

WELMEC

Informative Document

Proposal of Regulation on the deployment of alternative fuels infrastructure (AFIR)

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1. Purpose of document

The purpose of this informative document is to provide a summary of parts of the proposed Regulation of the European Parliament and of the Council on the deployment of alternative fuels infrastructure (COM(2021) 559 final, 2021/0223 (COD), dated 14. 7. 2021), which could be of interest for the legal metrology community.

2. Summary of proposed regulation

The proposal concerns the creation of a new Regulation for the deployment of alternative fuels infrastructure. It will repeal Directive 2014/94/EU.

Bellow some technical aspects of the proposal are summarised.

Article 1

- The Regulation sets out mandatory national targets for the deployment of alternative fuels infrastructure for road vehicles, vessels and stationary aircraft.
- It lays down common technical specifications and requirements on user information, data provision and payment requirements for alternative fuels infrastructure.

Article 2

The definition of 'alternative fuels' covers three subgroups, which further include applicable fuels or power sources:

- 'Alternative fuels for zero-emission vehicles': electricity, hydrogen, ammonia,
- 'Renewable fuels': biomass fuels and biofuels, synthetic and paraffinic fuels produced from renewable energy,
- 'Alternative fossil fuels' for a transitional phase: natural gas (CNG and LNG), liquefied petroleum gas (LPG), synthetic and paraffinic fuels produced from non-renewable energy

Articles 3-12

Provisions for the rollout of recharging and refuelling infrastructure for light- and heavy-duty road transport vehicles, vessels and aircraft.

Articles 3 and 4

Provisions to ensure minimum coverage of publicly accessible recharging points dedicated to light- and heavy-duty road transport vehicles.

Article 5

Provisions on payment options, price transparency and consumer information, non-discriminatory practices, smart recharging, and signposting rules for electricity supply to recharging points.

Article 6

Provisions to ensure minimum coverage of publicly accessible refuelling points for hydrogen dedicated to heavy- and light-duty vehicles.

Article 7

Provisions on payment options, price transparency and contractual choice of refuelling infrastructure for hydrogen.

Article 8

Provisions to ensure minimum coverage of publicly accessible refuelling points for LNG dedicated to heavy-duty vehicles.

Articles 9 and 10

Provisions to ensure installation of a minimum shore-side electricity supply for certain seagoing ships in maritime ports and for inland waterway vessels.

Article 11

Provisions to ensure an appropriate number of LNG refuelling points in maritime ports.

Article 12

Provisions for electricity supply to all stationary aircraft.

Article 19 + Annex II

Provisions for technical specifications related to:

- electricity supply for road transport
- communication exchange in the electric vehicle recharging ecosystem
- hydrogen supply for road transport
- electricity supply for maritime transport and inland navigation
- hydrogen, methanol, ammonia bunkering for maritime transport and inland navigation
- natural gas refuelling points
- fuel labelling

3. Observations and considerations

The proposal doesn't directly deal with legal metrology field, and it does not address the data that should be available to end-users after the end of the charging operation (including measured quantity (in kWh, kg or L) and the price to be paid (see Article 5 and 7)).

It can be seen from the proposal that "mobility services" are key for setting up the recharging and refuelling infrastructure. It should be carefully observed whether the measuring instruments that meet the requirements of the MID would meet the requirements for mobility services (and vice versa). According to the MID directive, the indication of the result must be performed by means of a display or in printed form, and the mobility services can be used as auxiliary indicating devices. However, the current version of the MID does not allow the exclusive display of measurement results via the mobility services.

Some instrument groups, which are used for measurement of alternative fuels are harmonised (included in MID), some not (e.g. CNG), and metrological requirements for DC energy meters are even not standardised on EU level. The latter could have a negative impact to the rollout of recharging and refuelling infrastructure.

Reference measurement equipment for verification of the hydrogen meters is not yet generally available.