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COMMISSION IMPLEMENTING REGULATION (EU) 2025/655

of 2 April 2025

laying down rules for the application of Regulation (EU) 2023/1804 of the European Parliament and of the Council as regards specifications and procedures relating to the availability and accessibility of data on alternative fuels infrastructure

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2023/1804 of the European Parliament and of the Council of 13 September 2023 on the deployment of alternative fuels infrastructure, and repealing Directive 2014/94/EU [1], and in particular Article 20(7), first subparagraph, thereof,

Whereas:

(1) Article 20(2) of Regulation (EU) 2023/1804 establishes that by 14 April 2025, operators of publicly accessible recharging points and refuelling points for alternative fuels, or, in accordance with the arrangements between them, the owners of those points, are to ensure the availability of static data and dynamic data concerning alternative fuels infrastructure operated by them, or services inherently linked to such infrastructure that they provide or outsource, at no cost. Member States are to ensure the accessibility of this data on an open and non-discriminatory manner to all data users through their national access points (NAPs) as referred to in Article 20(4) of Regulation (EU) 2023/1804.

(2) The data referred to in Article 20(2) of Regulation (EU) 2023/1804 is essential for end users of recharging and refuelling points to make informed decisions regarding the use of such infrastructure. End users may obtain information on alternative fuels infrastructure via information services developed by relevant market actors, namely data users, who rely on access to high-quality data. To ensure that operators or owners of recharging or refuelling points make available such data in an accurate and reliable manner, the conditions for access to, and the characteristics of, such data should be harmonised in terms of the format, frequency and quality in which it is to be made available.

(3) The specifications referred to in Article 20(7), point (a), of Regulation (EU) 2023/1804 are of key importance for the special purpose of facilitating the provision of compatible, interoperable and real-time alternative fuels infrastructure data to data users. They should help ensure that the data made accessible to data users is coherent, reliable and of high quality, thereby effectively supporting the development of timely and targeted information services for end users. Therefore, it is necessary to lay down relevant specifications on the data format, frequency and quality in which the data types referred to in Article 20(2) of Regulation (EU) 2023/1804 are to be made available. In order to ensure uniform application of Regulation (EU) 2023/1804, the specifications should contain a description of the data types to be made available.

(4) As regards specifications for the format of the data types, operators of publicly accessible recharging points and refuelling points for alternative fuels, or, in accordance with the arrangements between them, the owners of those points should make the data referred to in Article 20(2) of Regulation (EU) 2023/1804 available according to the relevant data model for alternative fuels data as described in DATEX II format, including at least the technical specification CEN/TS 16157-10:2022 'Intelligent transport systems – DATEX II data exchange specifications for traffic management and information – Part 10: Energy infrastructure publications'. Pursuant to Article 20(8) of Regulation (EU) 2023/1804, it is necessary to provide a reasonable transition period to implement such complex technical specifications. Those specifications should thus apply from 14 April 2026, which is one year after the date when the requirements set out in Article 20(2) of Regulation (EU) 2023/1804 take effect.

[1] OJ L 234, 22.9.2023, p. 1, ELI: http://data.europa.eu/eli/reg/2023/1804/oj.

(5) For the purpose of a comprehensive presentation and interpretation of the specifications introduced by this Regulation, it is necessary to provide a comprehensive group of the data types listed in Article 20(2) of Regulation (EU) 2023/1804. Broad categories across alternative fuels infrastructure should be set out to cover the different information needs, such as general information, geographic location, accessibility, payment options, operational status, availability or ad hoc price. Specific categories linked to certain alternative fuels infrastructure should be set out based on automatic authentication, smart recharging functionalities, renewable electricity, hydrogen delivery or renewable hydrogen. Each category should include its corresponding data types, accompanied by their relevant descriptions in order to provide unequivocal interpretation by data users. The level of application should also be further specified by indicating whether the data type applies either to recharging or refuelling points or to recharging or refuelling stations. To facilitate the future discoverability and use of the data, the metadata on alternative fuels infrastructure data should be based on the harmonised specifications introduced by this Regulation.

(6) To ensure that the data reflects the most current situation of alternative fuels infrastructure, it is necessary to set out the frequency under which the data is to be updated by operators or, in accordance with the arrangements between them, the owners of recharging and refuelling infrastructure. Both static and dynamic data should be updated when a change occurs. Static data should be updated no later than twenty-four hours after a change occurred, and dynamic data should be updated no later than one minute after a change occurred.

(7) Relevant requirements should be set out to ensure high quality of the data. Data quality management is the first and crucial step to build accurate and reliable information services. Therefore, operators or owners of recharging and refuelling points should ensure the completeness, correctness, consistency, timeliness and reliability of the data before making it available. To achieve that purpose, they should also establish relevant data quality control mechanisms to ensure that the data at source complies with those data quality requirements.

(8) It is also necessary to ensure efficient cooperation between Member States and relevant stakeholders to guarantee the quality of the data relating to alternative fuels infrastructure that is made available, building on the work of the Programme Support Action on National Access Point Coordination Organisation for Europe. Harmonised data quality and reliability requirements are fundamental to ensure that Member States have a good understanding of the data made accessible through their NAPs to data users, who will rely on its quality to develop reliable information services.

(9) In application of Article 20(4) of Regulation (EU) 2023/1804, Member States are to ensure that the data referred to in Article 20(2) of that Regulation is made accessible through their NAPs, in compliance with the additional complementary specifications set out in this Regulation. To that end, and to ensure the quality and, in particular the reliability of the data, it is appropriate to lay down procedures referred to in Article 20(7), point (b), of Regulation (EU) 2023/1804 that Member States should comply with when making data accessible through their NAPs. For this purpose, Member States should be required to regularly monitor the data, including information on the Application Program Interfaces (APIs), made accessible through their NAPs by operators of publicly accessible recharging points and refuelling points for alternative fuels, or, in accordance with the arrangements between them, the owners of those points. Moreover, in order to facilitate exchange of information and contact by operators or owners of publicly accessible recharging points and refuelling points, or the owners of those points, with the NAPs, Member States should establish appropriate measures. Member States should also take measures to address widespread and persistent data quality issues encountered in their NAPs, particularly issues affecting the overall automated and uniform data exchange via APIs through their NAPs.

(10) With a view to the implementation of Article 20(5) of Regulation (EU) 2023/1804, the specifications on the format, frequency and quality should also contribute to the technical set up of the common European access point that the Commission is to establish by 31 December 2026. The specifications should facilitate the future operation of the common European access point so that data users can easily access data and compare information on the characteristics of the alternative fuels infrastructure, such as price, accessibility, availability or power capacity.

(11) The specifications on the format, frequency and quality are built on the outcomes of the Connecting Europe Facility Programme Support Action on Data collection related to recharging/refuelling points for alternative fuels and the unique identification codes related to e-mobility actors that was concluded in 2022.

(12) Pursuant to Article 20(8) of Regulation (EU) 2023/1804, this Regulation is to provide for a reasonable transitional period. Therefore, the application of this Regulation should be deferred to 14 April 2025, which is the date when the requirements set out in Article 20(2) of Regulation (EU) 2023/1804 take effect.

(13) The measures provided for in this Regulation are in accordance with the opinion of the committee referred to in Article 23(1) of Regulation (EU) 2023/1804,

HAS ADOPTED THIS REGULATION:

Article 1

Specifications related to data format

1. Operators of publicly accessible recharging points and refuelling points for alternative fuels, or, in accordance with the arrangements between them, the owners of those points, shall ensure the availability of the data types referred to in Article 20(2) of Regulation (EU) 2023/1804 in accordance with:

(a) the specifications for the format of data types for publicly accessible recharging points and refuelling points, including the descriptions, provided in the tables in the Annex to this Regulation;

(b) the relevant data model for alternative fuels data provided in DATEX II format, including at least CEN/TS 16157-10:2022 in addition to the specifications referred to in point (a), from 14 April 2026.

2. Data types referred to in Article 20(2) of Regulation (EU) 2023/1804 shall be made available in accordance with the specifications for the format set out in the Annex to this Regulation.

Article 2

Specifications related to data frequency

Operators of publicly accessible recharging points and refuelling points for alternative fuels, or, in accordance with the arrangements between them, the owners of those points, shall ensure the availability of the data types referred to in Article 20(2) of Regulation (EU) 2023/1804 in accordance with the following requirements:

(a) static data shall be updated when a change occurs and, in any event, no later than twenty-four hours after the change occurred;

(b) dynamic data shall be updated when a change occurs and, in any event, no later than one minute after the change occurred.

Article 3

Specifications related to data quality

1. When ensuring the availability of the data referred to in Article 20(2) of Regulation (EU) 2023/1804, operators of publicly accessible recharging points and refuelling points for alternative fuels, or, in accordance with the arrangements between them, the owners of those points, shall comply with the following requirements:

(a) Completeness: All data types referred to in Article 20(2) of Regulation (EU) 2023/1804 shall be made available. In addition to this, additional data types may be made available on a voluntary basis by operators or owners of publicly accessible recharging points and refuelling points for alternative fuels when they consider that such additional data may bring added value to the development of information services to end users of alternative fuels infrastructure.

(b) Correctness: The data types shall correctly reflect the descriptions set out in the Annex.

(c) Consistency: The data types shall be made available in accordance with Article 20(2) of Regulation (EU) 2023/1804 and the specifications related to the data format set out in Article 1 of this Regulation. Potential duplicate or overlapping data shall be removed.

(d) Timeliness: The data types shall be updated in accordance with the specifications related to the frequency set out in Article 2 of this Regulation. The necessary technical measures shall be put in place to ensure that time-sensitive data types, such as the availability of recharging or refuelling points, are updated in accordance with these specifications.

(e) Reliability: The data types shall be regularly monitored to identify potential inconsistencies and errors in the data.

2. Operators of publicly accessible recharging points and refuelling points for alternative fuels, or, in accordance with the arrangements between them, the owners of those points, shall establish data quality control mechanisms which ensure that the data at source complies with the requirements set out in paragraph 1, before it is made accessible through the NAPs.

3. Any entity may set up an API providing access to the data referred to in Article 20(2) of Regulation (EU) 2023/1804 to data users on behalf of operators or owners of publicly accessible recharging points and refuelling points and may submit information on such API to the NAPs, in accordance with applicable agreements between the entity and the operator or owner. Such outsourcing agreements shall not relieve the operators or owners of their obligation under this Article to ensure the quality of the original data provided.

Article 4

Procedures on data accessibility

For the purpose of making the data referred to in Article 20(2) of Regulation (EU) 2023/1804 accessible in compliance with Article 20(4) of Regulation (EU) 2023/1804, Member States shall put in place the following procedures to:

(a) regularly monitor the data types, including information on the APIs, made accessible through their NAPs by operators of publicly accessible recharging points and refuelling points, or, in accordance with the arrangements between them, the owners of those points. This monitoring shall ensure that the data made accessible through their NAPs is in compliance with the requirements set out in Regulation (EU) 2023/1804 and in this Regulation;

(b) facilitate the exchange of information between operators or owners of publicly accessible recharging points and refuelling points and their NAPs;

(c) address widespread and persistent data quality issues, including issues affecting the overall automated and uniform data exchange via APIs through their NAPs.

Article 5

Entry into force and application

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

It shall apply from 14 April 2025.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 2 April 2025.

For the Commission
The President
Ursula VON DER LEYEN

ANNEX

Specifications related to the data format for making available the data types referred to in Article 20(2) of Regulation (EU) 2023/1804

Table A – Static data for publicly accessible recharging and refuelling infrastructure for alternative fuels

Table B – Further static data for publicly accessible recharging infrastructure

Table C – Further static data for publicly accessible hydrogen refuelling infrastructure

Table D – Further static data for publicly accessible refuelling infrastructure for liquified methane

Table E – Further static data for publicly accessible refuelling infrastructure for alternative fuels

Table F – Dynamic data for publicly accessible recharging and refuelling infrastructure for alternative fuels

Table G – Further dynamic data for publicly accessible hydrogen refuelling infrastructure

Table A

Static data for publicly accessible recharging and refuelling infrastructure for alternative fuels

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
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)
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)
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)
4	Recharging and refuelling infrastructure of alternative fuels	Static	General information	Service support	Station	Information regarding the presence of physical persons attending the recharging or refuelling station.	Discrete value (string/text)
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 <space> 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.

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
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) — Bathrooms. — Resting facilities. — Other (expressed as free text).	Discrete value (string/text) in list format
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.
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)
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
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
11	Recharging and refuelling infrastructure of alternative fuels	Static	Geographic location	City or town	Station	Name of the Member States city or town where the recharging station is located. It shall include information on the municipality or stop name (e.g. highway, area) if not directly associated with the city or town.	Discrete value (string/text)

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
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)
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
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
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 types to ensure that the availability of a recharging or refuelling point is shown correctly and to make reservation possible and accurate.	Format according to standard ISO 8601
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

([1]) https://unece.org/fileadmin/DAM/trans/main/wp29/wp29resolutions/ECE-TRANS-WP.29-78r6e.pdf.

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
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.
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)
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)
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)
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)

([2]) This covers vehicles and vehicle combinations as defined in the Weights and Dimensions Directive.

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
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: — 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)
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
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 (yes/no) between the end user and the mobility service provider.	Discrete value (string/text)

Table B

Further static data for publicly accessible recharging infrastructure

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
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)
2	Electric recharging infrastructure	Static	General information	Number of connectors	Point	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)

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
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) — Combo2/CCS (DC) — Megawatt Charging System (MCS) — CHAdeMO (DC) — Other (expressed as free text)	Discrete value (string/text) in list format
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
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
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
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
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 provider (yes/no) in a recharging point.	Discrete value (string/text)
9	Electric recharging infrastructure	Static	Smart recharging functionalities	Smart recharging services	Point	Possibility of using smart recharging services in a recharging point. The possibility of using the following smart recharging services must be indicated (yes/no): — Remote monitoring and control recharging. — User preference configuration for recharging power optimisation. — Bidirectional recharging. — Other (expressed as free text)	Discrete value (string/text)

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
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)

Table C

Further static data for publicly accessible hydrogen refuelling infrastructure

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
1	Hydrogen refuelling infrastructure	Static	Hydrogen delivery	Hydrogen state	Station	Type of hydrogen delivered at a refuelling station, differentiating between gaseous and liquified hydrogen.	Discrete value (string/text) expressed as gaseous or liquified hydrogen
2	Hydrogen refuelling infrastructure	Static	Hydrogen delivery	Hydrogen pressure	Point	Pressure at which a refuelling station supplies hydrogen via a refuelling point (i.e. dispenser)	Discrete/numeric value (combination of string/ text and numeric) expressed in bar
3	Hydrogen refuelling infrastructure	Static	Hydrogen delivery	Daily cumulative capacity	Station	Indication of the cumulative capacity per day (expressed in kg/ day) of a hydrogen refuelling station.	Discrete/numeric value (combination of string/ text and numeric) expressed in kg/day
4	Hydrogen refuelling infrastructure	Static	Renewable hydrogen	Hydrogen supplied is 100 % renewable	Station	The refuelling station exclusively supplies hydrogen produced from 100 % renewable sources in accordance with rules established under Directive (EU) 2018/2001 and relevant secondary legislation (yes/no)	Discrete value (string/text)

Table D

Further static data for publicly accessible refuelling infrastructure for liquified methane

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
1	Refuelling infrastructure for liquified methane	Static	Renewable liquified methane	Liquified methane supplied is 100 % renewable	Station	The refuelling station exclusively supplies liquified methane produced from 100 % renewable sources in accordance with rules established under Directive (EU) 2018/2001 and relevant secondary legislation (yes/no) (EU Guarantee of Origin (GO) scheme).	Discrete value (string/text)

Table E

Further static data for publicly accessible refuelling infrastructure for alternative fuels

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
1	Refuelling infrastructure of alternative fuels	Static	General information	Type of connector (dispenser)	Station	Identification of type of connectors available in each refuelling point within a refuelling station, stating the type of fuel applicable: — Hydrogen refuelling (gaseous) — Hydrogen refuelling (liquified) — Methane refuelling (CNG) — Methane refuelling (LNG) — Other (expressed as free text)	Discrete value (string/text) in list format

Table F

Dynamic data for publicly accessible recharging and refuelling infrastructure for alternative fuels

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
1	Recharging and refuelling infrastructure of alternative fuels	Dynamic	Functionality	Operational status	Point	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: — Operational: it can be used in normal conditions during the opening time that is accessible to the public.	Discrete value (string/text) expressed as operational or non-operational

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
						— Non-operational: it cannot be used due to a technical problem or maintenance works.	
2	Recharging and refuelling infrastructure of alternative fuels	Dynamic	Functionality	Availability	Point	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: — 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
3	Recharging and refuelling infrastructure of alternative fuels	Dynamic	Price	Ad hoc price	Station	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. For refuelling infrastructure, indication of the end user price for refuelling on an ad hoc basis, expressed in national currency per kg of fuel.	Discrete/numeric value (combination of string/text and numeric) in list format expressed for recharging infrastructure in national currency per kWh, national currency/min, or national currency/session and for refuelling infrastructure in national currency per kg of fuel. National currencies shall be expressed according to ISO 4217, which establishes internationally recognised codes for the representation of currencies.

Table G

Further dynamic data for publicly accessible hydrogen refuelling infrastructure

Number	Type of alternative fuels infrastructure	Type of data	Data category	Data type	Data level	Description	Data format
1	Hydrogen refuelling infrastructure	Dynamic	Hydrogen delivery	Limited amount of hydrogen available	Station	Indication about limited amount of hydrogen available (less than 100 kg) in the refuelling station (yes/no)	Discrete value (string/text)