



8.3.2021

NOTICE TO MEMBERS

Subject: Petition No 0787/2020 by I.C. (German) on an EU-wide electric car-charging infrastructure

1. Summary of petition

The petitioner owns a Peugeot electric car. She claims that the Nuremberg electricity supplier has set up wall boxes as charging stations, which refuse to charge her French car. She complains that this is a discriminatory measure and calls for an EU-wide electric car charging infrastructure for all electric cars.

2. Admissibility

Declared admissible on 13 January 2021. Information requested from Commission under Rule 227(6).

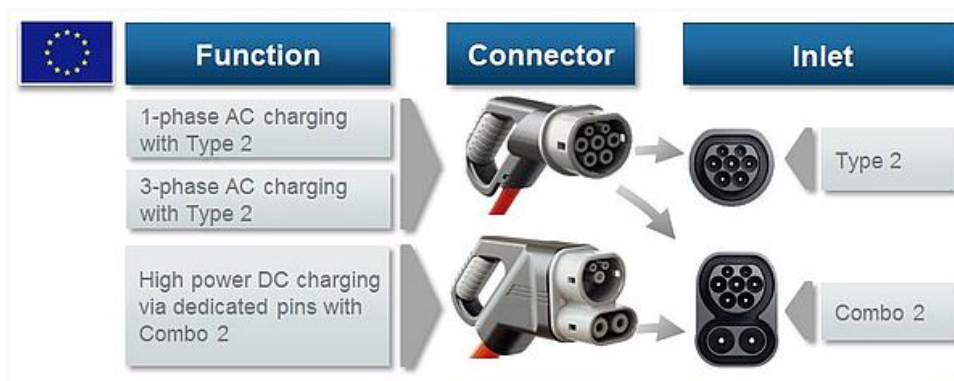
3. Commission reply, received on 8 March 2021

Low and zero-emission vehicles will play an important role in the transition of the transport sector to a climate neutral economy; a rapid uptake of such vehicles is expected in the coming years. Lack of suitable recharging infrastructure should not become a barrier for the uptake of vehicles. It is therefore a policy priority of the Commission to accelerate the deployment of alternative fuel infrastructure to contribute to the EU's overall objective to significantly reduce carbon dioxide (CO₂) emissions from transport. This is also explicitly stipulated in the Commission communication "The European Green Deal"¹ where the Commission sets the ambition to have 1 million publicly accessible recharging and refuelling points deployed by 2025.

¹ COM(2019) 640 final; https://ec.europa.eu/info/publications/communication-european-green-deal_en

Directive 2014/94/EU² on deployment of alternative fuels infrastructure (AFID) creates a common framework of measures for the deployment of alternative fuels infrastructure, including electric recharging infrastructure, in the EU. The Directive requires Member States to set up long-term national policy frameworks (NPFs) for the development of the market as concerns alternative fuels and the planning of the deployment of relevant alternative fuels infrastructure. It also stipulates requirements for rollout of alternative fuels infrastructure along the core network of the trans-European transport network (TEN-T) and its urban nodes - with different milestones for 2020, 2025 and 2030 for different alternative fuels. The Directive also sets common technical specifications for recharging and refuelling stations that aim at ensuring interoperability and adequate consumer information. It covers electricity (including shore-side electricity for ships), hydrogen, and natural gas (compressed natural gas (CNG) for light duty road and liquefied natural gas (LNG) for heavy duty road, maritime and inland waterway transport).

The AFID currently requires that all recharging points are, for interoperability purposes, equipped at least with socket outlets or vehicle connectors of Type 2 (for alternating current (AC) normal and high power recharging points) and connectors of the combined charging system, CCS/Combo 2 (for direct current (DC) high power recharging points)³. The following figure provides a graphical overview of these requirements.



Source: CharIN, <https://www.charinev.org/ccs-at-a-glance/ccs-implementation-guideline/>

At the same time, AFID does not prohibit the addition of other connectors to a recharging point. While prior to the adoption of AFID, a number of recharging points with AC connectors other than Type 2 were deployed in the EU, the prescription of the Type 2 standard through the Directive put an end to this. Different adaptors exist to recharge older vehicles at Type 2 connectors.

By contrast, while it has been a requirement for all DC high power recharging points constructed after the entry into effect of the Directive to be equipped with at least CCS/Combo2 connectors, it has become market practice to equip in particular 50kW recharging points with an additional CHArge de Move (CHAdemo) connector. CHAdemo is a connector standard developed in Japan and so far needed to recharge Japanese vehicle brands and also some models of certain European brands, such as certain Citroëns and Peugeots. Recently, these two

² Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure Text with EEA relevance, OJ L 307, 28.10.2014, p. 1–20.

³ Article 4(4) of Directive 2014/94/EU in conjunction with points 1.1 and 1.2 respectively of Annex II to that Directive.

European brands offer CCS inlets on their cars destined for the European market; Nissan however has not taken any decisive decision regarding the choice of DC inlets for future vehicles, with the exception of one model now offered with CCS⁴. As a result, more and more providers of high power recharging points choose to equip their stations with CCS/Combo 2 connectors only, following market developments. There are currently no approved CCS to CHAdeMO adaptors on the market.

The requirement of AFID to offer at least one common connector at recharging points has the benefit of providing investment security to the market as well as users. Consequently, nearly all electric vehicles currently sold in the EU markets are compatible with Type2/CCS/Combo2 connectors. The Commission is currently evaluating Directive 2014/94/EU⁵ and has started the impact assessment⁶ work with a view to propose a revision of the Directive in 2021. In 2020, the Commission also conducted an Open Public Consultation into certain elements of AFID, including the standardisation of connectors. The current legal framework was considered satisfactory to the large majority of respondents.

Conclusion

The petitioner owns one of the older electric vehicle models. The absence of the connector types required to recharge her vehicle at some, but not all publicly accessible recharging points is an issue that the Commission is aware of, but it is not contrary to the technical harmonisation requirements under AFID.

After the entry into force of Directive 2014/94/EU (“AFID”) on 18 November 2014, and deadline for transposition by the Member States on 18 November 2016, the European standard plug or vehicle connector is at least Type 2 for AC recharging points and at least Combo 2 for DC recharging points. Other vehicle connectors are allowed, but not required.

A practical solution for the petitioner could be to use a Type 2 to Type 1 adaptor where necessary.

Cost of mandating additional connectors to all charging points have to be assessed against benefits for the overall vehicle fleet – cost should not strongly outgrow benefits. The ongoing Impact Assessment is looking into this issue.

⁴ Tesla already late 2018 confirmed that its European version of the Model S would be equipped with a CCS inlet, and gradually started retrofitting its proprietary recharging network to come with CCS connectors: <https://electrek.co/2018/11/14/tesla-model-3-ccs-2-plug-europe-adapter-model-s-model-x/>

⁵ See Evaluation Roadmap of 20 February 2019: <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/2111-Evaluation-of-the-Alternative-Fuels-Infrastructure-Directive>

⁶ See Inception Impact Assessment of 6 April 2020 <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12251-Revision-of-Alternative-Fuels-Infrastructure-Directive>