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The European Commission proposal on the deployment of alternative fuels infrastructure in the EU

IRU Position on the European Commission proposal on the deployment of alternative fuels infrastructure (AFIR) in the EU

I. IRU POSITION

The road transport industry is committed to fulfilling its responsibility to decarbonise and welcomes the revision of the Alternative Fuels Infrastructure Directive. The decision to replace the Directive with a Regulation will help promote the uptake of alternative fuels and will lead to a more harmonised roll-out of alternative fuels infrastructure across the European Union (EU). Commercial road goods and passenger transport will require a wide range of alternative fuels for different types of operations, including during the transition period, and will have different infrastructure location requirements depending on the nature of the business. It is paramount that commercial road transport will have access to alternative fuels infrastructure based on the principle of technology neutrality.

Therefore, IRU calls for the following:

- Refine and expand provisions on electric recharging and hydrogen refuelling infrastructure on urban nodes:
  - Precisely identify the location of infrastructure serving heavy-duty vehicles (HDVs) on urban nodes with reference to freight terminals, logistics hubs, the proximity of major loading and unloading points, coach parking areas and terminals
  - Include minimum targets for electric recharging infrastructure for light-duty vehicles (LDVs)
- Refine the criteria for establishing the density of electric recharging and hydrogen refuelling infrastructure:
  - Based on the minimum requirements provided in the proposal, AFIR should define the concept of traffic density and set targets for building additional electric recharging and hydrogen refuelling infrastructure in those areas
  - Align the AFIR proposal provisions on electric recharging infrastructure in safe and secure truck parking areas (SSTPAs) with the TEN-T Regulation and set binding targets for the frequency of SSTPAs under the TEN-T rules
- Align the timing for the deployment of electric recharging and hydrogen refuelling stations
- Recognise the need to adapt alternative fuels infrastructure to accommodate renewable biofuels and to ensure that refuelling stations providing liquid fuels remain available to ensure commercial transport continuity
- Refine the conditions for developing additional compressed natural gas (CNG)/liquefied natural gas (LNG) refuelling capacity
- Provide guarantees that investments for building alternative fuels infrastructure will not be made at the additional expense of road users

- Provide guarantees that there will be sufficient power output from the electricity grid for electric infrastructure recharging points so as to ensure the continuity of daily business operations
- Consider slow vs. fast electric recharging and how this will impact drivers' 'availability' and/or 'working times'
- Establish a mandatory information system on the availability of recharging/refuelling points, estimated waiting times and secure, inclusive payment systems

II. ANALYSIS

1. Refine and expand provisions on electric recharging and hydrogen refuelling infrastructure on urban nodes

IRU welcomes that the AFIR proposal recognises the importance of electric recharging infrastructure for HDVs and hydrogen refuelling infrastructure for road vehicles, but misses a pragmatic definition of urban nodes and precision regarding the location and output of the required infrastructure.

An adequate level of recharging and refuelling infrastructure around cities is key for enabling the use of alternative fuelled vehicles. Cities are the starting and end point for a substantial part of goods transport in general and, even more so when they host connectivity points with other transport modes such as ports. Urban nodes are currently defined in Regulation 1315/2013 on Union guidelines for the development of the trans-European transport network (TEN-T Regulation). Unfortunately, the number of urban nodes currently identified under the TEN-T is small and far from sufficient to make a significant change when applied to the infrastructure needed around cities in the EU.

With regard to HDV categories, the AFIR proposal fails to recognise that the different segments of road transport, especially goods and passenger transport, have completely different patterns and needs for recharging and refuelling their vehicles. For example, logistics hubs with recharging and refuelling facilities could be considered at urban nodes for trucks. For coaches, the best location for recharging and refuelling facilities would be at dedicated parking areas and terminals.

Moreover, the AFIR proposal completely overlooks a very important category of vehicles used for commercial road transport, namely light-duty vehicles (LDVs). LDVs are used extensively for both goods transport and passenger transport, including taxi services and hire cars with drivers. Their role in regional and local transport is fundamental. Zero-emission technology is developing at a much slower pace for HDVs compared with other vehicle categories. For this reason, LDVs with limited vehicle autonomy and operations that are not weight sensitive should be targeted first. Given their special role in society, LDVs for commercial use should benefit from dedicated recharging and refuelling stations, which should not compete with private passenger vehicles.

There are over one million commercial road transport companies operating in the EU, of which 80% are small and medium-sized enterprises. Goods transport operators and bus and coach operators generally have up to five HDVs in their fleets. The market for taxi and hire cars with drivers is generally also highly fragmented. As zero-emission vehicles are expected to remain much more expensive than traditional ones in the foreseeable future, it is crucial that operators are at least supported with the necessary infrastructure to recharge and refuel their vehicles. It is too often assumed that the recharging and refuelling of commercial vehicles around cities, for both HDVs and LDVs, will take place at operators' depos or should be organised by shippers, based on their own investments. This assumption is unrealistic. This shifting of the entire investment responsibility on the private sector is based on the false assumption that operators can generally afford it.

In addition, a fragmented and unbalanced roll-out of infrastructure across EU Member States must be avoided at all costs. The lack of a synchronised harmonisation of

infrastructure could make it difficult for goods and passenger transport companies carrying out cross-border operations to switch to alternative fuel technology.

While the development of electric recharging infrastructure is welcome, it should be noted that the current weight of batteries significantly deters operators from embracing this technology. The weight of the battery reduces the payload capacity, which seriously affects the efficiency of transport operators and potentially increases the number of vehicles on the road. The rules on weights and dimensions set out in Directive 96/53/EC should provide commercial road transport operators with greater flexibility in terms of carrying capacity to compensate for the additional weight of the alternative fuel technology. In addition, an increase in the weight of LDVs could lead to problems with corresponding driving licence categories and create bottlenecks in recruiting professional drivers.

To address the shortcomings mentioned above, IRU calls for the AFIR proposal to be amended as follows:

IRU Calls:

- The location of infrastructure serving HDVs on urban nodes should be more precisely identified with reference to freight terminals, logistics hubs, the proximity of major loading and unloading points, coach parking areas and terminals
- AFIR should also include minimum provisions regarding dedicated electric recharging infrastructure for LDVs, for both freight transport and taxis, on urban nodes
- The definition of urban nodes should be aligned with the TEN-T Regulation and the number of urban nodes to be increased under this Regulation
- The promotion of zero-emission technologies in AFIR should be aligned with EU weights and dimensions as well as with driving licence rules

2. Refine the criteria for establishing the density of electric recharging and hydrogen refuelling infrastructure

The AFIR proposal sets targets based on distance. Whilst this provides a good starting point and can represent a generally applied minimum requirement, AFIR should be more demanding in the case of areas with higher traffic density. Several EU Member States experience higher traffic density than others, especially those Member States which are transited through more frequently. The “golden plating” proposed by the AFIR proposal may meet the needs of operators in some areas, but would be totally insufficient in other areas with dense traffic.

Another aspect is the obligation set out in the AFIR proposal to install electric recharging infrastructure in each SSTPA by 2030. IRU welcomes this provision, however the dramatic lack of SSTPAs (i.e. only 7,000 out of the 300,000 parking spots in the EU are SSTPAs) continues to pose a major challenge to the commercial transport sector. The revision of the TEN-T Regulation and related guidelines provides an opportunity to set binding rules on the minimum number of SSTPAs. For example, a legal requirement to have SSTPAs every 100 km on the TEN-T network, combined with AFIR’s requirement to build electric recharging infrastructure in each SSTPA, could bring progress in both social and environmental terms.

IRU Calls:

- Based on the minimum requirements provided in the proposal, AFIR should define the concept of traffic density and set targets for building additional electric recharging and hydrogen refuelling infrastructure in those areas
- The AFIR proposal should align its provisions on electric recharging infrastructure in SSTPAs with the TEN-T Regulation and set binding targets on the frequency of SSTPAs under the TEN-T rules. It should also be clear that the AFIR requirement applies to all SSTPA categories, regardless of their classification under the TEN-T rules and standards

3. Align the timing for the deployment of electric recharging and hydrogen refuelling stations

To harmonise the roll-out of alternative fuels infrastructure, EU Member States should be required to have a minimum number of publicly accessible hydrogen refuelling stations in place by 31 December 2025, as is the case with electric recharging stations. Manufacturers are investing in both battery-electric and hydrogen-powered solutions for HDVs and the infrastructure should be ready for both technologies to be deployed as soon as possible.

IRU Call: Align the timing for the deployment of electric recharging and hydrogen refuelling stations.

4. Recognise the need to adapt alternative fuels infrastructure to accommodate renewable biofuels and ensure that refuelling stations providing liquid fuels remain available to ensure commercial transport continuity

A variety of different alternative fuels guarantee a more sustainable supply chain, as the energy supply is based on several sources. Although most renewable liquid biofuels are drop-in fuels that are compatible with existing fuels infrastructure, higher biofuel blends do require special adaptation. The AFIR proposal should therefore include provisions that take this into account. Renewable biofuels are capable of making an immediate and positive change in existing fleets. The potential for reducing greenhouse gases (GHGs) and achieving air quality benefits can also be improved through the use of ethanol blended in petrol. EU Member States should therefore promote access to high ethanol blends, such as E85 for compatible engines and ED95 for buses and trucks.

In addition, it should be noted that the infrastructure for liquid fuels currently dominates, as not only HDVs but also the passenger car segment predominantly use this technology. It should be recalled that there are approximately 300 million cars on EU roads, compared with about seven million commercial vehicles. A massive uptake of zero-emission vehicles in the passenger car segment, where the technology is widely available, could change the business case for fuel and infrastructure providers. However, the commercial transport sector, especially the HDV segment, will remain dependent on liquid fuels for a long time. This may lead to commercial operators facing a lack of refuelling infrastructure for liquid fuels and jeopardise the continuity of goods and collective passenger transport by road.

IRU Calls:

- Recognise the need to adapt alternative fuels infrastructure to accommodate renewable biofuels
- Ensure that refuelling stations providing liquid fuels serving combustion engine vehicles remain available to ensure commercial transport continuity

5. Refine the conditions for developing additional CNG/LNG refuelling capacity

Renewable CNG/LNG provide viable alternatives for decarbonising road transport. These solutions are readily available on the market, have proven to reduce GHG emissions and are suitable for long-distance transport.

Road transport operators have already invested in vehicles powered by CNG/LNG, previously supported by the EU. As investments and fleet renewals do not happen overnight, operators are concerned about the lack of legal certainty and the EU's current lack of understanding for an appropriate transition period for phasing out fossil CNG/LNG. As with other types of fuels, renewable CNG/LNG may be available in limited quantities in the short and even medium term. From an infrastructure perspective, the immediate ban of fossil CNG/LNG could harm recent investments and leave the market unprepared when renewable CNG/LNG pick up.

Moreover, the AFIR proposal lacks specific provisions to support the development and maintenance of CNG refuelling stations. Whilst the number of CNG stations is growing steadily, their distribution across Europe remains uneven. Additional investment is needed to develop a comprehensive network of CNG refuelling stations to facilitate a good uptake of bio CNG in road transport. Moreover, the AFIR proposal limits support for LNG refuelling stations to 2025. With a high blend of bio LNG achievable in the medium term, LNG is a mature, affordable and necessary technology to accelerate the decarbonisation of HDVs. It is the only immediately viable alternative fuel to diesel for this specific sector, and it is therefore crucial to extend the development of the LNG refuelling stations across the EU beyond 2025.

IRU Call: Refine the conditions for developing additional CNG/LNG refuelling capacity.

6. Provide guarantees that investments for constructing alternative fuels infrastructure will not be at the additional expense of road users

The cost of constructing and upgrading alternative fuels infrastructure will be substantial. As mentioned above, the more than one million transport companies in the commercial transport sector will not be able to switch to much more expensive technologies and bear all the associated costs without adequate support. The average age of large commercial vehicles in the EU is seven years, but ACEA figures[1] indicate that this is considerably higher in several countries. This demonstrates that the industry is already struggling to invest in newer and cleaner vehicles powered by current technologies.

It is crucial that the costs incurred by constructing electric recharging infrastructure and associated grid upgrades are not passed on to transport operators via additional taxation or other methods. Currently, larger transport operators that decide to invest in their own infrastructure are not supported with the cost of upgrading the electricity grid, even if the asset that needs upgrading is outside the company premises. This market structure creates a considerable disincentive to electrifying fleets where in-depot recharging is needed.

IRU Call: Provide guarantees to ensure that investment in the development of alternative fuels infrastructure does not come at the expense of road users. Existing and newly proposed EU taxation and charges, combined with an appropriate level of EU and state funding, should provide the necessary resources for the construction of alternative fuels infrastructure. Moreover, the principle that the electricity grid provider invests in the grid upgrade should also be explicitly recognised.

7. Provide guarantees that there will be sufficient power output in the electricity grid for electric infrastructure recharging points so as to ensure the continuity of daily business operations

Battery-electric technology will play an increasingly important role in commercial road transport, and the development of electric recharging infrastructure is one of the prerequisites for widespread deployment. While the road transport sector is eager to have the right electric recharging infrastructure, it still has concerns about whether there will be enough power available in the electricity grid to allow the simultaneous recharging of commercial vehicles.

Continuity of transport operations is crucial for road transport operators and their customers. This is generally valid, but can become critical in segments such as urgent medical deliveries or perishable foodstuff. In addition to other conditions (e.g. availability of vehicles in sufficient numbers, recharging infrastructure, etc.), the road transport sector would like to see a guarantee that enough power output will be available to sustain the continuity of operations.

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[1] *Source: https://www.acea.auto/files/report-vehicles-in-use-europe-january-2021-1.pdf*

IRU Call: Provide guarantees that there will be sufficient power output in the electricity grid for electric infrastructure recharging points so as to ensure the continuity of daily business operations.

8. Consider slow vs. fast electric recharging and how this will impact drivers' 'availability' and/or 'working times'

Challenges remain when considering the impact of recharging/refuelling vehicles during the drivers' working time. The AFIR proposal makes no reference to the impact of longer times required to charge electric vehicles on the 'availability' and/or 'working time' of drivers. These concepts are defined in Directive 2002/15/EC on the organisation of the working time of persons performing mobile road transport activities. It is still uncertain how much time a battery-electric HDV needs to become fully recharged. Some estimates show that approximately nine hours are needed for a full charge using an AC charger (slow), while approximately two hours are needed with a DC charger (fast).[2] Transport operators should be provided with the right conditions to avoid any disruption to their daily operations.

In addition, the impact on driver shortages should be further analysed as diesel vehicles will not be replaced on a one-to-one basis with alternative fuel vehicles. Rather, the ratio will be greater, as more alternative fuel vehicles will be needed to carry the same number of goods/passengers compared with diesel vehicles. A higher number of vehicles and staff will result in a rise in economic costs. This will lead to more wear and tear on the roads and a higher number of vehicles, which is contrary to the aim of the European Commission's Fit for 55 package.

IRU Call: Consider slow vs. fast electric recharging and how this will impact drivers' 'availability' and/or 'working times'. The possibility of creating a flexible break as outlined in Regulation (EC) No 561/2006 and Regulation (EU) No 165/2014 should be considered for alternatively fuelled vehicles.

9. Establish a mandatory information system on the availability of recharging/refuelling points, estimated waiting times and secure, inclusive payment systems

Alternative fuels infrastructure needs to be very reliable and properly maintained so that it can be used seamlessly by transport operators. The adoption of battery-electric vehicles will lead to a material change in recharging patterns due to longer recharging times. Combined with the limited driving and working hours of drivers, this increases the urgent need to have access to information on the availability of specific recharging points and expected waiting times. A standardised booking system that allows a driver to book electric recharging facilities in advance will be essential to ensure good continuity of commercial traffic. The AFIR proposal does not contain any provisions in this regard.

In addition, the AFIR proposal contains provisions on payment systems and makes reference to mobile applications. Whilst a variety of payment systems is welcome, operators are concerned that the ability to make payments by credit card would disappear.

IRU Call: Establish a mandatory information system on the availability of recharging/refuelling points, estimated waiting times and secure, inclusive payment systems.

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[2] *Source: https://www.volvotrucks.com/en-en/trucks/alternative-fuels/electric-trucks/faq.html*