

Accessibility Extension

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https://github.com/ocpi & https://evroaming.org

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EVRoaming Foundation



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The EVRoaming Foundation strives to keep OCPI as free from IPR as possible. If you want to contribute by adding new functionality/features, you are required to send us the signed Contributor Agreement (CA) document before contributing. To get the CA, ask for it by send an e-mail to: info@evroaming.org.

Version History

Version	Date	Authors	Description
1.0-d2	2026-09-01	• Ben van Gameren *ihomer*	Documentation updates: • Documentation and schema corrections only — the extension itself gained no new types, properties, or values: fixed the enumeration formats to `open-enum`, added the Connector properties that were missing from the schema, and removed redundant existing members. • Aligned the OCPI 2.3.0 and 3.0.0 definitions, including documenting LocationService as a type backported from OCPI 3.0. • Reorganised the documentation so object-type definitions live in per-version appendices, with each support section marking every type as new or extending an existing OCPI type and linking to its appendix.

Version	Date	Authors	Description
1.0	2025-12-04	• Michel Bayings *EVRoaming Foundation / Emobility Consulting* • Ben van Gameren *ihomer* • Suman Nambiar *OZEV / UK DfT* • Madeleine Crean *OZEV / UK DfT* • Laetitia Rovira *OZEV / UK DfT* • Harry Fisher *Motability Foundation* • Parth Bhardwaj *Motability Foundation* • Edward Curwen *Motability Operations* • Marvin van Wingerde *Fastned* • Philipp Fischbacher *Chargepoint* • Callum Slater *Octopus Energy* • Alice Hodges *Octopus Energy* • Matthew Knight *Cenex* • Mark Chitty *Zapmap* • Madeleine North *Believ* • Marc Multin *Believ* • Amy Lambourne *Believ* • Moe Tun *Believ* • Elias Gouihate *Total Energies* • Thomas Croome *Chargecloud* • Nishant Seghal *Tesla*	Release of OCPI Accessibility Extension

1. Motivation

The EVRoaming Foundation aims to support the accessibility of charging infrastructure for all users. Everyone should be able to find a charging station that meets their needs and is easy to use, including people with disabilities who may require additional accessibility and usability support.

The EVRoaming Foundation partners with the European Commission, UK Department for Transport, and several other governments and regulators to improve this. Several organisations representing disabled people have also been involved. Special thanks to UK DfT Office for Zero Emission Vehicles (OZEV) and the Motability Foundation, who sponsored this specific OCPI Task Group to create this extension. Also, thanks to several Charge Point Operators and Mobility Service Providers who all participated actively.

The OCPI Accessibility Extension aims to ensure that disabled people are able to determine whether a charging station can be used according to their individual accessibility needs. This extension is designed to be applicable across multiple OCPI versions.

Because accessibility requirements vary, the usability of a charging station cannot be expressed through a single indicator. It depends on a set of data elements describing physical characteristics, usability features, and environmental factors that influence access and operation.

The purpose of this extension is to define and standardize those data elements at the OCPI level, enabling interoperability between market parties and supporting informed accessibility-related decisions by users and services.

The EVRoaming Foundation OCPI Accessibility Task Group has considered the following classes of disabilities:

- Vision impairment: affecting the ability to see
- Hearing impairment: affecting the ability to process sounds
- Mobility impairment: affecting the ability to move independently
- Dexterity impairment: affecting the ability to perform tasks that require fine motor skills
- Cognitive impairment: affecting the ability to process information, learn, remember, and manage emotions

2. Domain

To support an accessible and inclusive EV charging experience, it is essential that drivers with diverse abilities can determine in advance whether they will be able to use a charging station independently and safely. First, a set of driver-centred use cases is presented to illustrate the accessibility challenges drivers may encounter. Subsequently, these use cases are consolidated into accessibility aspects, which define the information items required to meet the identified accessibility needs.

2.1. Use Cases

The following use cases illustrate the challenges that drivers may encounter.

UC1. **As a driver, I want to know in advance what facilities and assistance services are available at the charging location**
Drivers with mobility, dexterity, cognitive, hearing, or vision impairments need to know in advance whether a charging location offers suitable facilities and assistance services to determine if the location meets their accessibility requirements.

UC2. **As a driver, I want to know in advance what safety measures are available at the charging location**
Drivers with mobility, dexterity, cognitive, hearing, or vision impairments need clear information about the safety and security measures at a charging location to assess whether the environment supports safe and confident use of the charging facilities.

UC3. **As a driver, I want to know in advance if I can enter and exit my vehicle at the parking space**
Drivers with mobility impairments need to know in advance whether the parking space provides sufficient width, length, and maneuvering space to enter and exit their vehicle safely and independently.

UC4. **As a driver, I want to know in advance if I can move between my vehicle and the charging station**
Drivers with mobility or dexterity impairments need clear information about the pathway and layout between the parking space and the charging station to assess whether they can move safely and independently between them.

UC5. **As a driver, I want to know in advance if I can reach all required charging station interfaces**
Drivers with mobility or dexterity impairments need to know in advance whether they can reach the connector, cable, displays, and controls to access and operate the charging station independently.

UC6. **As a driver, I want to know in advance if I can handle charging cables**
Drivers with mobility or dexterity impairments need information about the cable's characteristics and supportive mechanisms to determine whether they can manage the cable and connect or disconnect it.

UC7. **As a driver, I want to know in advance if I can interact with displays, controls, and payment terminals**
Drivers with mobility, dexterity, vision, hearing or cognitive impairments need information about the accessibility and reachability of user interfaces to determine whether they can perform required actions such as starting a session or completing a payment.

UC8. **As a driver, I want clear information about any parking restrictions or conditions at the charging location**
Drivers with mobility, cognitive, or visual impairments need information about parking restrictions to determine whether they are allowed to park at the location.

UC9. As a driver, I want to know in advance if the system allows enough time to complete the charging and payment processes

Drivers with mobility, dexterity, or cognitive impairments need information about timeouts to determine whether they will have sufficient time to complete each step of the charging and payment processes.

2.2. Accessibility Aspects

The identified use cases are grouped into four accessibility aspects, each addressing a specific dimension of accessibility.These accessibility aspects form the basis for defining the information items needed to fulfill the identified user needs.

Aspect 1. Assistance Services and Facilities

Aspect 2. Safety and security

Aspect 3. Parking and Movement between vehicle and charging station

Aspect 4. Charging Station Operation

2.2.1. Assistance Services and Facilities

Provide drivers with accessibility information about the facilities and assistance services available at a charging location, enabling them to determine in advance whether the location meets their accessibility needs.

Disability Types

Mobility, Dexterity, Cognitive, Vision

Information Items

A.1.1 Availability of On-Site Assistance Services

Indicates whether the charging location provides on-site assistance services to assist with charging-related activities, such as connecting cables or operating controls

A.1.2 Assistance Services Details

Provides descriptive information on the available assistance services, including contact methods, operating hours, and type of support offered.

A.1.3 Accessible Toilets Available

Indicates whether the charging location provides toilet facilities that are accessible to people with disabilities.

A.1.4 Accessible Charging Available

Indicates whether one or more charging stations at the location include physical or ergonomic adaptations for accessible use.

A.1.5 Accessibility Standards

Lists the accessibility standards or certification frameworks that the location conforms to (e.g., PAS 1899, ADA, EC STF).

A.1.6 Photos

Provides representative images of the charging location highlighting accessibility-related features.

2.2.2. Safety and Security

Provide drivers with accessibility information about the safety and security conditions at a charging location, enabling them to determine in advance whether the environment supports safe use of the charging infrastructure.

Disability Types

Mobility, Dexterity, Cognitive, Vision

Information Items

A.2.1 Assistance Services Available
Indicates whether the charging location provides on-site assistance services to assist in case of safety concerns.

A.2.2 Safety Measures
Indicates the safety and security measures present at the charging location

A.2.3 Emergency Assistance Available
Indicates whether immediate help can be summoned in case of an incident

A.2.4 Lighting
Indicates whether the parking area is illuminated by artificial lighting.

A.2.5 Roofed
Indicates whether the parking or charging space is covered by a roof.

A.2.6 Safety Standards
Lists the safety standards and certification frameworks that the charging location conforms to.

A.2.7 Photos
Provides representative images of the charging location highlighting safety and accessibility features.

2.2.3. Parking and Movement between the vehicle and charging station

Provide drivers with accessibility information about the parking space enabling them to determine in advance whether they can enter and exit their vehicle and move safely and independently between the vehicle and the charging station.

Disability Types

Mobility, Dexterity

Information Items

A.3.1 Parking Space Width
Describes the width of the parking space, helping drivers assess whether there is sufficient room to open doors fully and use mobility aids when entering or exiting the vehicle.

A.3.2 Parking Space Length
Describes the length of the parking space, allowing drivers to determine whether there is adequate space to park and maneuver safely, especially when deploying mobility aids or transferring from the vehicle.

A.3.3 Protected Area Available
Indicates whether the parking space includes an adjacent marked or hatched area that provides additional maneuvering space

A.3.4 Surface
Describes the type and quality of the parking surface

A.3.5 Slope
Indicates whether the parking space is located on a slope

A.3.6 Step-Free Access
Indicates whether there is step-free access between the parking bay and the charing statoin

A.3.7 Parking Direction
Indicates the direction in which parking occurs relative to the roadway on which vehicles approach the charging station.

A.3.8 Charging Station Position
Describes the physical location of the charging station relative to the parking space.

A.3.9 Parking Restrictions
Indicates whether specific parking restrictions or conditions apply to the parking space. This includes rules about who is allowed to park, under what circumstances parking is permitted, and when these restrictions apply.

A.3.10 Standards
Lists the standards that the parking area and charging station layout conform to

A.3.11 Photos
Provides representative images of the parking area and charging station layout

2.2.4. Charging Station Operation

Provide drivers with accessibility information about the reachability, operation, interaction, and timing of the charging equipment, enabling them to determine in advance whether they can independently access, connect, and operate the charging station.

Disability Types

Mobility, Dexterity, Vision, Cognitive

Information Items

A.4.1 Reach Distance
Indicates the minimum perpendicular distance a driver must reach between obstacles and key charging components such as the connector socket, cable, or interfaces.

A.4.2 Connector Type
Specifies the type and format of the connector interface.

A.4.3 Cable Length
Describes the total usable length of the charging cable.

A.4.4 Cable Weight

Indicates the effective handling weight of the charging cable, considering factors such as cable length, stiffness, and the presence of a cable management system

A.4.5 Cable Management System

Indicates whether the charging station includes a cable management system that assists in storing, lifting, or organizing the cable.

A.4.6 Timeout

Defines the maximum time allowed between key steps in the charging process before the session automatically expires or cancels.

A.4.7 Extended Timeouts

Indicates whether the charging system offers an option to extend or adjust timeouts during operation.

A.4.8 Standards

Lists relevant accessibility or ergonomic standards the charging equipment complies with.

A.4.9 Photos

Provides representative images of the charging station, including connectors, cables, and user interfaces.

3. Accessibility support in OCPI 2.3.0

To add accessibility support in OCPI 2.3.0, we need to extend the existing OCPI 2.3.0 specification with additional object types and properties. These changes only effect existing interfaces and endpoints of the Locations Module. Therefore, no new interfaces or endpoints are introduced and only object descriptions and data types are extended with additional information. The types and enumerations this extension adds or extends are documented in OCPI 2.3.0 Type definitions.

3.1. AccessLevel *OpenEnum*

New enumeration defined by this extension.

Item	Value	Status
A.3.6 Step-Free Access	SAME_LEVEL	New
A.3.6 Step-Free Access	ACCESSIBLE_TRANSITION	New
A.3.6 Step-Free Access	LEVEL_DIFFERENCE	New

3.2. Connector *Object*

Extends the existing OCPI 2.3.0 `Connector` object.

Item	Property	Status
A.4.2 Connector Type	standard	Existing
A.4.3 Cable Length	cable_length	New
A.4.4 Cable Weight	cable_weight	New
A.4.5 Cable Management System	cable_management_system	New
A.4.8 Standards	standards	New
A.4.9 Photos	images	New

3.3. EVSE *Object*

Extends the existing OCPI 2.3.0 `EVSE` object.

Item	Property	Status
A.3.9 Parking Restrictions	parking_restrictions	Existing
A.4.1 Reach Distance	reach_distance	New
A.4.6 Timeout	operation_timeout	New
A.4.7 Extended Timeouts	extended_operation_timeout	New
A.4.8 Standards	standards	New

Item	Property	Status
A.4.9 Photos	images	Existing

3.4. EVSEParking *Class*

Extends the existing OCPI 2.3.0 `EVSEParking` object.

Item	Property	Status
A.3.6 Step-Free Access	access_level	New
A.3.8 Charging Station Position	evse_position	Existing

3.5. ImageCategory *OpenEnum*

Extends the existing OCPI 2.3.0 `ImageCategory` enumeration.

Item	Value	Status
A.1.6 & A.2.7 Photos	LOCATION	Existing
A.4.9 Photos	CHARGER	Existing
A.4.9 Photos	CONNECTOR	New
A.3.11 Photos	PARKING	New

3.6. Location *Class*

Extends the existing OCPI 2.3.0 `Location` object.

Item	Property	Status
A.1.1, A.1.3, A.1.4, A.2.1, A.2.2, and A.2.3 Services	services	New
A.1.2 Assistance Services Details	assistance_service_details	New
A.1.5 Accessibility Standards	standards	New
A.1.6 & A.2.7 Photos	images	Existing

3.7. LocationService *OpenEnum*

New enumeration defined by this extension, backported from OCPI 3.0.

Item	Value	Status
A.1.1 Assistance Services Available	ASSISTANCE	New
A.2.1 Assistance Services Available	ASSISTANCE	New

Item	Value	Status
A.1.3 Accessible Toilets Available	ACCESSIBLE_TOILETS	New
A.1.4 Accessible Charging Available	ACCESSIBLE_CHARGING	New
A.2.2 Safety Measures	CAMERA_SURVEILLANCE	New
A.2.2 Safety Measures	PERIMETER_FENCE	New
A.2.3 Emergency Assistance Available	EMERGENCY_ASSISTANCE	New

3.8. Parking *Class*

Extends the existing OCPI 2.3.0 `Parking` object.

Item	Property	Status
A.2.4 Lighting	lighting	Existing
A.2.5 Roofed Area	roofed	Existing
A.2.6 Safety Standards	standards	Existing
A.3.1 Parking Space Width	parking_space_width	Existing
A.3.2 Parking Space Length	parking_space_length	Existing
A.3.3 Protected Area Available	protected_area	New
A.3.4 Surface	surface	New
A.3.5 Slope	slope	New
A.3.7 Parking Direction	direction	Existing
A.3.10 Standards	standards	Existing
A.3.11 Photos	images	Existing

3.9. Slope *OpenEnum*

New enumeration defined by this extension.

Item	Value	Status
A.3.5 Slope	FLAT	New
A.3.5 Slope	SLOPED	New
A.3.5 Slope	STEEPLY_SLOPED	New

3.10. Surface *OpenEnum*

New enumeration defined by this extension.

Item	Value	Status
A.3.4 Surface	ASPHALT	New
A.3.4 Surface	CONCRETE	New
A.3.4 Surface	TILES	New
A.3.4 Surface	GRAVEL	New
A.3.4 Surface	GRASS	New
A.3.4 Surface	SOIL	New

4. Accessibility support in OCPI 3.0

To add accessibility support in OCPI 3.0, we need to extend the existing OCPI 3.0 specification with additional object types and properties. These changes only effect existing functional use cases of the Location Module. Therefore, no new use cases are introduced and only the existing ones are extended with additional information. The types and enumerations this extension adds or extends are documented in OCPI 3.0.0 Type definitions.

4.1. AccessLevel *OpenEnum*

New enumeration defined by this extension.

Item	Value	Status
A.3.6 Step-Free Access	SAME_LEVEL	New
A.3.6 Step-Free Access	ACCESSIBLE_TRANSITION	New
A.3.6 Step-Free Access	LEVEL_DIFFERENCE	New

4.2. ChargingStation *Class*

Extends the existing OCPI 3.0 `ChargingStation` object.

Item	Property	Status
A.4.1 Reach Distance	reach_distance	New
A.4.6 Timeout	operation_timeout	New
A.4.7 Extended Timeouts	extended_operation_timeout	New
A.4.8 Standards	standards	New
A.4.9 Photos	images	Existing

4.3. Connector *Class*

Extends the existing OCPI 3.0 `Connector` object.

Item	Property	Status
A.4.2 Connector Type	standard	Existing
A.4.3 Cable Length	cable_length	Existing
A.4.4 Cable Weight	cable_weight	New
A.4.5 Cable Management System	cable_management_system	New
A.4.8 Standards	standards	New
A.4.9 Photos	images	New

4.4. EVSEParking *Class*

Extends the existing OCPI 3.0 `EVSEParking` object.

Item	Property	Status
A.3.6 Step-Free Access	access_level	New
A.3.8 Charging Station Position	evse_position	Existing

4.5. ImageCategory *OpenEnum*

Extends the existing OCPI 3.0 `ImageCategory` enumeration.

Item	Value	Status
A.1.6 & A.2.7 Photos	LOCATION	Existing
A.4.9 Photos	CHARGER	Existing
A.4.9 Photos	CONNECTOR	New
A.3.11 Photos	PARKING	New

4.6. Location *Class*

Extends the existing OCPI 3.0 `Location` object.

Item	Property	Status
A.1.1, A.1.3, A.1.4, A.2.1, A.2.2, and A.2.3 Services	services	Existing
A.1.2 Assistance Services Details	assistance_service_details	New
A.1.5 Accessibility Standards	standards	New
A.1.6 & A.2.7 Photos	images	Existing

4.7. LocationService *OpenEnum*

Extends the existing OCPI 3.0 `LocationService` enumeration.

Item	Value	Status
A.1.1 Assistance Services Available	ASSISTANCE	Existing
A.2.1 Assistance Services Available	ASSISTANCE	Existing
A.1.3 Accessible Toilets Available	ACCESSIBLE_TOILETS	New
A.1.4 Accessible Charging Available	ACCESSIBLE_CHARGING	Existing
A.2.2 Safety Measures	CAMERA_SURVEILLANCE	Existing

Item	Value	Status
A.2.2 Safety Measures	PERIMETER_FENCE	Existing
A.2.3 Emergency Assistance Available	EMERGENCY_ASSISTANCE	New

4.8. Parking *Class*

Extends the existing OCPI 3.0 `Parking` object.

Item	Property	Status
A.2.4 Lighting	lighting	Existing
A.2.5 Roofed Area	roofed	Existing
A.2.6 Safety Standards	standards	Existing
A.3.1 Parking Space Width	parking_space_width	Existing
A.3.2 Parking Space Length	parking_space_length	Existing
A.3.3 Protected Area Available	protected_area	New
A.3.4 Surface	surface	New
A.3.5 Slope	slope	New
A.3.7 Parking Direction	direction	Existing
A.3.9 Parking Restrictions	parking_restrictions	Existing
A.3.10 Standards	standards	Existing
A.3.11 Photos	images	Existing

4.9. Slope *OpenEnum*

New enumeration defined by this extension.

Item	Value	Status
A.3.5 Slope	FLAT	New
A.3.5 Slope	SLOPED	New
A.3.5 Slope	STEEPLY_SLOPED	New

4.10. Surface *OpenEnum*

New enumeration defined by this extension.

Item	Value	Status
A.3.4 Surface	ASPHALT	New

Item	Value	Status
A.3.4 Surface	CONCRETE	New
A.3.4 Surface	TILES	New
A.3.4 Surface	GRAVEL	New
A.3.4 Surface	GRASS	New
A.3.4 Surface	SOIL	New

Appendix A: OCPI 2.3.0 Type definitions

This appendix documents the OCPI 2.3.0 types and enumerations that this extension adds or extends. For each, it lists the properties and enumeration values the extension defines, together with the cardinalities it makes mandatory.

A.1. Location *Class*

Represents a location in the OCPI schema.

Property	Type	Cardinality	Description
services	LocationService	*	Services that are offered at the Location.
assistance_service_details	string[1..1024]	?	Additional details about the assistance services available at the location.
standards	CiString[1..36]	*	A list of standards that the location conforms to.

A.2. EVSE *Class*

The EVSE object describes the part that controls the power supply to a single EV in a single session.

Property	Type	Cardinality	Description
reach_distance	number	?	Minimum perpendicular distance in centimeters a driver has to reach between obstacles and key objects.
operation_timeout	number	?	Defines the maximum time allowed in seconds between key steps in the charging process
extended_operation_timeout	boolean	?	Indicates whether the system offers the option to extend timeouts
standards	CiString[1..36]	*	A list of standards that the EVSE conforms to.

A.3. Connector *Class*

A Connector is the socket or cable and plug available for the EV to use.

Property	Type	Cardinality	Description
cable_length	number	?	The length of the attached cable in centimeters. Only applicable if the connector type is one where the cable is part of the Charging Station.
cable_weight	number	?	Indicates the effective handling weight of the charging cable in kilograms, considering factors such as cable length, stiffness, and the presence of a cable management system
cable_management_system	boolean	?	Indicates whether a system is present to assist with storing, lifting, or organizing the cable

Property	Type	Cardinality	Description
standards	CiString[1..36]	*	A list of standards that the Connector conforms to.
images	Image	*	Images related to the Connector.

A.4. Parking *Class*

Describes a parking space that a vehicle can be parked in while charging.

Property	Type	Cardinality	Description
protected_area	boolean	?	Indicates whether the parking space includes an adjacent marked or hatched area
surface	Surface	?	The surface of the parking bay
slope	Slope	?	The slope of the parking bay

A.5. AccessLevel *OpenEnum*

Indicates whether the parking bay and the charging station are located on the same level, providing step-free or otherwise accessible access between them

Value	Description
SAME_LEVEL	Parking bay and charging station are on the same level; no step, curb, or height difference.
ACCESSIBLE_TRANSITION	Small height difference bridged by a ramp, beveled edge, or dropped curb, providing an accessible transition between the parking bay and the chargepoint.
LEVEL_DIFFERENCE	Step, curb, or significant height difference without an accessible transition.

A.6. EVSEParking *Class*

A link between an EVSE and a Parking object. The presence of an EVSEParking object in an EVSE indicates that a certain parking space can be used when charging at that EVSE.

Property	Type	Cardinality	Description
access_level	AccessLevel	?	Indicates whether the parking bay and the charging station are located on the same level, providing step-free or otherwise accessible access between them

A.7. ImageCategory *OpenEnum*

Describes what the image is used for.

Value	Description
CONNECTOR	Photo of the connector
PARKING	Photo of the parking bay

A.8. LocationService *OpenEnum*

Services that are offered at the Location. This is a backported type from OCPI 3.0, made available by this extension. In addition to the accessibility-related services, the `EMERGENCY_CALL` can be useful as well.

Value	Description
ACCESSIBLE_CHARGING	One or more EVSEs have accessibility modifications in place to allow use by people with disabilities. Note that more information on accessibility modifications can be provided using the various fields for images and in the `parking` field of the EVSE object.
ACCESSIBLE_TOILETS	Indicates whether the charging location provides toilet facilities that are accessible to people with disabilities
ASSISTANCE	Assistance from on-site staff is available to help a Driver charge at the Location.
CAMERA_SURVEILLANCE	Security monitoring with video cameras is in place at the Location.
EMERGENCY_CALL	A voice communication channel is available for the Driver to contact security staff from the Location.
EMERGENCY_ASSISTANCE	Indicates whether immediate help can be summoned in case of an incident
PERIMETER_FENCE	A security fence or wall is in place around the Location to keep unauthorized people out.

A.9. Slope *OpenEnum*

Slope of the parking bay

Value	Description
FLAT	Level surface
SLOPED	Moderately sloped surface
STEEPLY_SLOPED	Steeply sloped surface

A.10. Surface *OpenEnum*

Surface of the parking bay

Value	Description
ASPHALT	Hard asphalt surface
CONCRETE	Hard concrete surface

Value	Description
TILES	Firm surface made of paving tiles or pavers
GRAVEL	Loose gravel surface
GRASS	Natural grass surface
SOIL	Bare or compacted earth surface

Appendix B: OCPI 3.0.0 Type definitions

This appendix documents the OCPI 3.0.0 types and enumerations that this extension adds or extends. For each, it lists the properties and enumeration values the extension defines, together with the cardinalities it makes mandatory.

B.1. AccessLevel *OpenEnum*

Indicates whether the parking bay and the charging station are located on the same level, providing step-free or otherwise accessible access between them

Value	Description
SAME_LEVEL	Parking bay and charging station are on the same level; no step, curb, or height difference.
ACCESSIBLE_TRANSITION	Small height difference bridged by a ramp, beveled edge, or dropped curb, providing an accessible transition between the parking bay and the chargepoint.
LEVEL_DIFFERENCE	Step, curb, or significant height difference without an accessible transition.

B.2. ChargingStation *Class*

The ChargingStation object describes a device that is physically distinct and has a single user interface. It always belongs to a Location object. The object only contains directions to get from the central Location entrance to the Charging Station (i.e. floor, physical_reference or directions).

Property	Type	Required	Description
reach_distance	decimal	no	Minimum perpendicular distance in meters a driver has to reach between obstacles and key objects.
operation_timeout	decimal	no	Defines the maximum time allowed in seconds between key steps in the charging process
extended_operation_timeout	boolean	no	Indicates whether the system offers the option to extend timeouts
standards	Array of CiString[1..36]	no	A list of standards that the ChargingStation conforms to.

B.3. Connector *Class*

A Connector is the socket or cable and plug available for the EV to use.

Property	Type	Required	Description
cable_weight	decimal	no	Indicates the effective handling weight of the charging cable in kilograms, considering factors such as cable length, stiffness, and the presence of a cable management system

Property	Type	Required	Description
cable_management_system	boolean	no	Indicates whether a system is present to assist with storing, lifting, or organizing the cable
images	Array of Image	no	Images related to the Connector.
standards	Array of CiString[1..36]	no	A list of standards that the Connector conforms to.

B.4. EVSEParking *Class*

A link between an EVSE and a Parking object. The presence of an EVSEParking object in an EVSE indicates that a certain parking space can be used when charging at that EVSE.

Property	Type	Required	Description
access_level	AccessLevel	no	Indicates whether the parking bay and the charging station are located on the same level, providing step-free or otherwise accessible access between them

B.5. ImageCategory *OpenEnum*

Describes what the image is used for.

Value	Description
CONNECTOR	Photo of the connector
PARKING	Photo of the parking bay

B.6. Location *Class*

Represents a location in the OCPI schema.

Property	Type	Required	Description
assistance_service_details	AsciiString[1..1024]	no	Additional details about the assistance services available at the location.
standards	Array of CiString[1..36]	no	A list of standards that the location conforms to.

B.7. LocationService *OpenEnum*

Optional list of services that are offered at the Location by the CPO or their affiliated partners.

Value	Description
ACCESSIBLE_TOILETS	Indicates whether the charging location provides toilet facilities that are accessible to people with disabilities

Value	Description
EMERGENCY_ASSISTANCE	Indicates whether immediate help can be summoned in case of an incident

B.8. Parking *Class*

Describes a parking space that a vehicle can be parked in while charging.

Property	Type	Required	Description
protected_area	boolean	no	Indicates whether the parking space includes an adjacent marked or hatched area
surface	Surface	no	The surface of the parking bay
slope	Slope	no	The slope of the parking bay

B.9. Slope *OpenEnum*

Slope of the parking bay

Value	Description
FLAT	Level surface
SLOPED	Moderately sloped surface
STEEPLY_SLOPED	Steeply sloped surface

B.10. Surface *OpenEnum*

Surface of the parking bay

Value	Description
ASPHALT	Hard asphalt surface
CONCRETE	Hard concrete surface
TILES	Firm surface made of paving tiles or pavers
GRAVEL	Loose gravel surface
GRASS	Natural grass surface
SOIL	Bare or compacted earth surface