

Tabel A - Static data for publicly accessible recharging and refuelling infrastructure for alternative fuels								OCPI	
Nu mbe r	Type of alternative fuels infrastructur	Type of data	Data category	Data type	Data level	Description	Data format	v.2.2.1-d2	v.2.3.0
1	Recharging and refuelling infrastructure of alternative fuels	Static	General information	Legal name of the recharging or refuelling point operator or owner	Station	Legal name of the operator responsible for the management and operation of the publicly accessible recharging and refuelling points for alternative fuels, or, in accordance with the arrangements between them, the owner of those points, which provides a recharging or refuelling service to end users, including in the name and on behalf of a mobility service provider.	Discrete value (string/text)	<u>Data field:</u> Location.owner <u>Remarks:</u> Legal name of the operator or owner, as agreed between the operator and the owner. It is only possible to specify one legal name.	<u>Data field:</u> - -
2	Recharging and refuelling infrastructure of alternative fuels	Static	General information	Commercial name of the recharging or refuelling point operator or owner	Station	Commercial name of the recharging or refuelling point operator or, in accordance with the arrangements between them, the owner of those points as it is presented to the public when offering recharging or refuelling services.	Discrete value (string/text)	<u>Data field:</u> Location.operator <u>Remarks:</u> Name of the operator as shown on the physical installation.	<u>Data field:</u> - -
3	Recharging and refuelling infrastructure of alternative fuels	Static	General information	Number of recharging or refuelling points	Station	Number of recharging points or refuelling points that can be used at the same time in a recharging or refuelling station. An electric recharging point may have one or more connectors, however only one can be used at the same time	Numeric value (number)	<u>Data field:</u> Location.evses <u>Remarks:</u> The user can derive the numerical value for the number of objects in the list Location.evses	<u>Data field:</u> - -
4	Opladnings- og optankningsinfra struktur for	Static	General information	Service support	Station	Information regarding the presence of physical persons attending the	Discrete value (string/text)	<u>Data field:</u> N/A	<u>Data field:</u> Location.facilities [SERVICE_SUPPORT]

	alternative drivmidler					recharging or refuelling station.			<u>Remarks:</u> In this version, Facility is an OpenEnum, to which the following value must be added: SERVICE_SUPPORT
5	Recharging and refuelling infrastructure of alternative fuels	Static	General information	Helpdesk telephone	Station	Telephone number of the helpdesk, managed by the recharging or refuelling point operator or owner, that is readable in the recharging station	Format based on notation applicable to Union telephone numbers containing at least the following elements: Country code complete number including the regional code (if there is one) in one separate block with the starting zero. Extension numbers shall be added with a dash directly after the complete number. No other dashes, spaces or brackets may be used in the helpdesk telephone number.	<u>Data field:</u> N/A	<u>Data field:</u> Location.help_phone <u>Remarks:</u> It is required that the hotline number consists of [country code]-[8-digit phone number] Example: 0045-72545500
6	Recharging and refuelling infrastructure of alternative fuels	Static	General information	Facilities offering associated services to the user	Station	The recharging or refuelling station has in its immediate surrounding area facilities offering associated services to customers. The following facilities and services shall be reported (yes/no): — Roofed recharging or refuelling parking location. — Illuminated recharging or refuelling parking location. — Catering service (e.g. food, beverage)	Discrete value (string/text) in list format	<u>Datafield:</u> Location.facilities [RESTAURANT, CAFE, SUPERMARKET, HOTEL, PARKING_LOT, [OTHER]] <u>Remarks:</u> The above values must be included in the list of facilities if the facilities are present at the location. In this version, it is not possible to provide information about roofing, lighting, standards, toilets, or rest facilities.	<u>Data field:</u> - - As well as Location.parking_places .roofed .lighting .standards <u>Remarks:</u> In this version, Facility is an OpenEnum, to which the following values must be added:

						<ul style="list-style-type: none"> — Bathrooms. — Resting facilities — Other (expressed as free text). 			TOILET [OTHER]
7	Recharging and refuelling infrastructure of alternative fuels	Static	Geographic location	Global Navigation Satellite System (GNSS) geographic location information	Station	Latitude and longitude coordinates of the recharging or refuelling station.	Latitude and Longitude coordinated in WGS84 decimal standard.	<u>Data field:</u> Location.coordinates As well as Location.evse.coordinates	<u>Data field:</u> - -
8	Recharging and refuelling infrastructure of alternative fuels	Static	Geographic location	Additional geographic location information	Station	Additional concrete information that may be relevant to reach the recharging or refuelling station in certain situations, such as parking level, parking lot, etc.	Discrete/numeric value (combination of string/text and numeric)	<u>Data field:</u> Location.parking_type As well as Location.evse.floor_level As well as Location.evse.physical_reference	<u>Data field:</u> - -
9	Recharging and refuelling infrastructure of alternative fuels	Static	Geographic location	Country	Station	Name of the Member States where the recharging or refuelling station is located.	Format according to standard ISO 3166-1 alpha-2 codes	<u>Data field:</u> Location.country <u>Remarks:</u> OCPI leverer I ISO 3166-1 alpha-3 code.	<u>Data field:</u> - -
10	Recharging and refuelling infrastructure of alternative fuels	Static	Geographic location	Region	Station	Name of the Member States region where the recharging or refuelling station is located, expressed in the nomenclature of territorial units for statistics (NUTS) 1 level	Format according to NUTS-1 geocode standard	<u>Data field:</u> Location.state <u>Remarks:</u> NUTS 1 koden for Danmark er DK0.	<u>Data field:</u> - -
11	Recharging and refuelling	Static	Geographic location	City or town	Station	Name of the Member States city or town where the recharging station is	Discrete value (string/text)	<u>Data field:</u> Location.city	<u>Data field:</u> - -

	infrastructure of alternative fuels					located. It shall include information on the municipality or stop name (e.g. highway, area) if not directly associated with the city or town.			
12	Recharging and refuelling infrastructure of alternative fuels	Static	Geographic location	Postal Code	Station	Postal code where the recharging or refuelling station is located, including potential additional identification information attending to the concrete characteristics of the postal code in that location.	Discrete/numeric value (combination of string/text and numeric)	<u>Data field:</u> Location.postal_code	<u>Data field:</u> - -
13	Recharging and refuelling infrastructure of alternative fuels	Static	Geographic location	Address name	Station	Where relevant, name of the street where the recharging or refuelling station is located, including the number.	Discrete/numeric value (combination of string/text and numeric) indicating the street name followed by the street number	<u>Data field:</u> Location.address <u>Remarks:</u> The appearance of the cadastral number is a translation error from the EU. It is recommended that the house number be provided instead.	<u>Data field:</u> - -
14	Recharging and refuelling infrastructure of alternative fuels	Static	Accessibility	Opening time	Station	Information regarding the time periods when a recharging or refuelling station is open and accessible to the public for recharging or refuelling, where applicable taking into account the time schedules of the building/facility that gives physical access to that recharging or refuelling station.	Discrete/numeric value (combination of string/text and numeric) indicating the weekdays followed by the time ranges when a recharging or refuelling station is open and accessible to the public	<u>Data field:</u> Location.opening_times	<u>Data field:</u> - -
15	Recharging and refuelling infrastructure of alternative fuels	Static	Accessibility	Time zone	Station	Time zone where the recharging or refuelling station is located. This data type shall be used in combination with other data	Format according to standard ISO 8601	<u>Data field:</u> Location.time_zone <u>Remarks:</u>	<u>Data field:</u> - -

						types to ensure that the availability of a recharging or refuelling point is shown correctly and to make reservation possible and accurate.		It is recommended to use the ISO 8601 standard as the time zone standard instead of the IANA TZ values specified in OCPI.	
16	Recharging and refuelling infrastructure of alternative fuels.	Static	Accessibility	Vehicle-type compatibility	Station	Type of vehicle that may use a recharging or refuelling station. The type of vehicle shall be specified in accordance with UNECE vehicle categorisation ⁽¹⁾ . The following vehicle categories shall be reported (yes/no): —Two- and three-wheel vehicles and quadricycles (L) — Passenger cars (M1) —Buses and coaches (M2 or M3) — Vans (N1) — Trucks (N2 or N3) —Other (expressed as free text)	Discrete/numeric value (combination of string/text and numeric) in list format	<u>Data field:</u> N/A	<u>Data field:</u> Location.parking_places.vehicle_types As well as Location.evse.parking.parking_id <u>Remarks:</u> Location.parking_places contains a list of Parking objects, each of which includes a list of vehicle types for the given parking space.
17	Recharging and refuelling infrastructure of alternative fuels	Static	Accessibility	Vehicle specifications permitted	Station	Where relevant, specific limitations to the mass and dimensions of vehicles (including trailers, semi-trailers, etc.) ⁽²⁾ , allowed to access the recharging or refuelling station. The following vehicle specifications, including trailers, shall be reported (yes/no): — Maximum vehicle mass. — Maximum vehicle height. — Maximum vehicle length. — Maximum vehicle width.	Discrete/numeric value (combination of string/text and numeric) indicating maximum vehicle mass in tonnes and maximum vehicle height, length and width in metres, including trailer.	<u>Data field:</u> N/A	<u>Data field:</u> Location.parking_places.max_vehicle_weight .max_vehicle_height .max_vehicle_length .max_vehicle_width <u>Remarks:</u> Capable of converting from centimeters and kilograms to meters and metric tons

18	Recharging and refuelling infrastructure of alternative fuels	Static	Accessibility	Number of parking spaces	Station	Number of parking spaces that may be used at a recharging or refuelling station to conduct a recharging or refuelling session. It may be different to the number of recharging or refuelling points of that station.	Numeric value (integer number)	<u>Data field:</u> N/A	<u>Data field:</u> Location.evse.parking <u>Remarks:</u> The implementation can derive the number of parking spaces for charging from the number of Parking objects in Location.evse.parking
19	Recharging and refuelling infrastructure of alternative fuels	Static	Accessibility	Number of parking spaces for people with disabilities	Station	Number of parking spaces with accessible recharging or refuelling points for people with disabilities in compliance with relevant accessibility requirements defined in existing standards, guidelines or national legislation.	Numeric value (integer number)	<u>Data field:</u> Locations.evse.parking_restrictions [DISABLED] <u>Remarks:</u> The number is not directly available in OCPI, but it can be derived from the number of EVSEs where the parking_restriction is 'DISABLED'.	<u>Data field:</u> - - As well as Location.parking_places.vechicle_type [DISABLED] & Standards <u>Remarks:</u> In OCPI v.2.3.0, the number can also be derived from the number of Parking objects in Location.parking_places with the vehicle type 'DISABLED' and standards indicating accessibility for persons with disabilities.
20	Recharging and refuelling infrastructure of alternative fuels	Static	Payment options	Payment device with bank card reader	Station	Indication on the existence (yes/no) of a payment terminal with the ability to enable the bank card (debit/credit) to be physically inserted in the terminal for the Europay, Mastercard and Visa (EMV) chip to be read.	Discrete value (string/text)	<u>Data field:</u> Locations.evse.capabilities <u>Remarks:</u> The following OCPI options must be able to be included in the list: - CHIP_CARD_SUPPORT - CREDIT_CARD_PAYABLE	<u>Data field:</u> - -

								<ul style="list-style-type: none"> - DEBIT_CARD_PAYABLE - PED_TERMINAL 	
21	Recharging and refuelling infrastructure of alternative fuels	Static	Payment options	Payment device with a contactless functionality that is at least able to read payment cards	Station	Indication on the existence (yes/no) of a payment terminal that is at least able to read bank cards (debit/credit) with a contactless functionality (e.g. Near Field Communication – NFC).	Discrete value (string/text)	<u>Data field:</u> Locations.evse.capabilities <u>Remarks:</u> The following OCPI options must be able to be included in the list: <ul style="list-style-type: none"> - CONTACTLESS_CARD_SUPPORT - CREDIT_CARD_PAYABLE - DEBIT_CARD_PAYABLE 	<u>Data field:</u> - -
22	Recharging and refuelling infrastructure of alternative fuels	Static	Payment options	Other ad hoc payment option	Station	Indication on the existence (yes/no) of the following ad hoc payment options: <ul style="list-style-type: none"> — Specific (i.e. dynamically generated) QR code — Payment through a website (e.g. static QR code) — Cash — Other (expressed as free text) 	Discrete value (string/text)	<u>Data field:</u> N/A	<u>Data field:</u> - -
23	Recharging and refuelling infrastructure of alternative fuels	Static	Payment options	Additional information about payment providers accepted	Station	Additional information indicating the payment service providers that accept electronic payments in the ad hoc payment option.	Discrete value (string/text) in list format	<u>Data field:</u> N/A	<u>Data field:</u> - -
24	Recharging and refuelling infrastructure of alternative fuels	Static	Payment options	Contract-based (subscription) payment option	Station	Possibility to pay for a recharging or refuelling service on the basis of a contract-based payment	Discrete value (string/text)	<u>Data field:</u> N/A	<u>Data field:</u> Location.evse

						(yes/no) between the end user and the mobility service provider.			<div>.accepted_service_providers</div> <div>As well as</div> <div>Location.evse.capabilities</div> <div>Remarks: The implementation can derive payment options from lists of service providers with contract-based payment options on EVSE objects – the lists may be empty. In this version, Capability is an OpenEnum, to which the following value must be added: CONTRACT_BASED</div>
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Tabel B - Further static data for publicly accessible recharging infrastructure								OCPI	
N u m b e r	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format	v.2.2.1-d2	v.2.3.0
1	Electric recharging infrastructure	Static	General information	Recharging Point ID code (Connector)	Point	Unique ID of the recharging point, which includes the unique ID code of the recharging point operator issued by the IDRO (ID Registration Organisation). It supports the identification, including for billing and booking purposes, of the recharging point within a recharging station.	Discrete/numeric value (combination of string/text and numeric)	<u>Data field:</u> Location.evse .evse_id	<u>Data field:</u> - -
2	Electric recharging infrastructure	Static	General information	Number of connectors	Punkt	Number of connectors in a recharging point. An electric recharging point may have one or more connectors, however only one can be used at the same time.	Numeric value (integer number)	<u>Data field:</u> Location.evse .connectors <u>Remarks:</u> The implementation can derive the numerical value of the number of objects in the list of Connector objects.	<u>Data field:</u> - -
3	Electric recharging infrastructure	Static	General information	Type of connector (plug)	Point	Identification of connectors available in each recharging point within a recharging station: — Type 2 (AC) — Combo 2/CCS (DC) — Megawatt Charging System (MCS) — CHAdeMO (DC) — Other (expressed as free text)	Discrete value (string/text) in list format	<u>Data field:</u> Location.evse.connectors .standard <u>Remarks:</u> Note that the types do not exist directly in OCPI as noted in AFIR. ConnectorType must at a minimum consist of - CHADEMO - TYPE_2 - COMBO2_CCS - MCS	<u>Data field:</u> - - <u>Remarks:</u> ConnectorType is an OpenEnum in this version, to which the following value must be added: OTHER

4	Electric recharging infrastructure	Static	Type of current	Type of current	Point	Type of electric current flow delivered at the recharging point, differentiating between alternating current (AC) or direct current (DC)	Discrete value (string/text) differentiating between AC and DC	<u>Data field:</u> Location.evse.connectors .power_type	<u>Data field:</u> - -
5	Electric recharging infrastructure	Static	Power output	Recharging station maximum power	Station	Total maximum power that the recharging points of the station can provide at the same time.	Numeric value (number) expressed in kW	<u>Data field:</u> N/A	<u>Data field:</u> - -
6	Electric recharging infrastructure	Static	Power output	Recharging point maximum power	Point	Maximum power that can be provided by the recharging point to the electric vehicle at a given time.	Numeric value (number) expressed in kW	<u>Data field:</u> Location.evse.connectors .max_electric_power <u>Remarks:</u> The implementation can derive the power in kilowatts from the specified watts.	<u>Data field:</u> - -
7	Electric recharging infrastructure	Static	Payment options	Mobility service providers offering contract-based recharging	Station	Information indicating the name of those mobility service providers that are offering contract-based payment options and are accepted in a recharging station.	Discrete value (string/text) in list format	<u>Data field:</u> N/A	<u>Data field:</u> Location.evse .accepted_service_providers As well as Location.evse.capabilities <u>Remarks:</u> Capability is an OpenEnum in this version, to which the following value must be added: CONTRACT_BASED
8	Electric recharging infrastructure	Static	Automatic authentication	Plug-and-charge	Point	Possibility of conducting automatic authentication and authorisation of the recharging session on the basis of a contract-based payment concluded between the end user and the mobility service	Discrete value (string/text)	<u>Data field:</u> N/A	<u>Data field:</u> Location.evse.capabilities <u>Remarks:</u> Capability is an OpenEnum in this version, to which the following value must be added: AUTOMATIC_AUTHENTICATION

						provider (yes/no) in a recharging point.			
9	Electric recharging infrastructure	Static	Smart recharging functionalities	Smart recharging services	Point	<p>Possibility of using smart recharging services in a recharging point. The possibility of using the following smart recharging services must be indicated (yes/no):</p> <ul style="list-style-type: none"> — Remote monitoring and control recharging. — User preference configuration for recharging power optimisation. — Bidirectional recharging. — Other (expressed as free text) 	Discrete value (string/text)	<u>Data field:</u> N/A	<u>Data field:</u> - -
10	Electric recharging infrastructure	Static	Renewable electricity	Electricity supplied is 100 % renewable	Station	The recharging station exclusively supplies 100 % renewable electricity (yes/no) (EU Guarantee of Origin (GO) scheme).	Discrete value (string/text)	<u>Data field:</u> Location.energy_mix .is_green_energy	<u>Data field:</u> - -

Tabel F - Dynamic data for publicly accessible recharging and refuelling infrastructure for alternative fuels								OCPI	
N u m b e r	Type infrastruktur for alternative drivmidler	Type of data	Data category	Data type	Data level	Description	Data format	v.2.2.1-d2	v.2.3.0
1	Recharging and refuelling infrastructure of alternative fuels	Dynamic	Functionality	Operationa l status	Point	<p>Capability of the recharging or refuelling point to perform its function. The operational status of a recharging or refuelling point expressed as operational or non-operational:</p> <ul style="list-style-type: none"> — Operational: it can be used in normal conditions during the opening time that is accessible to the public. — Non-operational: it cannot be used due to a technical problem or maintenance works. 	Discrete value (string/text) expressed as operational or non-operational	<p><u>Datafelt:</u> Location.evse.status</p> <p><u>Remarks:</u> Values defined in OCPI do not directly reflect the description in AFIR.</p> <p>All values defined in OCPI for status shall be used as possible values.</p>	<p><u>Data field:</u> - -</p>
2	Recharging and refuelling infrastructure of alternative fuels	Dynamic	Functionality	Availability	Point	<p>Possibility to use a recharging or refuelling point at present time and, when technically possible, at a specific future time, The availability of a recharging or refuelling point expressed as in use, reserved or not in use:</p> <ul style="list-style-type: none"> — In use: it is occupied — Reserved: it is booked by an end user — Not in use: it is non-occupied, thus available for use 	Discrete value (string/text) expressed as in use, reserved or not in use	<p><u>Data field:</u> Location.evse.status</p> <p><u>Remarks:</u> Values defined in OCPI do not directly correspond to the description in AFIR.</p>	
3	Recharging and refuelling infrastructure of alternative fuels	Dynamic	Price	Ad hoc- price	Station	<p>For recharging infrastructure, indication of the end user price for recharging on an ad hoc basis, including all applicable price components. These must be indicated and expressed in national currency per kWh, national currency/min, or national currency/session. Any other price component that may apply in addition must be equally indicated.</p> <p>For refuelling infrastructure, indication of the end user price for refuelling on an ad</p>	Discrete/numeric value (combination of string/text and numeric) in list format expressed for recharging infrastructure in national currency per kWh, national	<p><u>Data field:</u> Tariff .type .min_price .max_price</p> <p>Tariff.elements .price_components .restrictions</p>	<p><u>Data field:</u> - -</p> <p><u>Remarks:</u> Note: In OCPI 3.0, Tariff Associations are expected to be introduced as an object.</p>

						<p>hoc basis, expressed in national currency per kg of fuel.</p>	<p>currency/min, or national currency/session and for refuelling infrastructure in national currency per kg of fuel.</p> <p>National currencies shall be expressed according to ISO 4217, which establishes internationally recognised codes for the representation of currencies.</p>	<p>Location.evse.connectors.tariff_ids</p> <p><u>Remarks:</u> Information on the connector about tariffs (Connector.tariff_ids) refers to Tariff objects from the Tariff module, which can have the tariff type "AD_HOC_PAYMENT" in Tariff.type.</p> <p>If Tariff.type is not specified, the tariff applies to all sessions.</p>	
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