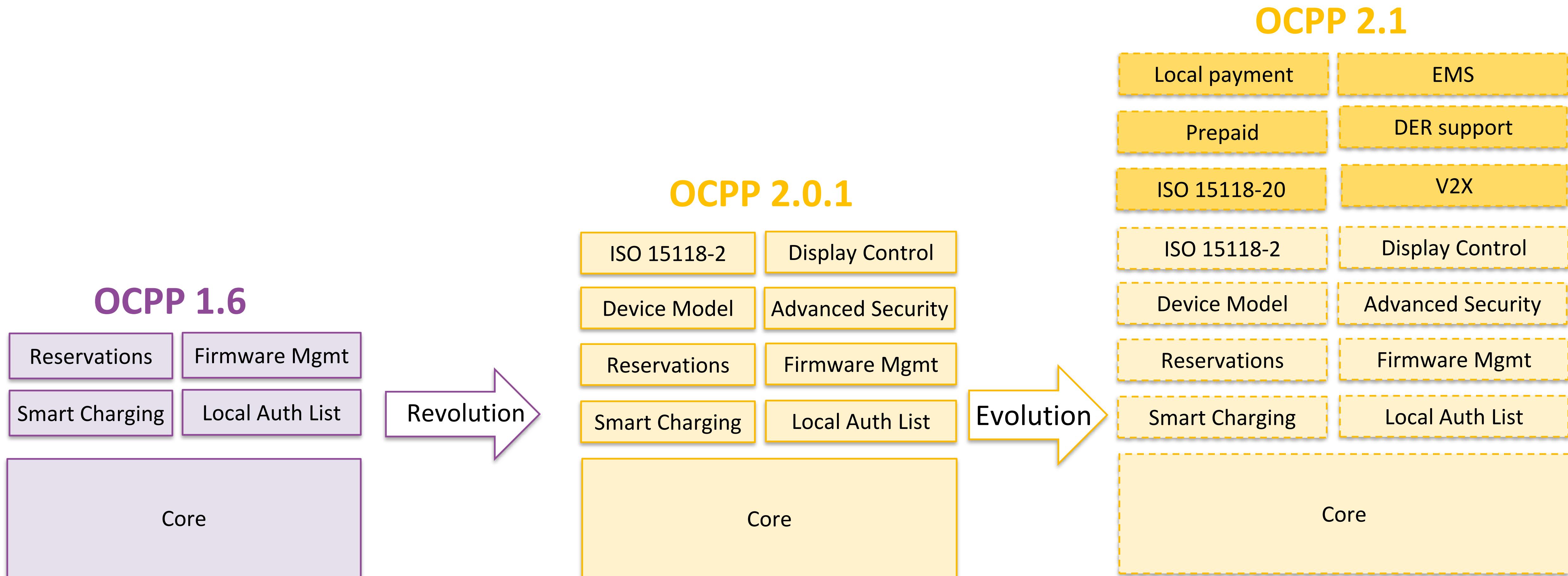




Latest developments

- OCPP2.1
- OCPP 2.Lite

OCPP 2.1 is nearing completion!



OCPP2.lite

Plugfest February 2024



www.OpenChargeAlliance.org



Why OCPP2.lite?

We are adding a lot of features to OCPP for important market segments

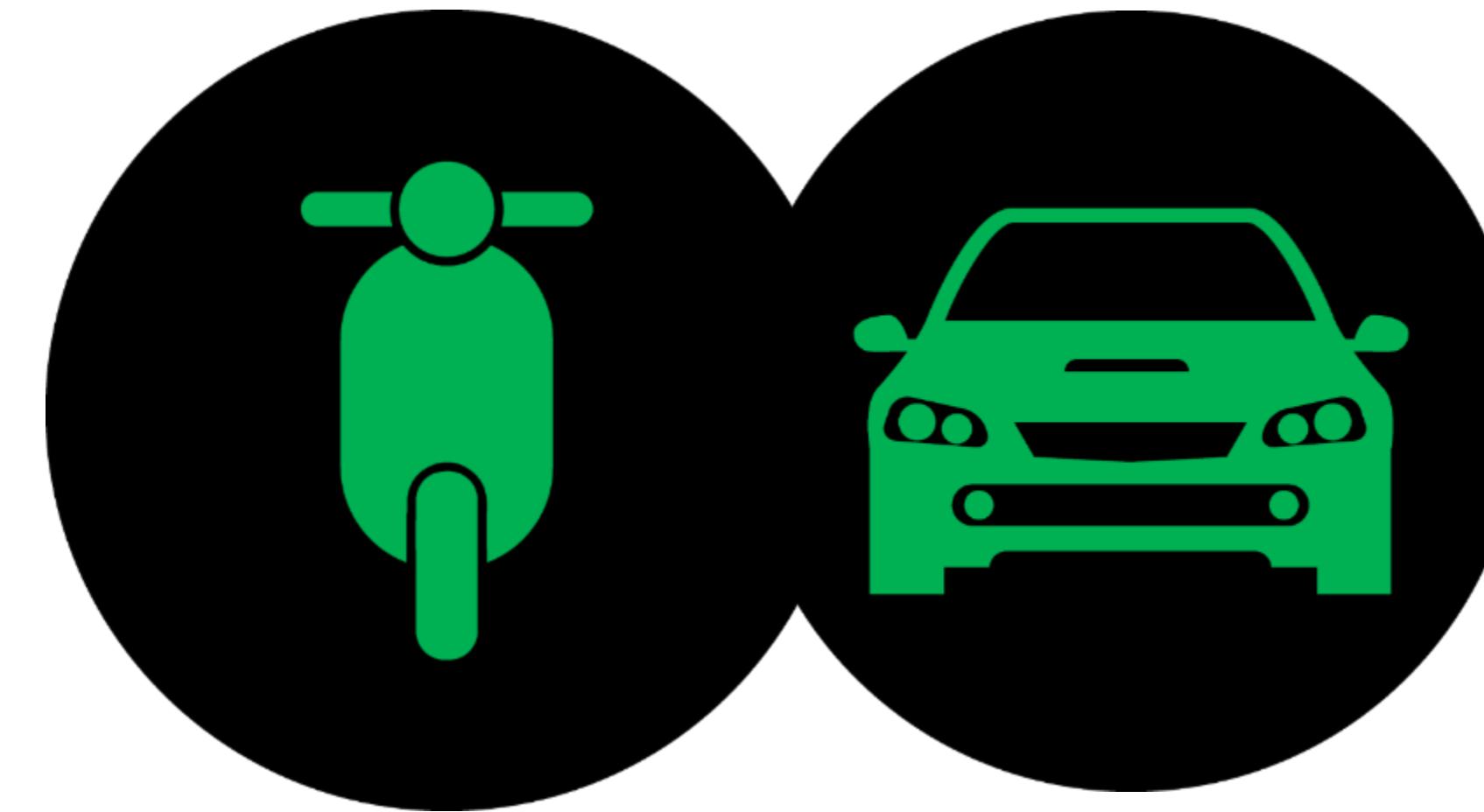
But....

At the same time, there are many booming markets for lightweight – and low cost - OCPP implementations

That is why we are turning our attention to OCPP2.Lite!

A booming market: 2 wheelers in India

75 Million e2w in 2030



10.5 Million e4w in 2030

EV adoption will be led by 2 wheelers in India with a 7:1 ratio

Projections by Niti Aayog – The Indian Think Tank

What does a market need regarding data communication? And can we get there with OCPP2.lite?

Mobile networks are an important cost factor in Kenya



Kenya on the world map¹

Typical mobile internet costs:

Flatrate, 50 MB: USD 0.7

Flatrate: 200 MB: USD 1.0

The case of CHAJI², a peer-to-peer charger sharing network in Kenya

Private persons operate chargers and provide access to everyone via OCPP. Mobile connectivity is a must in rural areas. USD 0.7 is considered a reasonable monthly operational cost.

Target mark for OCPP

To be competitive as a standard, it should be possible to operate a charger via OCPP with **at most 25 MB per month** (50% headroom).

1) CC BY-SA 3.0 Deed [https://de.wikipedia.org/wiki/Datei:Kenya_on_the_globe_\(Africa_centered\).svg](https://de.wikipedia.org/wiki/Datei:Kenya_on_the_globe_(Africa_centered).svg)
2) <https://www.chajigo.com/>

We have started a new Task Group that meets every 3 weeks

Track 1

What do we already have
within 2.0.1 and 1.6

Track 2

What can we do more within
2.x

Track 3

What is more like 3.x
(will not work with 2.x)

What is the lightest possible implementation of OCPP we can have, with regards to

- *Data communication*
- *Memory (RAM, Flash)*
- *Firmware size*
- *Code language (C++ vs Python vs Java)*

Discussions about

- *Optimizing TLS connection*
- *Message size reduction*
- *Minimal implementation of the Device model*
- *Eliminating need for persistent storage*
- *OCPP hub*

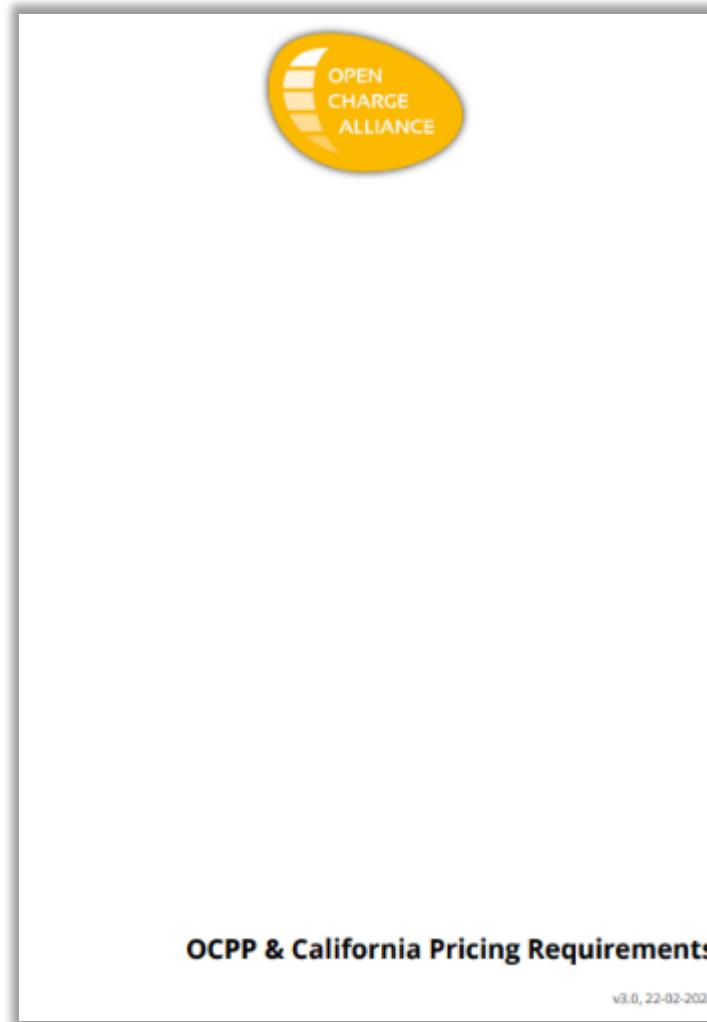
A semi-transparent Indian flag serves as the background for the title, with its colors (saffron, white, and green) and Ashoka Chakra轮 (a 24-spoked wheel) visible.

How can India join the global OCA community?

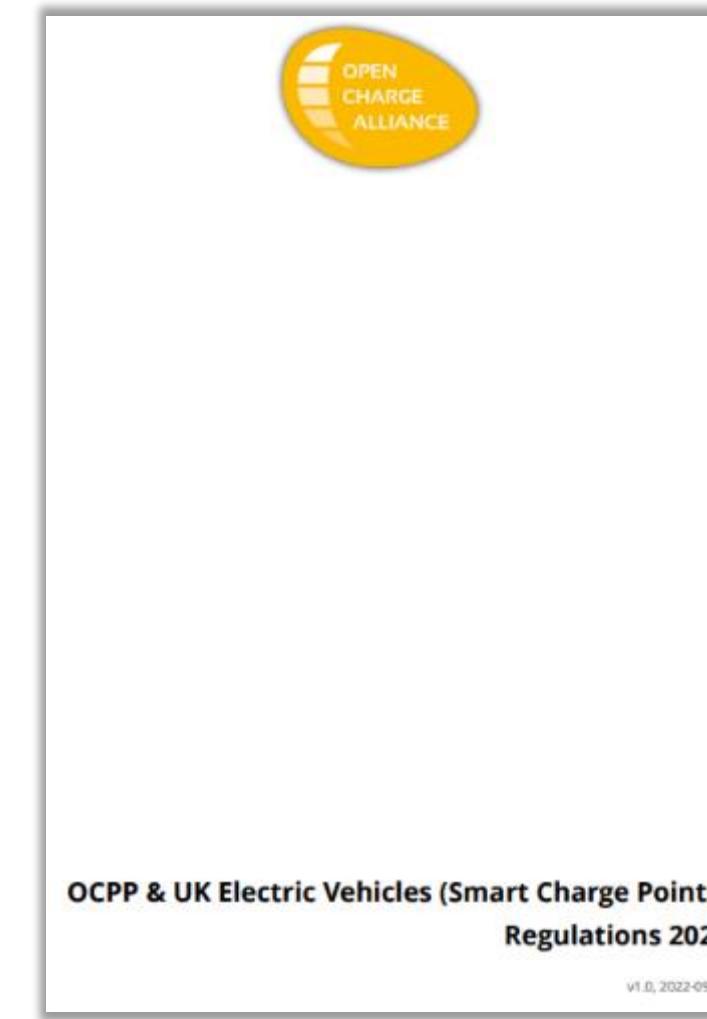
Input from regulators - examples



CALIFORNIA
ENERGY
COMMISSION



legislation.gov.uk



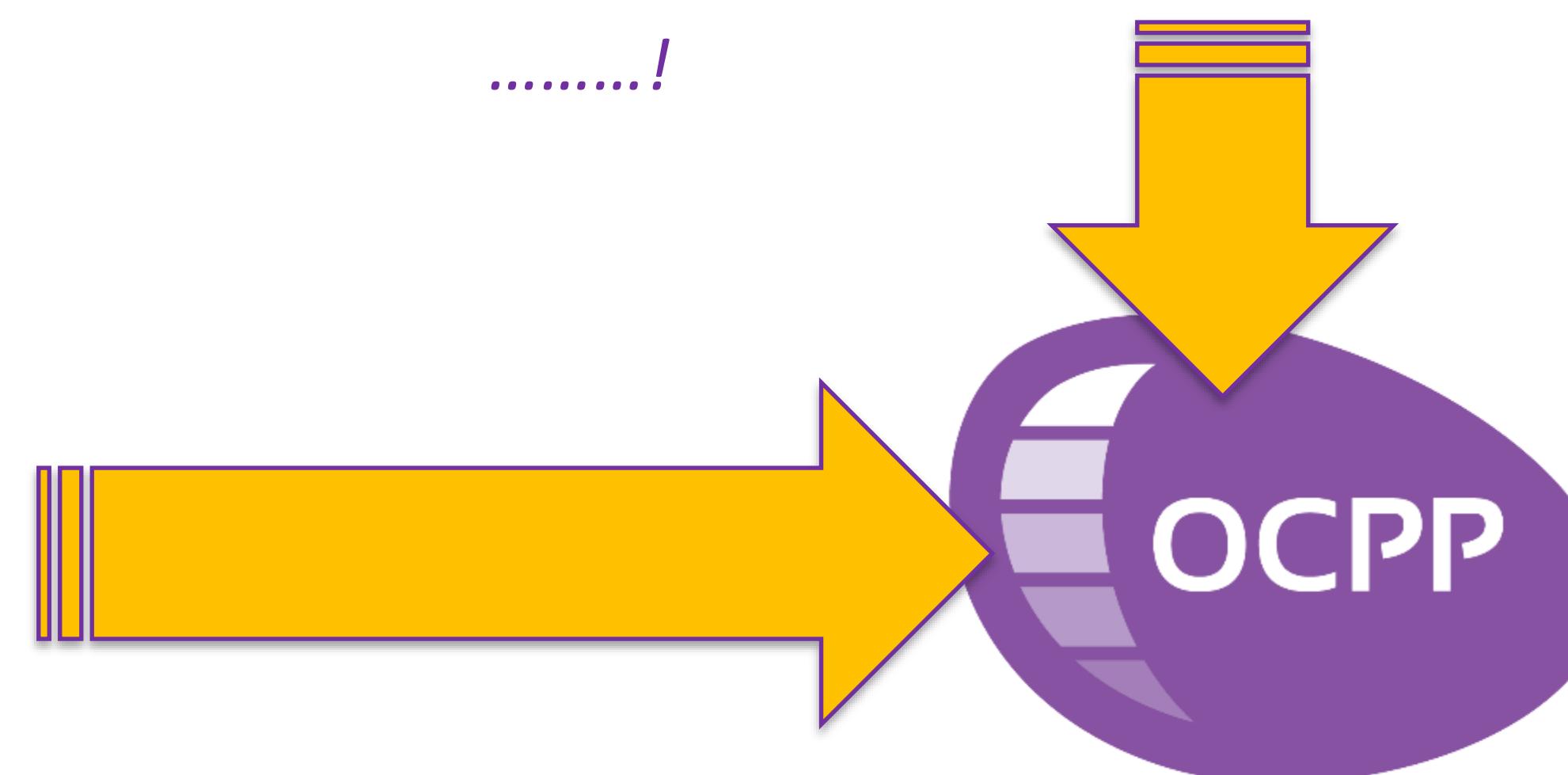
Input from Indian Industry

Lightweight implementation of OCPP for charging of 2- and 3 wheelers

Using FASTag for EV charging transactions

Better explaining the OCPP behavior what to do with a running transaction after power loss

Better explaining a 'Last Gasp' functionality in OCPP





More focus on Indian requirements

JOIN US!





OCA moving forward