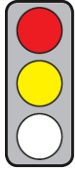


KEY ISSUES

Objective of the Directive: Penetration of the market by vehicles using alternative fuels is to be promoted by extending the network of both refuelling points for alternative fuels and electricity recharging points.

Parties affected: Manufacturers and users of vehicles using alternative fuels as well as companies that produce or market fuels and electricity for electro-mobility, car drivers.



Pro: The EU-wide standardisation of the interfaces between vehicles and supply points for refuelling and recharging substantially increases the usability of the refuelling and recharging infrastructure.

Contra: (1) Establishing a pre-determined very high minimum level for the number of electrical recharging points results in high costs without any visible benefit.

(2) Political influence on the establishment of certain technologies may give rise to long-term subsidy structures which could prevent the development of better fuels in the future.

(3) Empowering the Commission, by way of delegated legal acts, to change the minimum requirements applicable to the national strategy frameworks of the Member States is in breach of EU law.

CONTENT

Title

Proposal COM(2013) 18 of 24 January 2013 for a **Directive** of the Parliament and of the Council on the deployment of an **alternative fuels infrastructure**.

Brief Summary

In the absence of any indication to the contrary, page numbers refer to the Proposal for a Directive COM(2013) 18.

► Context and objectives

- "Alternative Fuels" (AF) such as electricity, hydrogen, biofuels as well as compressed natural gas (CNG) and liquefied natural gas (LNG) are fuels which substitute fossil fuel sources in the transport sector ("de-carbonisation") and reduce the greenhouse gas emissions from transport (Art. 2 (1); see [cepStudie Kraftstoffe der Zukunft](#)).
- The Commission wants to promote the use of vehicles using AF (AF-vehicles) with regard to the various modes of transport – road, rail, water, air. According to its estimations, this would allow [COM(2013) 17, p. 2]
 - cost savings for oil imports of € 4.2 billion by 2020 and € 9.3 billion by 2030 and
 - the creation of 700,000 jobs by 2025.
- The Commission wants to build up an EU-wide unified infrastructure of refuelling and recharging points for AF (AF-infrastructure) in order to ensure the cross-border mobility of AF-vehicles.

► Insufficient number of vehicles using alternative fuels

- In 2010, the energy consumption of the EU transport sector amounted to 94% from fossil fuels, 4.4% from biofuels [COM(2013) 17, p. 2 and 7] and therefore 1.6% from other AF.
- The low number of AF-vehicles and insufficient AF-infrastructure are mutually obstructive ["chicken and egg problem"; COM(2013) 17, p. 8].
 - Due to the low demand for AF-vehicles, it has not been cost effective to produce them or to invest in the AF-infrastructure.
 - Due to high acquisition and refitting costs, as well as insufficient AF-infrastructure, consumers are hardly buying any AF-vehicles [SWD(2013) 6, p. 2].

► National policy framework

- The Member States must lay down targets and support measures for increasing the number of AF-vehicles and building up the AF-infrastructure in "national policy frameworks" (Art. 3 (1)).
- Minimum requirements to be covered by the "national policy frameworks" are (Art. 3 (1), Annex I):
 - 2020 targets for the deployment of AF in the different transport modes and for the relevant infrastructure;
 - year by year targets in order to achieve 2020 targets;
 - "measures" to promote the build-up of the AF-infrastructure e.g. fuel station concessions and building permits for parking lots;

- subsidies and tax incentives for the purchase of AF-vehicles and the build-up of the AF-infrastructure,
 - the use of public procurement to support AF,
 - "non-financial incentives", e.g. preferential access to parking spaces and dedicated lanes for AF-vehicles;
 - subsidies to promote the development of the AF-infrastructure, manufacturing plants as well as research, technological development and demonstration facilities for AF.
- The Commission may change the minimum requirements applicable to the national policy frameworks by way of delegated acts (Art. 3 (7) in conjunction with Art. 8, Art. 290 TFEU).

► **Development of the infrastructure for alternative fuels**

– **Electricity**

By the end of 2020, every Member State must ensure that a minimum number, specified by the EU, of private and public recharging points have been set up for electric vehicles (Art. 4 (1), Annex II).

- It must be twice the expected number of electric vehicles (Recital 11).
- In Germany, at least 1,503,000 recharging points must be set up (Annex II).
- Other requirements are:
 - At least 10% of the recharging points must be publicly accessible (Art. 4 (2)), in Germany that means 150,000 (Annex II).
 - The users of electric vehicles must have a choice of energy suppliers (Art. 4 (8)).
 - The Member States must ensure that the prices at public recharging points are "reasonable". Extra charges to users who do not have "contractual relations" with the operator of the recharging point are prohibited (Art. 4 (10)).
 - A shore-side electricity supply must be installed in all ports in the EU by the end of 2020 for water-borne vessels "provided" this is cost-effective and environmentally beneficial (Art. 4 (4)).

– **Hydrogen**

In every Member State in which hydrogen refuelling points already exist on entry into force of the Directive, an "uninterrupted" supply of publicly accessible refuelling points, not more than 300 km apart, must be available by the end of 2020 (Art. 5 (1)).

– **Natural gas**

By the end of 2020, every Member State must have installed:

- a network of publicly accessible refuelling stations for compressed natural gas (CNG) which must not be more than 150 km apart (Art. 6 (6)),
- a network of publicly accessible refuelling stations for liquefied natural gas (LNG), which must not be more than 400 km apart, for heavy duty motor vehicles, along the core network of the Trans-European transport network (TEN-T Core Network; see [cepPolicy Brief](#)) (Art. 6 (3)),
- publicly accessible refuelling stations for liquefied natural gas for water-borne transport in all sea ports - and, by end of 2025 in all inland ports - of the TEN-T Core Network (Art. 6 (1) and (2)).

► **EU-wide standardisation of refuelling and recharging points**

- No EU-wide standards currently exist for the interface between AF-vehicles and refuelling and/or recharging points. A lack of EU-wide standards
 - prevents the cross-border use of AF-vehicles and makes them less acceptable to potential buyers,
 - prevents the economies of scale arising from the mass production of AF-vehicles (Recital 10).
- By ensuring the EU-wide harmonised standardisation of refuelling and recharging points by the end of 2015, the Commission wants to prevent a fragmentation of the EU internal market (Art. 4 (3) and (5), Art. 5 (2), Art. 6 (4), (5) and (7) in conjunction with Annex III).

► **Consumer information**

- In order to increase the acceptance of AF-vehicles, consumers must receive "clear and simple" information about the compatibility between all the fuels and the vehicles on the market (Art. 7 (1)).
- The information must be available
 - at the pumps in all refuelling points, at vehicle dealerships and at technical control facilities;
 - in vehicle manuals;
 - on new vehicles sold after expiry of the transposition date for the Directive, and
 - on older vehicles as from the first technical control after expiry of the transposition date for the Directive.

Main Change to the Status Quo

There has not previously been any EU legislation to promote the development of an alternative fuels infrastructure in the transport sector.

Statement on Subsidiarity by the Commission

The Commission believes EU action is necessary in order to coordinate the build-up of an infrastructure for alternative fuels for the whole of the EU and lay down EU-wide technical specifications (p. 5).

Policy Context

The EU has undertaken to reduce greenhouse gases by 20% by 2020 as compared with 1990 (see [cepDossier EU-Klimaschutzpolitik](#), p. 8). In addition, at least 10% of fuels are to come from renewable energy sources by 2020 (see [cepKompass EU-Energiepolitik](#), p. 58) and CO₂ levels in road traffic are to be reduced by 6%. In the white paper "Single European Transport Area" [COM(2011) 144; see [cepPolicy Brief](#)] the Commission sets the target of reducing greenhouse gases from transport by 60% by 2050 as compared with 1990.

Legislative Procedure

24 January 2013 Adoption by the Commission
Open Adoption by the European Parliament and the Council, publication in the Official Journal of the European Union, entry into force

Options for Influencing the Political Process

Leading Directorate General:	DG Mobility and Transport
Committees of the European Parliament:	Transport and Tourism (leading), Rapporteur Carlo Fidanza (EVP Group, IT)
Committees of the German Bundestag:	Transport, Construction, Town Planning (leading)
Leading Federal Ministries:	Transport, Construction, Town Planning (leading)
Decision mode in the Council:	Qualified majority (Adoption by a majority of the Member States and with 255 of 345 votes; Germany: 29 votes)

Formalities

Legal competence:	Art. 91 TFEU (Transport)
Form of legislative competence:	Shared competence (Art. 4 (2) TFEU)
Legislative procedure:	Art. 294 TFEU (ordinary legislative procedure)

ASSESSMENT

Economic Impact Assessment

Ordoliberal Assessment

When it comes to the market penetration of AF-vehicles, there is, as the Commission correctly states, a problem of coordination: On the one hand, the lack of a minimum of infrastructure for AF reduces the demand for this type of vehicle; on the other hand, the development of such an infrastructure is not worthwhile while too few vehicles are on the market. The required minimum distances between hydrogen refuelling points of 300 km and between CNG refuelling points of 150 km are not remotely sufficient to allow the corresponding vehicles to be used comfortably on a day to day basis. Nevertheless, even a loose network of refuelling stations, which satisfies specific minimum requirements, will allow the use of AF-vehicles for cross-border transport.

The "chicken and egg" problem can basically be reduced by way of cooperation between vehicle manufacturers and operators of refuelling stations. In addition, vehicles which use both alternative and conventional fuels can significantly ease the problem of coordination. They also offer the operators of refuelling stations the possibility of developing the necessary AF-infrastructure gradually. The extent to which AF-vehicles will be able to establish themselves in countries which do not yet have a dense AF-infrastructure, depends largely upon the arrangement of the measures laid down under the national policy frameworks.

In many countries, there is already a relatively tight network of CNG refuelling points which clearly exceeds the requirements of the proposed Directive, and a large number of users of CNG-vehicles. These, in particular, will benefit from the required network development in those Member States where vehicles using natural gas have not so far played any role, because they will then be able to use their vehicles for cross-border transport.

The build-up requirements for recharging points are based on an increase in electric vehicles by 2020 which has not shown itself so far. They therefore **have a very high potential of being a bad investment. Neither the Commission nor anyone else can say, today, how many electric vehicles will be used in the individual Member States in 2020**, how many recharging points will be required or where these will have to be set up. This is planned economy. **Investment should be decided by the economic players** after weighing up the likely costs and the likely return.

For the same reason, compulsory supportive measures for AF-vehicles and AF-infrastructure should be rejected. The Commission does not give reasons why Member States should have to make provision for the availability of private recharging points. It is likely that potential buyers of electric vehicles regard the availability of at least one private recharging point - cost: approx. € 520 - as a basic prerequisite for the acquisition of such a vehicle. It is also understandable that, due to "range anxiety" there needs to be a certain number of public recharging points so that an electric vehicle can comfortably be used on a day to day basis. However, the requirements that there must be at least twice as many recharging points as electric vehicles and that 10% of recharging points must be publicly accessible, are arbitrary and ultimately excessive. In this regard, the Member States should be allowed more scope for discretion in the national policy frameworks.

Impact on Efficiency and Individual Freedom of Choice

In principle, the existence of a refuelling and/or recharging infrastructure for alternative fuels increases the freedom of choice of vehicle users and thus reduces their dependence on fossil fuels. **Political influence over the establishment of certain technologies can** however cause inefficiently high costs, **create long-term subsidy structures and** as a result of these structures even **impede more innovative propulsion technologies in the future** (path dependence). This is the fear particularly as regards the build-up proposals for electric recharging points.

The EU-wide standardisation of the interfaces for refuelling and recharging substantially increases the usability of the refuelling and recharging infrastructure. This increases the user's freedom of choice, improves the efficiency of the network and strengthens competition within the EU internal market.

It is not yet clear which business model for the marketing of electricity for electro-mobility will ultimately be regarded as advantageous for both customers and suppliers. Electricity suppliers should certainly therefore be able to grant their customers special conditions within the framework of their contractual relations so that alternative business models can be tested.

EU-wide standardised labels at refuelling points and in vehicles providing the consumer with sufficient information as to the usability of all fuel types may reduce uncertainty among consumers and thus contribute to the cross-border use of alternative fuels. The retrospective provision of information in all older vehicles and their manuals would, however, involve substantial additional costs for the auto-mobile industry which would have to update the information for all older vehicles in respect of every new type of fuel and make it available to vehicle owners.

Impact on Growth and Employment

The development of AF-infrastructure being called for will have an impact on employment in the industries affected, such as construction, manufacturing and the auto-mobile industry [Impact Assessment SWD(2013) 5, par. 181–191]. Assumptions about the long-term effects on growth and employment are speculative, however. On the one hand, it is unclear who should bear the cost of building up the infrastructure and which AF-vehicles and -infrastructures will actually be used, to what extent and based on which business model. On the other hand, compulsory investment in AF-infrastructure displaces other possibly more profitable investment.

Impact on Europe as a Business Location

Negligible.

Legal Assessment

Legislative competence

Unproblematic. For the purpose of realising a single transport policy, the EU may issue, in particular, measures on international transport and other "appropriate provisions" (Art. 91 (1) TFEU). In addition, the build-up of an infrastructure for alternative fuels aims at protecting the climate by reducing greenhouse gas emissions caused by transport (Art. 192 TFEU) and at ensuring the functioning of the internal market by way of EU-wide harmonised standards (Art. 114 TFEU).

Subsidiarity

National policy frameworks containing a minimum number of EU-wide harmonised measures can help to encourage Member States to take action and at the same time counteract the fragmentation of such measures. In this regard, however, it is sufficient, at EU level, to require e.g. the build-up of a refuelling network in the abstract, whilst leaving the concrete minimum number of refuelling points to the Member States.

Proportionality

Unproblematic.

Compatibility with EU law

Empowering the Commission, by way of delegated legal acts, to change the minimum requirements applicable to the content of the national strategy frameworks of the Member States (Art. 3 (1), Annex I), relates to a core part of the Directive. Since the provisions are not simply technical "non-essential legislative acts" (Art. 290 (1) TFEU), the empowerment **is in breach of EU law.**

Compatibility with German law

Unproblematic.

Conclusion

The build-up requirements for recharging points have a very high potential of being a bad investment. Neither the Commission nor anyone else knows how many electric vehicles will be used in the individual Member States in 2020. Investment should be decided by the economic players. Political influence over the establishment of certain technologies can create long-term subsidy structures and impede more innovative propulsion technologies in the future. The EU-wide standardisation of the interfaces for refuelling and recharging substantially increases the usability of the refuelling and recharging infrastructure. Empowering the Commission, by way of delegated legal acts, to change the minimum requirements applicable to the national strategy frameworks of the Member States is in breach of EU law.