

TECHNICAL RULE NO. 1/MOBI.E/2019

Communication Protocol used in the Charging Stations Integrated in the Electric Mobility Network, with the EGME Management System

A Line a) from nr.3 of the article 51 of the Electric Mobility Regulation (No. 854/2019) defines that the measuring equipment of the charging stations integrated in the electric mobility network must communicate through a protocol determined by the Electric Mobility Management Entity (EGME).

Following this obligation, MOBI.E, S.A., in the quality of the EGME, specifies that the communication of the charging stations integrated in the Electric Mobility Network must be carried out in accordance with the Open Charge Point Protocol (OCPP).

This protocol, developed, promoted and published by the Open Charge Alliance (OCA), corresponds to an open normative reference, available for implementation and use by those involved in the electric mobility ecosystem, specifies a two-way communication method between electric vehicle charging stations and central management systems, in this case, with the EGME Management System.

Periodically, the OCA publishes new versions of the OCPP which, as a rule, add functionality to previous versions.

The OCPP protocol versions 1.5 (SOAP/XML and JSON implementations) and 1.6 (JSON over Websockets) are accepted for communicating between the measuring equipment at the charging points and the EGME Management System.

The EGME may approve new versions and discontinue older versions of the Protocol, with the Charging Point Operators (OPC) and private access Charging Point Holders (DPC) being duly and timely informed, of the dates on which the changes will come into force.

All the charging stations connected to the MOBI.E network must have their communication software version fully validated. The EGME is responsible for carrying out validation tests on the communication software, which may be done remotely or when the equipment is delivered for validation. These tests must precede the installation in the MOBI.E network of new versions of the communication software with the EGME Management System. This obligation covers both direct communication of the measuring equipment at the charging stations and communication through the OPC's or DPC's own IT platforms.

The software versions with the communication protocol to be installed in the recharging points must, as a minimum, have the following OCPP messages implemented in accordance with the specifications set out in the protocol:

- BootNotification
- Authorize
- StartTransaction

- StopTransaction
- StatusNotification
- HeartBeat
- MeterValues
- RemoteStart
- RemoteStop
- Reset
- UnlockConnector

In particular, the value of active energy, reported in the field with the value "Energy.Active.Import.Interval" or "Energy.Active.Import.Register" associated to the MeterValues and StopTransaction messages.

Either during the integration phase of a new charging point in the Management System, or whenever the protocol is updated to another version approved by the EGME, the OPC or DPC must immediately inform the EGME of the version of the OCPP Protocol installed. This obligation covers loading points connected directly to the EGME's Management System, as well as charging stations connected via the OPC or DPC's own IT platforms.

It is further informed that it is the obligation of the OPC and DPC to ensure that the measurements made by the measuring equipment of the charging stations are not compromised, tampered with or corrupted in the communication with the EGME Management System.

Published on 20 December 2019