Electric Mobility: New Rules and Targets for Electric Vehicle Charging Infrastructure

As of April 13, 2024, the new rules for Alternative Fuels Infrastructure Regulation (EU) 2023/1804 of the European Parliament and of the Council of September 13, 2023 ("AFIR") will apply.

AFIR is the result of the proposals in the Fit for 55 package presented by the European Commission in July and December 2021, which focuses on European climate, energy and transport policies, with the aim of reducing greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels, as well as achieving carbon neutrality by 2050.

The new regulation establishes a set of targets to be achieved by the Member States of the European Union, but also a whole set of new rules to be applied by the various players in the electric mobility activity, be they Charging Point Operators ("OPC"), Electricity Suppliers for Electric Mobility ("CEME"), or even the Electric Mobility Network Management Entity ("EGME"), which in this case is MOBI.E.

The new targets are aimed at a faster transition to the electric alternative in road transport, essentially seeking to guarantee a minimum coverage of charging points accessible to the public. Moreover, the new rules seek to make it easier for users to charge their electric vehicles by making ad hoc charging compulsory, but also other structural components such as price formation and transparency and data sharing.

A. Member State targets for charging infrastructures for electric vehicles

According to Article 3(4) of AFIR, Member States shall ensure a minimum coverage of publicly accessible charging points dedicated to light electric vehicles on the road network. To this end, Member States shall ensure:

a) The installation, along the main road network of the Trans-European Transport Network ("TEN-T") and in each direction of traffic, of publicly accessible charging platforms dedicated to light electric vehicles and meeting the following requirements, with a maximum distance of 60 km between them:
i) by December 31, 2025, each charging platform shall provide an output of at least 400 kW and include at least one charging point with an individual output of at least 150 kW;
ii) by December 31, 2027, each charging platform must provide a power of at least 600 kW and include at least two charging points with an individual power of at least 150 kW.

b) The installation, along the overall TEN-T road network and in each direction of traffic, of publicly accessible charging platforms dedicated to light electric vehicles and meeting the following requirements, with a maximum distance of 60 km between them:
i) by December 31, 2027, along at least 50% of the overall TEN-T road network, each charging platform must provide a power of at least 300 kW and include at least one charging point with an individual power of at least 150 kW;
ii) by December 31, 2030, each charging platform shall provide a power of at least 300 kW and include at least one charging point with an individual power of at least 150 kW;
iii) by December 31, 2035, each charging platform shall provide an output of at least 600 kW and include at least two charging points with an individual output of at least 150 kW.

Targets are also presented for charging infrastructure for heavy-duty electric vehicles (Article 4 of AFIR). As this is a developing area, "the Commission should consider increasing the individual power of charging stations on charging platforms as soon as common technical specifications are available" (Recital 22 of AFIR).

In order to assist and ensure that the targets set are actually achieved, each Member State should, by December 31, 2024, set up its national framework for market development action on alternative fuels in the transport sector (Article 14 of AFIR).

By March 31, 2025, and every year thereafter by March 31, Member States shall communicate to the Commission the total aggregated charging power, the number of charging points accessible to the public and the number of battery electric vehicles and rechargeable hybrid electric vehicles registered in their territory on December 31 of the previous year.

B. Payment Methods in Charging Infrastructures

a) According to article 5 of AFIR, charging points installed as of April 13, 2024, must allow users to charge their vehicle on an ad hoc basis.

In this way, AFIR guarantees access to all public access points in a way that had not been applied in the Portuguese model, since users can now charge their electric vehicle at public access charging points without the need to register, sign a contract or establish a commercial relationship with the OPC, beyond the purchase of the charging service.

b) To this end, they must accept electronic payments through terminals and devices used for payment services, including at least one of the following mechanisms:
i. Payment card readers;
ii. Devices with contactless functionality that is at least capable of reading payment cards;
iii. At publicly accessible charging points with a power of less than 50 kW, devices that use an internet connection and enable secure payment transactions, such as those that generate a specific quick response code (QR code).

c) As of January 1, 2027, OPCs shall ensure that all publicly accessible charging points operate with a power of 50 kW or more comply with the requirement to have a card reader or a payment device with contactless functionality.

d) OPCs shall ensure that, when providing automatic authentication at publicly accessible points, they allow users, if they so wish, to use one of the payment methods provided on an ad hoc basis, and that this option is clearly displayed.

e) By October 14, 2024, OPCs must ensure that all publicly accessible charging points operated by them are digitally connected charging points (Article 5(7) of Regulation 2023/1804).

f) OPCs must ensure that all publicly accessible charging points operated by them and installed after April 13, 2024, or renewed after October 14, 2024, are capable of smart charging.

g) By April 14, 2025, operators of publicly accessible charging points shall ensure that all publicly accessible direct current (DC) charging points operated by them have a fixed charging cable.

C. Rules on Price Formation and Transparency

Regarding the prices to be charged by OPCs, according to recital 33 of the AFIR, "price transparency is crucial to ensure smooth and seamless charging and supply". In this sense, as stated in Article 5(3), (4) and (5) of the AFIR:

a) Prices must be "reasonable, easily and clearly comparable, transparent and non-discriminatory";

b) Charging point operators must make information on the ad hoc price available in a clear and simple manner, and the components must be presented in the following order: 1. Price per KWh, 2. Price per minute, 3. Price per session, and 4. Any other applicable price components;

c) For charging points of 50 kW or more, the ad hoc price must be in €/kWh and any occupancy charge (per minute).

D. Availability of data at charging points

According to Article 20(2) of the AFIR, until April 14, 2025, operators of charging points shall ensure that the following data on the alternative fuels infrastructure operated by them is made available free of charge:

a) Static data relating to charging points accessible to the public: i) location of charging points; ii) number of connectors; iii) number of parking spaces for people with disabilities; iv) contact details of the owner and operator of the charging and refueling station; v) opening hours.

b) Additional static data relating to publicly accessible charging points operated by them: (i) unique identification codes, at least of the charging point operator; (ii) type of connector; (iii) type of current (AC/DC); (iv) maximum power (kW) of the charging station; (v) maximum power (kW) of the charging point; (vi) compatibility with the vehicle type.

c) Dynamic data for publicly accessible charging points: i) operational status (operational/out of service); ii) availability (in use/available); iii) ad hoc price; iv) electricity supplied is 100 % renewable (yes/no).

E. Creation of an Identification Registration Organization (IDRO)

According to Recital 70 of AFIR, "it is essential that all players in the electromobility sector can interact easily through digital means in order to provide the best service to end users".

A new player in electric mobility has thus emerged, and all member states will now have to create an entity with this format in order to be able to identify the different OPCs and CEMES. However, given MOBI.E's current role as an EGME, it is expected that it will also take on these new obligations.

Each IDRO should collect information on the unique electromobility identification codes already used in its Member State, so as to enable the exchange and verification of the uniqueness of these codes, possibly through a future common identifier registry repository within the Union.

If you have any doubts or questions on this matter, please do not hesitate to contact the Environment, Energy and Natural Resources Law team at pbbr - Sociedade de Advogados, SP, RL.

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