

Delivering on the electrification and sustainable transition of the transport sector with the Alternative Fuel Infrastructure Regulation:

The urgent need for timely and clear European Commission's guidelines regarding the use of static QR codes

We, manufacturers and operators of electric vehicle charging stations, as well as national and European organizations, are deeply concerned by **missing guidance of the European Commission on the implementation of Article 5, Paragraph 1 c) of the Alternative Fuel Infrastructure Regulation (AFIR)**.

Such delay is not only making it **challenging for manufacturers to implement AFIR provisions** but also, according to the **possibility to use a static QR code**, impossible to comply within the very short deadline of April 13, 2024.

Thus, we seek guideline and clarification as much as an extension of the deadline to be able to comply with the provisions.

First interpretation of provisions of article 5 confirms the possibility to use a static QR code:

Article 5, Paragraph 1 c) allows **for alternative solutions to payment terminals to be used for charging points with a charging capacity of less than 50 kW**, with devices *"allowing for secure payment transactions"*.

- The term *"secure payment transactions"* is, however, not defined in the AFIR or any other European legislation.
- Additionally, among the *"secure payment transactions"* is given the example („such as“) of *„specific Quick Response code“*.
- The mention of the *"specifically generated QR code"* in the AFIR allows for the interpretation that a so-called static QR code can be used, which is already the case in 95% of AC and DC charging stations in Germany (but also throughout Europe) for over twelve years.
- Our industry believes in the importance of providing for equal treatment regarding secure payment processes, which are clearly defined in the Payment Service Directive II and do not include authentication at the charging point.

Draft European Commission's guidelines now creates uncertainty on the use of static QR Code:

In November 2023, when the European Commission consulted on the draft AFIR guidelines, a contradictory signal on the interpretation of article 5 was sent to our industry:

- *"Specifically,"* was understood as *"per charging process"* and not considering that the use of a static QR code at charging points up to a power of 50 kW was sufficient.
- Similarly, it would require that a unique QR code must be generated for each charging session, contradicting the wording *"such as"* used in the AFIR.
- Pending finalization and official publication of the AFIR Guidelines, our industry is unable, without the necessary clarification, to know how to apply provisions of article 5) by April 13, 2024.

Limiting the interpretation to a dynamic QR code will negatively impact the roll-out of charging infrastructure:

If a static QR code is not sufficient, every charging station will need to have a display to show a charging process-specific QR code. As a consequence:

- **Approximately 80% of publicly accessible charging points under 50 kW (wallboxes and charging stations) do not have a suitable display** for such implementation. Integrating a display is often difficult or not possible due to space constraints alone.

- In addition, further **technical adjustments would be necessary, as well as compliance declarations for EMC approvals and CE markings**, etc. Consequently, the hardware would need to be completely redesigned.
- The technical implementation, whether with a payment terminal (separate device or integrated) or online (web-based), should be left to the operator and chosen based on the underlying business models for the local applications. Especially for locations with a few charging points, a **cost-effective payment option is essential to develop and operate them profitably for public charging**. This applies to spatially limited public areas, as well as small private areas such as restaurants and shopping facilities.
- To display a charging process specific QR code on a display, the charging station's control system must convert or generate the URL provided by the overarching system (eMobility backend) into a QR code. But it would require standardization of transmitting the URL in the OCPP communication protocol between the charging station and the backend, which does not exist at the moment. **Implementing this approach would thus result in proprietary solutions on the part of charging station manufacturers and backend operators.**

Static QR code is allowing for secure payment transactions:

Static QR codes are already allowed and presented as a modern secure payment solution in other areas such as for parking lots. Additionally:

- Alleged reasons for abuse include willful removal, covering, or overwriting of the QR code. However, such cases of abuse have not occurred, or to a negligible extent, in the years since the establishment of charging infrastructure.
- Similar to a gas station operator, a charging infrastructure operator must regularly check their products in use for vandalism and changes. This would not be different with unique QR codes.
- Furthermore, engaging in such abusive behavior would constitute a criminal offense. Those who act with intent commit a criminal offense, which is subject to criminal law as a more specific law. Even a display can be willfully scratched, written on, or covered, leading the customer to a fake website. Therefore, the intended higher level of protection by only allowing the use of dynamic QR code would not be achieved.

The way forward for the implementation of article 5, paragraph 1 c): views from our industry:

We call the European Commission to **urgently clarify in its guidelines the possibility to use a static QR code** as an allowed secure payment transaction.

We are willing to **provide static QR code with the highest level of security and with a high level of vandalism resistance**, such as a sticker, print, or engraving. This solution would lead to a comparably secure implementation as when displaying the QR code through a display. This option would be significantly faster and more cost-effective to implement. It would allow manufacturers of charging stations to comply with the provisions of AFIR by 13 April 2024.

Should **static QR codes not be allowed**, we call the European Commission to **grant a two-year transition period** to manufacturers of charging stations, to be able to comply with the need for a dynamic QR code.

Our companies are strongly committed to support EU's efforts to decarbonize road transport and to develop e-mobility infrastructure in the EU. We would welcome an exchange with the European Commission, to further explain our position and how we can work jointly towards a successful implementation of the Alternative Fuel Infrastructure Regulation.

The appeal is supported by the companies listed below:





The following associations and their members also support the appeal:

