Basic information

2013/0012(COD) COD - Ordinary legislative procedure (ex-codecision procedure) Directive	Procedure completed
Deployment of alternative fuels infrastructure Repealed by 2021/0223(COD) **Subject** 3.20.05 Road transport: passengers and freight 3.60.02 Oil industry, motor fuels	

Key players

European Parliament

Committee responsible	Rapporteur	Appointed
TRAN Transport and Tourism	FIDANZA Carlo (PPE)	06/03/2013
	Shadow rapporteur ERTUG Ismail (S&D) MEISSNER Gesine (ALDE) TAYLOR Keith (Verts/ALE) VAN DALEN Peter (ECR)	

Committee for opinion	Rapporteur for opinion	Appointed
ENVI Environment, Public Health and Food Safety	The committee decided not to give an opinion.	
ITRE Industry, Research and Energy	TZAVELA Niki (EFD)	18/04/2013
IMCO Internal Market and Consumer Protection	The committee decided not to give an opinion.	
REGI Regional Development	The committee decided not to give an opinion.	
AGRI Agriculture and Rural Development	The committee decided not to give an opinion.	

Council of the

Council configuration	Meetings	Date

European Union	General Affairs	3334	2014-09-29
	Transport, Telecommunications and Energy	3229	2013-03-11

European Commission	Commission DG	Commissioner
	Mobility and Transport	KALLAS Siim

European Economic and Social Committee

European Committee of the Regions

Key events

Date	Event	Reference	Summary
24/01/2013	Legislative proposal published	COM(2013)0018	Summary
05/02/2013	Committee referral announced in Parliament, 1st reading		
11/03/2013	Debate in Council		Summary
26/11/2013	Vote in committee, 1st reading		
05/12/2013	Committee report tabled for plenary, 1st reading	A7-0444/2013	Summary
14/04/2014	Debate in Parliament		
15/04/2014	Decision by Parliament, 1st reading	T7-0352/2014	Summary
15/04/2014	Results of vote in Parliament		
29/09/2014	Act adopted by Council after Parliament's 1st reading		
22/10/2014	Final act signed		
28/10/2014	Final act published in Official Journal		
29/10/2014	End of procedure in Parliament		

Technical information

Procedure reference	2013/0012(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Directive
Amendments and repeals	Repealed by 2021/0223(COD)
Legal basis	Treaty on the Functioning of the European Union TFEU 091
Mandatory consultation of other institutions	European Economic and Social Committee European Committee of the Regions
Stage reached in procedure	Procedure completed
Committee dossier	TRAN/7/11743

Documentation gateway

European Parliament

Document type	Committee	Reference	Date	Summary
Committee draft report		PE516.591	30/07/2013	
Amendments tabled in committee		PE519.818	03/10/2013	
Committee opinion	ITRE	PE514.770	24/10/2013	
Committee report tabled for plenary, 1st reading/single reading		A7-0444/2013	05/12/2013	Summary
Text adopted by Parliament, 1st reading/single reading		T7-0352/2014	15/04/2014	Summary

Council of the EU

Document type	Reference	Date	Summary
Draft final act	00079/2014/LEX	22/10/2014	

European Commission

Document type	Reference	Date	Summary
Commission document (COM)	COM(2013)0017	24/01/2013	Summary
Legislative proposal	COM(2013)0018	24/01/2013	Summary
Document attached to the procedure	SWD(2013)0005	24/01/2013	
Document attached to the procedure	SWD(2013)0006	24/01/2013	
Commission response to text adopted in plenary	SP(2014)471	09/07/2014	
Commission document (COM)	COM(2017)0652	08/11/2017	Summary
Commission working document (SWD)	SWD(2017)0365	09/11/2017	
Follow-up document	COM(2019)0598	19/11/2019	Summary
Follow-up document	COM(2021)0103	08/03/2021	
Follow-up document	SWD(2021)0049	08/03/2021	
Follow-up document	SWD(2022)0033	16/02/2022	

National parliaments

Document type	Parliament /Chamber	Reference	Date	Summary

Contribution	PL_SENATE	COM(2013)0018	22/03/2013	
Contribution	PT_PARLIAMENT	COM(2013)0018	27/03/2013	
Contribution	CZ_SENATE	COM(2013)0018	01/07/2013	
Contribution	CZ_SENATE	COM(2013)0017	16/07/2013	

Additional information

Source	Document	Date
National parliaments	IPEX	
European Commission	EUR-Lex	

Final act

Directive 2014/0094
OJ L 307 28.10.2014, p. 0001 Summary

Delegated acts

Reference	Subject
2019/2794(DEA)	Examination of delegated act
2017/2980(DEA)	Examination of delegated act
2021/2767(DEA)	Examination of delegated act

Deployment of alternative fuels infrastructure

2013/0012(COD) - 24/01/2013 - Legislative proposal

PURPOSE: to encourage the widespread commercial uptake of alternative fuels in the Union.

PROPOSED ACT: Directive of the European Parliament and of the Council (new proposal).

PARLIAMENT'S ROLE: Parliament decides in accordance with the ordinary legislative procedure and on an equal footing with the Council.

BACKGROUND: in line with its flagship initiative 'Resource-efficient Europe", the White Paper entitled "Roadmap to a Single European Transport Area – Towards a Competitive and Resource Efficient Transport System" called for breaking the oil dependence of transport and set a target of 60% greenhouse gas emissions reduction from transport by 2050. The Commission therefore decided to develop a sustainable alternative fuels strategy, including also the appropriate associated infrastructure.

The Commission's communication "Clean Power for Transport: A European alternative fuels strategy" evaluates the main alternative fuel options available to substitute oil. The main alternative fuel options are electricity, hydrogen, biofuels, natural gas (in the forms of Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG), or GasTo-Liquid (GTL)), and Liquefied Petroleum Gas (LPG). Lack of alternative fuel infrastructure and of the common technical specifications for the vehicle-infrastructure interface is considered a major obstacle to the market introduction of alternative fuels and consumer acceptance.

IMPACT ASSESSMENT: the impact assessment that accompanies the proposal investigated the situation with infrastructure for the main alternative fuel options.

LEGAL BASIS: Article 91(1)(d) of the Treaty on the Functioning of the European Union (TFEU).

CONTENT: the proposed Directive aims at ensuring the setting in place of **alternative fuel infrastructure** and the implementation of common technical specifications for this infrastructure in the Union. More specifically, the proposal requires:

- the introduction of **common technical specifications** and the establishment of minimum infrastructure for alternative fuels for transport, i.e. electricity, natural gas (CNG and LNG) and hydrogen, to ensure the market uptake by consumers of alternative fuels and the further development and deployment of the technology by industry;
- Member States to draw up **national policy frameworks** for the market development of alternative fuels and their infrastructure;
- each Member State to establish a **minimum number of recharging points for electric vehicles** by each Member State, with 10% of them being publicly accessible;
- the establishment, on the territory of Member States where there are already **hydrogen refuelling points**, the build-up of a sufficient number of points to allow hydrogen-powered vehicles to circulate throughout the national territory;
- that **LNG refuelling points** shall be built in all maritime and inland waterway ports, as well as routes on the Trans-European Transport (TEN-T) Core Network and defines the common technical specifications to be met by this infrastructure;
- that **common information on fuels** and their compatibility with vehicles be made available to the consumer at the pumps in all refuelling points, in vehicle manuals, and on the vehicles themselves.

BUDGETARY IMPACT: only limited costs related to the follow-up on the implementation of the Directive will arise for the EU budget. The total impact on expenditure (operational and administrative expenditure) is estimated at **EUR 1 329 080 million**.

DELEGATED ACTS: the proposal contains provisions empowering the Commission to adopt delegated acts in accordance with Article 290 of the Treaty on the Functioning of the European Union.

Deployment of alternative fuels infrastructure

2013/0012(COD) - 24/01/2013 - Document attached to the procedure

This Communication sets out a **comprehensive alternative fuels strategy to break dependence on oil,** as well as a roadmap to its implementation. Covering all modes of transport, it aims at establishing a long-term policy framework to guide technological development and investments in the deployment of these fuels and give confidence to consumers. The accompanying **legislative proposal** provides a general direction for the development of alternative fuels in the Single European Transport Area.

1. Need for a comprehensive strategy: the European Union, for many years, has invested in research and development into alternative fuels. However, previous European initiatives supporting alternative fuels, including market quotas and favourable taxation, have been followed up in uneven and disjointed ways. Although there is a common trend throughout the European Union to use the potential of alternative fuels in transport, **different technological choices in different parts of Europe, have led to a fragmentation of the internal market,** creating technology border lines inhibiting the mobility of alternatively fuelled vehicles across Europe.

The Commission estimates that a strategy for the transport sector to gradually replace oil with alternative fuels and build up the necessary infrastructure could bring **savings on the oil import bill of EUR 4.2 billion per year in 2020, increasing to EUR 9.3 billion per year in 2030**, and a further EUR 1 billion per year from dampening of price hikes.

2. A comprehensive mix of alternative fuels: the increasing demand for energy from the transport sector and the need to break the dependence on oil can only be satisfied it there is a comprehensive mix of alternative fuels. All main alternative fuel options must be pursued, with a focus on the needs of each transport mode; without giving preference to any particular fuel, thereby keeping technological neutrality.

- The growing interest for **natural gas** – for maritime and inland-waterways, for long distance road haulage applications, and light duty vehicles - as well as **electricity** for short-distance road transport - indicates that it would be possible, in the short to medium term, to both increase the European supply of energy for transport as well as reduce dependency on imported oil. **Natural gas vehicle technology is mature for the broad market**, with close to 1 million vehicles on the road in Europe and around 3,000 filling stations. **The technology of electric vehicles (EVs) is maturing,** and the deployment of EVs is picking up. Member States aim to have 8-9 million EVs on the road by 2020.

- At the same time, with a view to the rapid development of the market, the Commission considers it will be essential to encourage:

- the **development of advanced biofuels** – which have potential for all transport modes, but are the only option for aviation. Biofuels are currently the most important type of alternative fuels, accounting for 4.4% in EU transport;
- the **progressive build-up of electricity and hydrogen supply networks** to provide area wide coverage for road transport. The technology for hydrogen fuel cell vehicles is maturing, and is being demonstrated in passenger cars, city buses, light vans and inland ship applications. Industry has announced a roll-out of vehicles, including hydrogen powered two-wheelers, for the next years, and several Member States plan for hydrogen refuelling networks.

3. Priority fields for further EU action: priorities for further action need to be set according to the stage of technological maturity and market development as well as future perspective of the different fuels, focussing on:

- **alternative fuel infrastructures:** the investment in the build-up of alternative fuels infrastructure is estimated at EUR 10 billion. The proposal for a Directive that accompanies this Communication provides for sufficient infrastructure coverage to ensure economies of scale on the supply side and network effects on the demand side;

- **developing technical specifications:** most urgent is the implementation of common technical specifications in the Union for the interface between EVs and recharging points. The lack of an agreement on a "common plug" is now considered one of the heaviest impediments to the broader market uptake of EVs in Europe;
- **addressing consumer acceptance:** the harmonisation of consumer information on fuel quality and vehicle compatibility and on the availability of recharging/refuelling points, as well as on environmental, financial and safety aspects, is important to create consumer acceptance. In this context, guidelines on financial incentives for consumers to purchase clean and efficient vehicles are indispensable in order to coordinate the demand-side measures;
- **research and development:** specific technology roadmaps for alternative fuels will be developed in the frame of the Strategic Transport Technology Plan. Research and development of critical components for electric propulsion such as **batteries**, should deliver significantly improved range, performance, durability and reduced costs for a competitive market offer.

Deployment of alternative fuels infrastructure

2013/0012(COD) - 11/03/2013

The Council heard a presentation by the Commission of its recent "Clean power for transport" initiative and held an exchange of views. The goal of the initiative is to break the oil dependence of transport and reduce greenhouse gas emissions from transport by accelerating the market uptake of alternative fuels and vehicles adapted to their use.

In the debate at the Council meeting, ministers generally **welcomed the initiative and acknowledged the need for harmonisation and standardisation**.

Many delegations, however, voiced **concerns about the proposed target numbers of recharging or refuelling points, the financing of the proposed measures and the deadlines for implementation**.

It was stressed that **Member States needed flexibility for implementation**.

There were also **questions about standards and technology, which is still evolving**.

Moreover, a number of Member States also highlighted the **maritime dimension of the initiative**.

The Council's preparatory bodies will pursue the examination of the proposal in the light of the remarks made by the ministers.

Deployment of alternative fuels infrastructure

2013/0012(COD) - 05/12/2013 - Committee report tabled for plenary, 1st reading/single reading

The Committee on Transport and Tourism adopted the report by Carlo FIDANZA (EPP, IT) on the proposal for a directive of the European Parliament and of the Council on the deployment of alternative fuels infrastructure

The committee recommended that the position of the European Parliament adopted in first reading following the ordinary legislative procedure should amend the Commission proposal as follows:

Objective: Members proposed to set out the objective of **a 60% reduction in greenhouse gas (GHG) emissions** from transport by 2050, thereby contributing to the Union's long-term decarbonisation policy. They recommended that a **Union strategy on alternative fuels** should be implemented.

'Publicly accessible recharging or refuelling point' is defined as a recharging or refuelling point which provides non-discriminatory, easy, open and Union-wide interoperable access, by means of widely acceptable payment systems, to the users.

Strengthening national policy: Member States shall set national targets for the development of alternative fuels in the **different transport modes** (road, rail, water and air) and the deployment of the relevant infrastructure by 2020.

National policy frameworks must contain the following:

- an annual report on developments on the alternative fuels market, and in particular on supply and demand;
- policy measures to achieve the maximum possible sustainable mobility and the Union global target for the reduction of energy consumption in the transport sector;
- targets for the reduction of urban congestion, increased mobility efficiency and the deployment of electrified public transport services;
- national plans for the supply of green electricity to electric vehicles;
- deployment and manufacturing support measures, with particular emphasis on the initial launch phase;
- designation of priority ports, whether or not forming part of the TEN-T Core Network, to be equipped with LNG supply infrastructure;
- a minimum number of railway and public transport stations, freight terminals and logistic centres to be equipped with recharging points for electric vehicles in technically suitable locations in their vicinity;

- national policy frameworks must integrate the needs of each mode of transport, including those for which limited alternatives to fossil fuels are available.

Member States shall ensure that national policy frameworks **integrate the needs of each mode of transport,** including those for which limited alternatives to fossil fuels are available.

Electricity supply for transport: Member States shall ensure that at least the number of publicly accessible recharging points for electric vehicles referred to in the table in Annex II are put in place, paying particular attention to urban agglomerations and other densely-populated areas such as suburbs, and within adequate distances along the TEN-T Core Network.

The technical specifications must be observed by:

- **31 December 2015** for **normal** recharging points for electric vehicles;
- **31 December 2017** for **fast** recharging points.

The Directive should **not prevent the development and introduction of other recharging technologies,** such as wireless charging, on which international standardisation is currently in progress.

Member States may maintain additional **safety requirements** in force at national level, such as the charging sockets being fitted with safety shutters.

In line with European transport policy goals in support of **multimodal transport**, the deployment of electric vehicles should be integrated with railway and public transport infrastructure, as well as freight railway and logistic terminals infrastructure wherever possible.

Hydrogen supply for transport: Member States on the territory of which, on the date of entry into force of this Directive, hydrogen refuelling points already exist shall ensure that a sufficient number of publicly accessible refuelling points are available, with distances not exceeding **300 km** , including one refuelling point per **250 000 inhabitants** in urban areas, by 31 December 2020 at the latest. Isolated areas will be exempted.

Natural gas supply for transport: a sufficient number of inland ports of the TEN-T Core Network must be equipped with publicly accessible **LNG** refuelling points for inland waterway transport, within adequate distances, to allow the circulation of LNG vessels Union-wide by 31 December 2025 at the latest.

Members felt it important to set more ambitious goals with regard to CNG: they proposed that a sufficient number of publicly accessible refuelling points be available, with maximum distances of **100 km**, including one refuelling point per 100 000 inhabitants in urban areas, to allow the circulation of CNG vehicles Union-wide by 31 December 2020 at the latest.

Lastly, they wanted to ensure that all LNG and CNG refuelling points for motor vehicles must provide gas at a quality complying with the standards developed by CEN.

Consumer information: with a view to increasing consumer awareness about the alternative fuels covered by this Directive, the Commission and relevant stakeholders should examine ways of providing consumers with information at the refuelling/recharging points allowing comparison of the price, energy content and climate effects linked to different fuels.

Deployment of alternative fuels infrastructure

2013/0012(COD) - 15/04/2014 - Text adopted by Parliament, 1st reading/single reading

The European Parliament adopted by 622 votes to 29 with 20 abstentions, a legislative resolution on the proposal for a directive of the European Parliament and of the Council on the deployment of alternative fuels infrastructure

Parliament adopted its position in first reading following the ordinary legislative procedure. The amendments adopted in plenary were the result of a compromise between Parliament and Council. They amended the Commission proposal as follows:

Subject matter: Parliament and Council agreed that the Directive established a common framework of measures for the deployment of alternative fuels infrastructure in the Union in order to minimise the oil dependence and mitigate the environmental impact of transport.

National policy frameworks: each Member State should adopt a national policy framework for the market development of alternative fuels in the transport sector and the deployment of the relevant infrastructure. Each framework should contain at least the following elements:

- assessment of current and future development of the market of alternative fuels in the transport sector;
- national targets and objectives, and, where applicable, for the deployment of alternative fuels infrastructure;
- measures necessary to ensure that the national targets and the objectives contained in their national policy framework are reached;
- measures that can promote the deployment of alternative fuels infrastructure in public transport services;
- designation of the urban/suburban agglomerations, other densely populated areas and networks, which, subject to market needs, will be equipped with CNG refuelling points.

"Recharging or refuelling point accessible to the public" was defined as a recharging or refuelling point to supply an alternative fuel, which provided Union-wide non-discriminatory access to the users. Non-discriminatory access may include different terms of authentication, use and payment.

National policy frameworks must take into account the needs of the different transport modes existing on their territory, including those for which limited alternatives to fossil fuels are available.

Notification to the Commission: the amended text stated that Member States should notify their national policy frameworks to the Commission within 24 months from the date of entry into force of the Directive.

Based on the national policy frameworks, the Commission should publish information on the national targets and the objectives submitted by each Member State regarding: (i) number of recharging points accessible to the public; (ii) refuelling points for LNG at maritime and inland ports and for LNG accessible to the public for motor vehicles; (iii) CNG refuelling points accessible to the public for motor vehicles.

Electricity supply for transport: Parliament and Council agreed that an appropriate number of recharging points accessible to the public must put in place by **31 December 2020**, in order to ensure that electric vehicles can circulate at least in urban/suburban agglomerations and other densely populated areas, and, where appropriate, within networks determined by the Member States. The number of these recharging points shall be established **taking into consideration inter alia the number of electric vehicles estimated to be registered in 2020**.

As an indication, the appropriate average number of recharging points should be equivalent to **at least one recharging point per 10 cars**. An appropriate number of recharging points accessible to the public should be installed, in particular, at public transport stations, such as port passenger terminals, airports or railway stations.

The Commission should present a **proposal to modify the Directive**, taking into account the development of the electric vehicle market, in order to ensure that an additional number of recharging points accessible to the public are put in place in each Member State by **31 December 2025** at the latest.

Operators of recharging points accessible to the public must be **free to purchase electricity** from any EU electricity supplier, subject to the supplier's agreement and be allowed to provide electric vehicle recharging services to customers on a contractual basis.

Prices charged by the operators of recharging points accessible to the public must be **reasonable, easily and clearly comparable, transparent and non-discriminatory**.

Hydrogen supply for road transport: those Member States which decide to include hydrogen refuelling points accessible to the public in their national policy framework should ensure that an appropriate number of such points are available to ensure the circulation of hydrogen powered motor vehicles, including fuel cell vehicles, within networks determined by those Member States, including cross-border links where appropriate, by **31 December 2025** at the latest.

Natural gas supply for transport: Member States should ensure that:

- an appropriate number of **refuelling points for LNG** are put in place at maritime ports (by 31 December 2025) and at inland ports (by 31 December 2030) to enable LNG inland waterway vessels or sea-going ships to circulate throughout the TEN-T Core Network;
- an appropriate number of **LNG refuelling points accessible to the public are put in place by 31 December 2025 at the latest**, at least along the existing TEN-T Core Network, in order to ensure that LNG heavy-duty motor vehicles can circulate throughout the Union, where there is demand, unless the costs are disproportionate to the benefits, including environmental benefits. As an indication, the necessary average distance between refuelling points should be approximately **400 km**;
- an appropriate number of **CNG refuelling points accessible to the public are put in place by 31 December 2025** at the latest, at least along the existing TEN-T Core Network, to ensure that CNG motor vehicles can circulate throughout the Union. As an indication, the necessary average distance between refuelling points should be approximately **150 km**.

User information: Member States should ensure that **relevant, consistent and clear information** is made available as to which motor vehicles can be regularly fuelled with individual fuels put on the market or recharged by recharging points. Such information shall be made available in motor vehicle manuals, at refuelling and recharging points, on motor vehicles and motor vehicle dealerships in their territory.

Strategy on Clean Power: the Commission shall, if it considers appropriate, adopt an Action Plan for the implementation of the Strategy on Clean Power for Transport in order to achieve the broadest possible use of alternative fuels for transport, while ensuring technological neutrality, and promote sustainable electric mobility throughout the Union.

Deployment of alternative fuels infrastructure

2013/0012(COD) - 22/10/2014 - Final act

PURPOSE: to promote a broad market development of alternative fuels by building up minimum infrastructure for alternative fuels across the EU.

LEGISLATIVE ACT: Directive 2014/94/EU of the European Parliament and of the Council on the deployment of alternative fuels infrastructure.

CONTENT: this Directive establishes a **common framework of measures for the deployment of alternative fuels infrastructure** in the Union in order to minimise dependence on oil and to mitigate the environmental impact of transport.

This Directive sets out:

- **minimum requirements for the building-up of alternative fuels infrastructure**, including recharging points for electric vehicles and refuelling points for natural gas (LNG and CNG) and hydrogen, to be implemented by means of Member States' national policy frameworks;

- **common technical specifications** for such recharging and refuelling points, and user information requirements.

National policy frameworks: under this Directive, each Member State shall adopt a national policy framework for the deployment of the relevant infrastructure and shall send it to the Commission **by 18 November 2016**. These national policy frameworks will set out the country's national targets for putting in place new recharge and refuelling points for the different types of "clean fuel", such as electricity, hydrogen and natural gas, as well as relevant **supporting actions**.

The Commission will assist Member States in ensuring the **coordination and coherence** of these measures.

Deadlines for putting in place the infrastructure: these range from **2020 to 2030**, depending in particular on the type of fuel, vehicle and deployment area.

The Directive stipulates that Member States:

- **by the end of 2020**, enough recharge and refuelling points should be installed so that **electric cars and cars using compressed natural gas (CNG)** can circulate at least in cities and suburban areas;
- shall ensure that an appropriate number of refuelling points for LNG are put in place at **maritime ports** (by 31 December 2025) and in their inland ports (by 31 December 2030) to enable LNG inland waterway vessels or seagoing ships to circulate throughout the TEN-T Core Network;
- shall ensure that, **by 31 December 2025, an appropriate number of refuelling points for LNG accessible to the public** are put in place, at least along the existing TEN-T Core Network, in order to ensure that **LNG heavy-duty motor vehicles** can circulate throughout the Union, where there is demand, unless the costs are disproportionate to the benefits, including environmental benefits. As an indication, the necessary average distance between refuelling points should be approximately **400 km**;
- shall ensure that an **appropriate number of LNG and CNG refuelling points accessible to the public should be put in place by 31 December 2025**, at least along the TEN-T Core Network existing at that date and, after that date, on the other parts of the TEN-T Core Network where these are made accessible to vehicles. As an indication, the necessary average distance between refuelling points should be approximately **150 km**.

As regards **electricity supply for transport**, Member States shall ensure that prices charged by the operators of recharging points accessible to the public are reasonable, easily and clearly comparable, transparent and non-discriminatory.

Technical standards: common technical standards are to be applied, making all new recharge and refuelling points interoperable.

User information: Member States shall ensure that **relevant, consistent and clear information** is made available as regards those motor vehicles which can be regularly fuelled with individual fuels placed on the market, or recharged by recharging points. Such information shall be made available in motor vehicle manuals, at refuelling and recharging points, on motor vehicles and in motor vehicle dealerships in their territory.

Financing new measures: it should be possible for Member States to implement this Directive by making use of a **wide range of regulatory and non-regulatory incentives and measures**, in close cooperation with **private sector actors**, who should play a key role in supporting the development of alternative fuels infrastructure. In addition, relevant actions are eligible for EU funding from the Connecting Europe Facility and Horizon 2020.

Reporting and review: each Member State shall submit to the Commission a report on the implementation of its national policy framework by 18 November 2019, and every three years thereafter. **By 31 December 2020**, the Commission shall review the implementation of this Directive, and, as appropriate, submit a proposal to amend it by laying down new common technical specifications for alternative fuels infrastructure.

ENTRY INTO FORCE: 17.11.2014.

TRANSPOSITION: 18.11.2016.

DELEGATED ACTS: the Commission should be empowered to adopt delegated acts in order to ensure adaptation of the provisions of this Directive to market developments and technical progress. The power to adopt acts should be delegated to the Commission for a **period of five years (renewable) from 17 November 2014**. The European Parliament or the Council may object to a delegated act within a period of two months from the date of notification (this period may be extended by three months). If the European Parliament or the Council objects, the delegated act shall not enter into force.

Deployment of alternative fuels infrastructure

2013/0012(COD) - 08/11/2017

The **Commission's action plan** sets out measures to complement and better implement national policy frameworks (NPFs) under Directive 2014/94/EU on **alternative fuels infrastructure**.

By 2025, the EU should have completed basic charging and refuelling infrastructure, ensuring full coverage of the trans-European transport network (TEN-T) core network corridors. **The future deployment of infrastructure** will require significant public and private investment.

With the agreement of Paris on climate change in force, it is necessary to accelerate the transition to a modern low-carbon economy. In order for the EU to make a successful transition to low-emission or zero-emission mobility, the Commission believes that an **integrated approach** is required. This requires a common policy framework for vehicles, infrastructure, electricity grids, economic incentives and digital services at EU, national, regional and local levels.

Current situation and needs: although the deployment of alternative fuels infrastructure has recently intensified, the EU now needs to accelerate deployment in two areas: first, in the core network and the overall TEN-T network.

The level of ambition between different Member States varies significantly. For example, only two Member State provide more than 100 recharging points for electric vehicles per 100 000 city inhabitants.

Analysis of the NPFs under Directive 2014/94/EU results in the following estimates of infrastructure investment needs by Member States, including the TEN-T core network corridors:

- **electricity**: up to EUR 904 million by 2020;
- **compressed natural gas** (CNG): up to EUR 357 million by 2020 and up to EUR 600 million by 2025 for road vehicles running on CNG;
- **liquefied natural gas** (LNG): up to EUR 257 million by 2025 for road vehicles operating on LNG. For LNG for waterborne transport, up to EUR 945 million in the TEN-T Core Network Corridor seaports by 2025 and up to EUR 1 billion in the TEN-T Core Network Corridor inland ports by 2030;
- **hydrogen**: up to EUR 707 million by 2025.

Overall, the analysis of the situation shows that the **NPFs combined do not add up to a conclusive picture** that provides the long-term market certainty that is needed.

By 6 November 2017, only 8 out of 25 NPFs fully meet the NPF requirements.

The actions proposed in the framework of the plan revolve around the following objectives:

Accelerate the completion and implementation of national policy frameworks: the Commission will support the exchange of information and mutual learning on the implementation of national policy frameworks, starting in March 2018 with a group of experts, then from the end of autumn 2018 with annual policy conferences. It will consider how to best reflect priorities of NPFs in the allocation of EU project funding and in European Semester reporting.

Investment support: the Commission will organise **roadshows** in Member States starting in November 2017 to review in a comprehensive way the ambition of the NPFs and the investment needs for low and zero emission mobility as well as assess the opportunities offered by different EU funding and financial instruments.

As a result, an additional EU financial support of up to **EUR 800 million** from CEF and NER300 is being made available with this action plan for investments into alternative fuels infrastructure

Enabling actions in urban areas: many European cities and regions are frontrunners in the transition to low and zero emission mobility. The Commission will also look into and adapt, where feasible, funding for alternative fuels in urban nodes, including for fleet solutions, by the end of 2017.

Increasing consumer buy-in: users must be able to use the entire transport network in a simple and seamless way.

Greater collaboration between public and private actors is needed. This implies access to reliable and timely information on the location and availability of charging points or refuelling points. Interoperable and easy-to-use payment services will also have a major impact.

In the end all parts of the necessary infrastructure need to be digitally connected (i.e. remotely and in real time for charging stations).

Integrating electric vehicles into the electricity system: Member States should (i) adopt a legislative framework to fully meet demand and enable smart charging; ii) encourage the deployment of charging points and pre-wiring of parking spaces in residential and non-residential buildings; and (iii) ensure that smart charging technologies such as smart meters are rolled out and that already adopted and upcoming smart charging standards for electric vehicles are being applied.

Electro-mobility related needs will be taken into account in the context of Horizon 2020 programming as well as in the context of the Strategic Energy Technology Plan (SET-Plan) process and other stakeholder fora.

The Commission concluded that the assessment of NPFs under the Alternative Fuels Infrastructure Directive shows that there is a lot to learn from the positive experiences of some Member States.

Serious **cross-border and cross-sector collaboration** of all public and private stakeholders is needed. The lock-in of technologies and markets needs to be prevented. For markets to grow, alternative fuels infrastructures and their services need to be open, transparent and interoperable.

The Commission stands ready to support this process through both means of non-legislative and legislative action.

Deployment of alternative fuels infrastructure

2013/0012(COD) - 19/11/2019 - Follow-up document

The Commission presents a report on the exercise of the power to adopt delegated acts conferred on the Commission pursuant to Directive 2014/94 /EU of the European Parliament and of the Council on the deployment of alternative fuels infrastructure.

As a reminder, Directive 2014/94/EU on the deployment of alternative fuels infrastructure sets out minimum requirements for the building-up of alternative fuels infrastructure, including recharging points for electric vehicles and refuelling points for natural gas (LNG and CNG) and hydrogen.

Certain articles of the directive stipulate that such recharging and refuelling points when deployed or renewed as from 18 November 2017, shall comply at least with the technical specifications set out in Annex II of the Directive.

In accordance with Article 8 of the Directive, the Commission is authorised to adopt delegated acts in order to:

- update the references to the standards in the technical specifications where these standards are replaced by new versions thereof adopted by the relevant European or international standardisation organisations;

- supplement Annex II in order to require compliance of the infrastructures to be deployed or renewed with the technical specifications contained in the standards to be developed by the relevant European Standardisation Organisations (ESOs).

The Directive, in Annex II, indicates further needs for setting technical specifications in areas where no reference to standards exists yet, including:

- wireless recharging points for motor vehicles;

- battery-swapping for motor vehicles;

- recharging points for electric buses;

- shore-side electricity supply for inland waterway vessels;

- refuelling points for LNG for inland waterway vessels, sea-going ships and motor vehicles;

- compressed natural gas (CNG) refuelling points for motor vehicles.

Exercise of delegation

After consulting the Commission Expert Group ‘Sustainable Transport Forum’ and after informing the European Parliament and the Council of this consultation, the European Commission adopted Commission Delegated Regulation (EU) 2018/674 supplementing Directive 2014/94/EU as regards recharging points for L-category motor vehicles, shore-side electricity supply for inland waterway vessels, refuelling points for LNG for waterborne transport, and amending that Directive as regards connectors for motor vehicles for the refueling of gaseous hydrogen.

This Delegated Regulation lays down the following provisions:

- The publicly accessible alternating current (a.c.) recharging points reserved for Lcategory electric vehicles up to 3.7 kVA shall be equipped, for interoperability purposes, with at least one of the following: (i) socket-outlets or vehicle connectors of Type 3a as described in standard EN 62196-2 (for Mode 3 charging); (ii socket-outlets and connectors compliant with IEC 60884 (for Mode 1 or Mode 2 charging).

- The publicly accessible alternating current (a.c.) recharging points reserved for Lcategory electric vehicles above 3.7 kVA shall be equipped, for interoperability purposes, with at least socket-outlets or vehicle connectors of Type 2 as described in standard EN 62196-2.

- The shore-side electricity supply for inland waterway vessels shall comply with standard EN 15869-2 ‘Inland navigation vessels — Electrical shore connection, three phase current 400 V, up to 63 A, 50 Hz — Part 2: Onshore unit, safety requirements’.

- The refuelling points for LNG for inland waterway vessels or sea-going ships, which are not covered by the International Code of the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code), shall comply with standard EN ISO 20519.

- Connectors for motor vehicles for the refuelling of gaseous hydrogen shall comply with standard EN ISO 17268 “Gaseous hydrogen land vehicle refuelling connection devices”.

Following requests received from single Member States and from the Central Commission for Navigation of the Rhine (CCNR) to technically update and complement Commission Delegated Regulation EU 2018/674, and following the CEN-CENELEC's letter of 26 November 2018, which informed the Commission of the new developments in the standardisation of natural gas and hydrogen refuelling infrastructure, the Commission adopted a new Delegated Regulation to repeal Commission Delegated Regulation (EU) 2018/674 (Delegated Regulation (EU) 2019/1745) and to include the above-mentioned updates and complements as well as the new developments in the standardisation of natural gas and hydrogen refuelling infrastructure

Lastly, the adoption of a new Commission Delegated Regulation is foreseen in the fourth quarter of 2020 in order to supplement the technical specifications on wireless recharging for motor vehicles and recharging points for electric buses of Annex II of Directive 2014/94/EU.

The Commission does not intend to include the technical specifications concerning battery swapping for motor vehicles because the relevant European standardisation organisation does not consider such standard a priority for the EU industry.