

EUROPEAN COMMISSION DIRECTORATE-GENERAL FOR MOBILITY AND TRANSPORT

Directorate B - Investment, Innovative & Sustainable Transport B4 - Sustainable & Intelligent Transport

Sustainable Transport Forum sub-group on governance and standards for communication exchange in the electromobility ecosystem

Working Programme 2021

1. ACTIVITIES

• Activity 1: Mapping of the current discussion concerning standards and protocols for communication exchange in the electromobility ecosystem.

The focus shall be placed on five areas of communication within the EV recharging ecosystem, as follows:

- 1. Communication between EV-CP
- 2. Communication between CP-CPO
- 3. Communication between CPO-EMSP or Roaming Platform
- 4. Communication between CPO-Energy System
- 5. Communication between the EV user, the EV and the EV services infrastructure (e.g. CPOs, EMSPs, Roaming Platforms, Energy Systems, etc.)

The activity shall consider the current state of development by international standardisation organizations as well as industry-driven activities. In addition, the activity shall consider the synergies with private/commercial/semi-public buildings.

→ Deliverable: The sub-group shall produce a document (maximum 15 pages) concluding and recommending to the Commission the preferred option for an EU standard/protocol for each of the above-mentioned areas of the electromobility ecosystem. Quantitative arguments for the possible options will be collected and combined with the rationale of a SWOT analysis, in order to underpin the recommendation for the best solution. The document shall also identify other existing solutions in the market, ensuring the full ecosystem interoperability.

→ Timeline: 14 December 2021

• Activity 2: Development of a governance structure and implementation strategy for the operation of a PKI.

The aim of this activity is to reach a consensus between the members of the subgroup on the choice of a governance framework and PKI architecture for vehicleto-grid communication, defining its ownership model as well as the roles and responsibilities of every type of market player. This activity is subject to the agreement of the sub-group on the possible need to adopt the standard ISO 15118 as the preferred EU option for the communication between the EV and the CP. In the event that ISO 15118 would not be the preferred option, the sub-group shall define an alternative solution.

The activity will build on the work carried out by the members of the sub-group on their respective initiatives.

 \rightarrow **Deliverable:** The sub-group shall produce a document (maximum 30 pages) concluding and recommending to the Commission the preferred option for a governance framework and PKI architecture under the standard ISO 15118 or other feasible alternative solution. In particular, the following aspects shall be addressed:

- The document shall describe the possible governance and architectural options proposed by the members, detailing the characteristics of the preferred option, which shall consider the needs of the different market players and feature quantifiable arguments, *why* to be chosen.
- The document shall outline an implementation scheme for the proposed PKI architecture, including the timeline for its execution and entry into operation.
- The document shall elaborate the future ownership model of the PKI and its associated costs.
- The document shall identify specific regulatory needs in support of the preferred choice.

→ Timeline: 14 December 2021

2. WORKING PROGRAMME 2021 AS PART OF THE SUB-GROUP'S OBJECTIVES

The activities included under the Working Programme 2021 correspond to the fulfilling of the 3-year mission stated in the ToR for the sub-group.

- 1st year (2021): Mapping of the current standardisation discussion and conclusion on the governance and implementation framework for a PKI under the standard ISO 15118.
- 2nd year (2021): Continuation of the activities for the implementation of the PKI governance framework concluded by the sub-group. Identification and definition of the necessary elements to assist the Commission in the preparation of secondary legislation under the new AFID proposal supporting the preferred governance framework.
- **3rd year (2022)**: Finalization of the required elements assisting the Commission with the preparation of secondary legislation. Development of any other action identified by the sub-group to ensure the continuity of the PKI system over the time.