EUROPEAN
COMMISSION

Brussels, XXX
[…](2024) XXX draft

ANNEX

**ANNEX**

**to the**

**Commission Delegated Regulation (EU) .../...**

**to the amending Regulation (EU) 2023/1804 of the European Parliament and of the Council as regards standards for wireless recharging, electric road system, vehicle-to-grid communication and hydrogen supply for road transport vehicles.**

## ANNEX

Annex II to Regulation (EU) 2023/1804 is amended as follows:

(1) points 1.1 to 1.4 are replaced by the following:

‘1.1. Normal-power recharging points for light-duty electric vehicles:

– alternating current (AC) normal-power recharging points for light-duty electric vehicles shall be equipped, for interoperability purposes, at least with socket outlets or vehicle connectors of Type 2 for Mode 3 recharging as described in standard EN IEC 62196-2:2022 or, if their power is less than or equal to 3.7 kW and their primary purpose is the recharging of electric vehicles in Mode 2, with socket outlets compliant with standard IEC 60884-1:2022;

– direct current (DC) normal-power recharging points for light-duty electric vehicles shall be equipped, for interoperability purposes, at least with vehicle connectors of the combined charging system ‘Combo 2’ for Mode 4 recharging as described in standard EN IEC 62196-3:2022.

1.2. High-power recharging points for light-duty electric vehicles:

– alternating current (AC) high-power recharging points for light-duty electric vehicles shall be equipped, for interoperability purposes, at least with vehicle connectors of Type 2 for Mode 3 recharging as described in standard EN IEC 62196-2:2022;

– direct current (DC) high-power recharging points for light-duty electric vehicles shall be equipped, for interoperability purposes, at least with vehicle connectors of the combined charging system ‘Combo 2’ for Mode 4 recharging as described in standard EN IEC 62196-3:2022.

1.3. Recharging points for L-category electric vehicles:

1.3.1. The publicly accessible alternating current (AC) recharging points reserved for L-category electric vehicles with a power output less than or equal to 3.7 kW shall be equipped, for interoperability purposes, with at least one of the following:

(a) socket outlets or vehicle connectors of Type 3A as described in standard EN IEC 62196-2:2022 (for Mode 3 recharging);

(b) socket outlets compliant with standard IEC 60884-1:2022 (for Mode 1 or Mode 2 recharging).

1.3.2. The publicly accessible alternating current (AC) recharging points reserved for L-category electric vehicles above 3.7 kW shall be equipped, for interoperability purposes, at least with socket outlets or vehicle connectors of Type 2 for Mode 3 recharging as described in standard EN IEC 62196-2:2022.

1.3.3. Direct current (DC) normal- and high-power recharging points reserved for L-category electric vehicles shall be equipped, for interoperability purposes, at least with vehicle connectors of the combined charging system ‘Combo 2’ for Mode 4 recharging as described in standard EN IEC 62196-3:2022.

1.4. Normal power recharging points and high-power recharging points for electric buses:

– alternating current (AC) normal-power recharging points and high-power recharging points for electric buses shall be equipped, for interoperability

purposes, at least with connectors of Type 2 for Mode 3 recharging as described in standard EN IEC 62196-2:2022;

– direct current (DC) normal-power recharging points and high-power recharging points for electric buses shall be equipped, for interoperability purposes, at least with vehicle connectors of the combined charging system 'Combo 2' for Mode 4 recharging as described in standard EN IEC 62196-3:2022.';

(2) points 1.6 and 1.7 are replaced by the following:

'1.6. High-power recharging points for heavy-duty electric vehicles:

– Direct current (DC) high-power recharging points for recharging infrastructure capable of supplying electricity to both light- and heavy-duty electric vehicles shall be equipped, for interoperability purposes, at least with vehicle connectors of the combined charging system 'Combo 2' for Mode 4 recharging as described in standard EN IEC 62196-3:2022.

1.7. Technical specifications for inductive static wireless recharging for light-duty electric vehicles:

Recharging points for light-duty electric vehicles dedicated to inductive static wireless recharging shall comply, for interoperability purposes, with:

– EN IEC 61980-1:2021 'Electric vehicle wireless power transfer (WPT) systems – Part 1: General requirements';

– EN IEC 61980-2:2023 'Electric vehicle wireless power transfer (WPT) systems – Part 2: Specific requirements for magnetic field wireless power transfer (MF-WPT) system communication and activities';

– EN IEC 61980-3:2022 'Electric vehicle wireless power transfer (WPT) systems – Part 3: Specific requirements for magnetic field wireless power transfer (MF-WPT) systems.';

(3) point 1.14 is replaced by the following:

'1.14. Technical specifications for electric road system (ERS) for dynamic ground-level power supply through conductive rails for light- and heavy-duty electric vehicles:

Recharging infrastructure for alternating current (AC) and direct current (DC) dedicated to electric road system (ERS) for dynamic ground-level power supply through conductive rails for light- and heavy-duty electric vehicles equipped with ground level current collector devices, to enable conductive current collection by road vehicles from a feeding track integrated in the roadway shall comply, for interoperability purposes, with:

– CLC/TS 50717:2022 'Technical requirements for current collectors for ground-level feeding system on road vehicles in operation.';

(4) point 2.1 is replaced by the following:

'2.1. Technical specifications regarding communication between the electric vehicle and the recharging point (vehicle-to-grid communication):

2.1.1. The publicly accessible recharging points for alternating current (AC) and direct current (DC) for light- and heavy-duty electric vehicles built or renovated from [OP: Please insert the date = six months after the date of entry into force of this

Regulation] shall comply, for interoperability purposes, at least with the following standards:

– EN ISO 15118-1:2019 ‘Road vehicles – Vehicle to grid communication interface Part 1: General information and use-case definition’;

– EN ISO 15118-2:2016 ‘Road vehicles – Vehicle to grid communication Interface Part 2: Network and application protocol requirements’;

– EN ISO 15118-3:2016 ‘Road vehicles – Vehicle to grid communication interface Part 3: Physical and data link layer requirements’;

– EN ISO 15118-4:2019 ‘Road vehicles – Vehicle to grid communication interface Part 4: Network and application protocol conformance test’;

– EN ISO 15118-5:2019 ‘Road vehicles – Vehicle to grid communication interface – Part 5: Physical layer and data link layer conformance test’.

2.1.2. Publicly accessible recharging points for alternating current (AC) and direct current (DC) for light- and heavy-duty electric vehicles built or renovated from 1 January 2027 shall comply, for interoperability purposes, at least with standard EN ISO 15118-20:2022 ‘Road vehicles – Vehicle-to-grid communication interface – Part 20: 2nd generation network layer and application layer requirements’. Where such recharging points offer automatic authentication and authorisation services, such as plug-and-charge, they shall comply, for interoperability and security purposes, with both standard EN ISO 15118-2:2016 and standard EN ISO 15118-20:2022.

2.1.3. Private recharging points for alternating current (AC) and direct current (DC) electric light- and heavy-duty electric vehicles built or renovated from 1 January 2027 shall comply, for interoperability purposes, at least with the following standards:

(a) EN IEC 61851-1:2019 ‘Electric vehicle conductive charging system – Part 1: General requirements’ (for Mode 2 recharging);

(b) EN ISO 15118-20:2022 ‘Road vehicles – Vehicle to grid communication interface – Part 20: 2nd generation network layer and application layer requirements’ (for Mode 3 or Mode 4 recharging).

(5) point 3.1 is replaced by the following:

‘3.1. Technical specifications for connectors for refuelling points dispensing gaseous (compressed) hydrogen for light-duty vehicles shall comply, for interoperability purposes, at least with the interoperability requirements described in standard EN 17127:2024.’

(6) point 3.3 is replaced by the following:

‘3.3. The hydrogen refuelling algorithm shall comply with the requirements of standard EN 17127:2024.’

(7) point 3.5 is replaced by the following:

‘3.5. Technical specifications for connectors for refuelling points dispensing gaseous (compressed) hydrogen for heavy-duty vehicles shall comply, for interoperability purposes, at least with the requirements described in standard EN 17127:2024.’.