1. INTRODUCTION

These are terms of reference for a sub-group to foster the creation of an electromobility market of services to help electro-mobility deployment.

1.1. Context and rationale

The Commission has been promoting actions towards a market up-take of alternative fuels. This is reflected in the Commission Communication "Clean Power for Transport: A European alternative fuels strategy"\(^1\) and in the proposal for a Directive on the deployment of alternative fuels infrastructure\(^2\), which became Directive 2014/94/EU\(^3\).

Electromobility is one of the main options for road and rail transport identified in the Clean Power for Transport Package. Its specificity, especially for road transport, requires to be addressed properly, taking into account all the potential drivers and barriers that can respectively push or hamper its deployment in Europe.

The need to electrify transport has been reaffirmed by the Energy Union Package and goes beyond the mere deployment of a physical infrastructure for electric vehicles. To avoid a European market fragmentation, it is important to create an infrastructure which can be used easily all over Europe. This will be one of the prerequisite to facilitate EU-wide and cross-border mobility of electric vehicles and the subsequent development of an optimum market size in order to trigger the necessary private investments. Therefore the deployment of an EU electro-mobility system will require common EU framework to define interoperability, as well as a digital infrastructure that will allow creating an "E-Mobility" market in the EU. The creation of a sub-group addressing those specific interoperability issues is therefore necessary in the framework of the STF.

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\(^1\) COM(2013) 17 final of 24.1.2013

\(^2\) COM(2013) 18 final of 24.1.2013

1.2. Mandate
The sub-group on the creation of an E-mobility market and the interoperability challenges for electro-mobility deployment should assist the STF to progress in the implementation of the Directive 2014/94/EU with the help of recommendations aiming at facilitating the deployment of electro-mobility services at EU level.

2. OBJECTIVES, TASKS, DELIVERABLES AND TIMETABLE

2.1. OBJECTIVES

Interoperability is a key challenge for the global electro-mobility industry and, if left unresolved, will continue holding back the uptake of electric driving. Taking into consideration the measures and the timelines contained in Directive 2014/94/EU for the deployment of alternative fuels infrastructure, the recommendations issued by the Expert Group on Future Transport Fuels\(^4\), the results obtained by the FP7 research project on electro-mobility Green eMotion, or other H2020 projects, as well as the studies and works supported by the TEN-T and CEF Programmes, the main objectives for the sub-group to foster the creation of an electromobility market of services are as follows:

1. To define interoperability and formulate minimum requirements for EU charging points;

2. To recommend common European standards and procedures beyond the Directive 2014/94/EU, to help the deployment of electromobility services;

3. To propose guidance to develop a European framework for an electromobility market of services.

2.2. TASKS

The sub-group on the creation of an electromobility market of services and the interoperability challenges for electro-mobility deployment has a central role in carrying out tasks that may include the specification of common data Formats & protocols, common definitions and minimum requirements, to ensure the European infrastructure for electro-mobility will be interoperable and will allow the deployment of electric vehicles together with innovative services, bringing growth and jobs to the EU.

The sub-groups shall non-exhaustively:

1. Analyse and recommend concrete remedial actions to overcome potential market barriers due to a lack of interoperability. Recommend common data Formats & Communication protocols to identify charging points and contracts.

2. Collect and share information on relevant initiatives regarding common identification and interoperability at EU level.

3. Adopt guidance to ensure the interoperability of different existing and future national systems. This may include a harmonized identification issuing process

\(^4\) Please put the link to the report
for electro-mobility actors and contractors, in all EU Member States, according to common and comprehensive rules.

4. Implement article 7.7 of the Directive 2014/94/EU, by determining the scope of the data that should be published, and clarifying the process among Member States and at EU level (EAFO) to release the right information to any kind of user (professional and non-professional).

5. Draft guidelines aiming at having common definitions of electro-mobility related services, devices, actors among other.

6. Recommend functional or non-functional minimal requirements to define interoperability of electric charging for possible EU guidelines.

7. Discuss the possibility to set-up a common European platform that would be in charge of collecting data, attributing identifiers and ensuring the fulfilment of interoperability requirements.

2.3. DELIVERABLES AND TIMETABLE

The sub-group shall report to the STF Plenary. It shall report on all meetings to the STF Plenary. A rapporteur shall be appointed and shall participate to the STF meeting and report about progress. The work could start beginning of 2016 with duration of at least 5 years depending on the Sustainable Transport Forum needs, but shall provide strong recommendations for securing EU interoperability of electric charging services, by the end of 2016.

The sub-group is requested to address to the STF a report, of maximum 50 pages plus Annexes, which includes an analysis and a set of conclusions and recommendations.

The report is to be made publicly available.

The main section of the report should include – where appropriate - the following main deliverables:

1. Evaluation and recommendations for interoperability

D.1.1. collect information collection on different interoperability systems, barriers and initiatives on a continuous basis with a first assessment by June 2016.

D.1.2. recommendations for the implementation of article 7.7 of the Directive 2014/94/EU, by defining the exact data that should be published, and clarifying the process among Member States to release the right information to the public, by July 2016.

D.1.3. draft guidelines for harmonised definitions and requirements for interoperability of electro-mobility services and providers, by December 2016.

2. Recommend common European standards and procedures

D.2.1. Formulate functional or non-functional minimal requirements to define interoperability of electric charging and possibly adopt guidelines, by the end of 2016.
D.2.2. Prepare a Memorandum of Understanding on the adoption of common data Formats & Communication protocols to identify charging points and contracts, first proposal by the end of 2016.

3. Make recommendations for the creation of an EU electromobility market of services.

D.3.1. Make recommendation to put in place a harmonized identification issuing process for electro-mobility actors and contractors, in all EU Member States, according to common and comprehensive rules, by June 2016.

D.3.2. Analyse the effectiveness of different processes and models to guarantee interoperability on the basis of existing schemes in some Member States. This may encompass the possibility to set-up a common European process to collect data and attributing identifiers, by the end of 2016.

3. OPERATION OF THE EXPERT GROUP

3.1. Identification and selection of experts

The sub-group should encompass relevant actors of the electro-mobility sector, representatives of the following sectors to ensure informed assessment and decisions on all of the areas covered by the current ToR: energy providers, vehicles manufacturers, research and innovation institutes, operators and users, service providers, technical standardisation organisations, regional and local authorities, civil society as well as organisations aiming at collecting data and providing interoperability services.

The experts will be proposed by the Commission, confirmed by the STF and appointed by the Commission on the basis of the following criteria:

- high level of expertise in at least one of the relevant fields indicated above;
- appropriate range of skills in the different fields covered by Directive 2014/94/EU, combined with the ability to examine related questions and analyse the general context (legislative, economic, etc.) pertaining to alternative fuels technology.

Provided that the above two conditions can be satisfied, other criteria are also taken into consideration:

- Appropriate balance between academic and industry expertise;
- Appropriate balance between service providers representatives and users;
- Reasonable balance of geographical origins.

3.2. Working method

The sub-group will be chaired by a representative from the Commission in cooperation with a vice-chair. The vice-chair will be a representative from the sub-group members and shall be appointed by the sub-group on simple majority.

The Chairpersons of the sub-group decide on its working methods; they are however requested to ensure that the sub-group members and the supporting expertise are best exploited to allow for such in-depth analysis in all the areas covered by these ToR.
The sub-group assigns a rapporteur by simple majority.

The European Commission will provide administrative, secretariat activities and technical expertise.

The rapporteur will prepare and coordinate the reports of this sub-group, on the basis of all members' written contributions and of relevant material and events identified by the group members and/or the Commission. Commission staff responsible for the sub-group will support the rapporteur in these tasks.

The sub-group shall cooperate with and provide input to other relevant sub-groups established under the STF.

3.3. Meetings

The meetings of the sub-group shall be held on Commission premises. The sub-group shall meet at least twice per year. Commission officials with an interest in the proceedings may attend meetings of the sub-group.

The Chairpersons of the sub-group and the rapporteur will be in regular contact with the members of the sub-group to ensure progress and the smooth running of the sub-group. Ad-hoc external experts may attend the meetings to provide appropriate information and orientations.

3.4. Duration

The sub-group on the Implementation of Directive 2014/94/EU shall be dismantled as soon as its mandate is fulfilled.