



Procedure file

Basic information	
COD - Ordinary legislative procedure (ex-codecision procedure) Regulation	Procedure completed 2007/0214(COD)
Motor vehicles: type-approval of hydrogen-powered vehicles Amending Directive 2007/46/EC Repealed by 2003/0153(COD) 2018/0145(COD)	
Subject 3.20.06 Transport regulations, road safety, roadworthiness tests, driving licence 3.40.03 Motor industry, cycle and motorcycle, commercial and agricultural vehicles	

Key players			
European Parliament	Committee responsible	Rapporteur	Appointed
	IMCO Internal Market and Consumer Protection		21/11/2007
		PPE-DE WEISGERBER Anja	
	Committee for opinion	Rapporteur for opinion	Appointed
	ENVI Environment, Public Health and Food Safety		20/12/2007
	PPE-DE PETERLE Alojz		
	ITRE Industry, Research and Energy		
	TRAN Transport and Tourism	The committee decided not to give an opinion.	
Council of the European Union	Council configuration	Meeting	Date
	Employment, Social Policy, Health and Consumer Affairs2916		16/12/2008
European Commission	Commission DG	Commissioner	
	Internal Market, Industry, Entrepreneurship and SMEs	VERHEUGEN Günter	

Key events			
10/10/2007	Legislative proposal published	COM(2007)0593	Summary
25/10/2007	Committee referral announced in Parliament, 1st reading		
27/05/2008	Vote in committee, 1st reading		Summary
30/05/2008	Committee report tabled for plenary, 1st reading	A6-0201/2008	
03/09/2008	Results of vote in Parliament		
03/09/2008	Debate in Parliament		

03/09/2008	Decision by Parliament, 1st reading	T6-0395/2008	Summary
16/12/2008	Act adopted by Council after Parliament's 1st reading		
14/01/2009	Final act signed		
14/01/2009	End of procedure in Parliament		
04/02/2009	Final act published in Official Journal		

Technical information

Procedure reference	2007/0214(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Regulation
	Amending Directive 2007/46/EC 2003/0153(COD) Repealed by 2018/0145(COD)
Legal basis	EC Treaty (after Amsterdam) EC 095
Stage reached in procedure	Procedure completed
Committee dossier	IMCO/6/54802

Documentation gateway

Legislative proposal		COM(2007)0593	10/10/2007	EC	Summary
Document attached to the procedure		SEC(2007)1301	10/10/2007	EC	
Document attached to the procedure		SEC(2007)1302	10/10/2007	EC	
Committee draft report		PE402.916	07/03/2008	EP	
Amendments tabled in committee		PE404.740	09/04/2008	EP	
Committee opinion	ITRE	PE402.734	08/05/2008	EP	
Committee opinion	ENVI	PE402.744	21/05/2008	EP	
Committee report tabled for plenary, 1st reading/single reading		A6-0201/2008	30/05/2008	EP	
Economic and Social Committee: opinion, report		CES1186/2008	09/07/2008	ESC	
Text adopted by Parliament, 1st reading/single reading		T6-0395/2008	03/09/2008	EP	Summary
Commission response to text adopted in plenary		SP(2008)6073	17/10/2008	EC	
Draft final act		03674/2008/LEX	14/01/2009	CSL	

Additional information

National parliaments	IPEX
European Commission	EUR-Lex

Motor vehicles: type-approval of hydrogen-powered vehicles

PURPOSE: to incorporate hydrogen vehicles of categories M1, M2, M3 and N1, N2, N3 in the EU whole vehicle type approval framework.

PROPOSED ACT: Regulation of the European Parliament and of the Council.

BACKGROUND: hydrogen is not a source of energy but a promising energy carrier. The use of hydrogen as fuel for road vehicles offers an environmentally friendly solution for mobility. At present, hydrogen powered vehicles are not included in the European Community vehicle type-approval framework. This situation results in a fragmented internal market of these vehicles, which discourages the introduction of this environmentally friendly technology.

Furthermore, hydrogen is a substance that has different characteristics from conventional fuels that are used for vehicle propulsion. In order to realise the environmental benefits associated with the use of hydrogen vehicles, the share of these in the total vehicle fleet should be increased.

The proper functioning of the single market in the European Union requires common standards regarding the approval of hydrogen powered vehicles. At the same time, since there are perceived safety issues with using hydrogen for vehicle propulsion, it should be ensured that hydrogen systems are as safe as conventional propulsion technologies.

CONTENT: the proposal foresees the amendment of the Framework Directive 2007/46/EC in order to include hydrogen vehicles in the approval procedure. It specifies technical requirements to be applied for the type-approval of hydrogen components (hydrogen containers and hydrogen components other than containers) included in the hydrogen system in order to ensure that hydrogen related components are working in a proper and safe way. In addition, it includes requirements for the type-approval of vehicles with regard to the installation of hydrogen components or systems in vehicles. The proposal foresees the amendment of separate type-approval Directives and Regulations in order to include specific requirements for hydrogen powered vehicles.

Motor vehicles: type-approval of hydrogen-powered vehicles

The Committee on the Internal Market and Consumer Protection adopted a report drafted by Anja WEISGERBER (EPP-ED/DE) and, in the framework of the codecision procedure, made some amendments to the proposal for a regulation of the European Parliament and of the Council on type-approval of hydrogen powered motor vehicles and amending Directive 2007/46/EC.

The main amendments, which chiefly concern new recitals, are as follows:

- the CARS 21 High Level Group final report¹ stated that efforts with a view to increasing international harmonisation of motor vehicle regulations should be maintained where appropriate, with a view to involve the key vehicle markets and to extend harmonisation to areas not yet covered, notably both in the framework of the 1958 and the 1998 Agreements of the UNECE. In line with this recommendation, the Commission should continue to support the development of internationally harmonised requirements for motor vehicles under the auspices of UNECE. In particular, if a Global Technical Regulation (GTR) on hydrogen and fuel cell vehicles is adopted, the Commission should consider the possibility of adapting the requirements of this Regulation to those of that GTR;
- innovative small vehicles, designated under EC type-approval legislation as L category vehicles, are considered as early adopters of hydrogen as a fuel. This is because introducing hydrogen for these vehicles requires less effort, as the technical challenge and level of investment required is not as high as with cars. The Commission should, no later than 1 January 2010, evaluate the possibility of regulating the type-approval of hydrogen L category vehicles;
- hydrogen powered vehicles are unlikely to be successful on the market unless adequate filling station infrastructure is available in Europe. The Commission should therefore look into suitable measures to support the establishment of a Europe-wide filling-station network for hydrogen powered vehicles;
- the committee introduced an obligation for the Commission to adopt identification requirements for hydrogen vehicles through the regulatory procedure with scrutiny to ensure that hydrogen vehicles are recognised by rescue services. In addition, it was specified that it must be possible for rescue services to identify the hydrogen power source of a vehicle;
- hydrogen mixtures could be used as a transition fuel to facilitate the introduction of hydrogen powered vehicles in countries where there is a good natural gas infrastructure. The Commission should therefore develop requirements for the use of mixtures of hydrogen and natural gas/biomethane, especially a mixing ratio of hydrogen and gas which takes account of technical feasibility and environmental benefits;
- in the future, hydrogen powered vehicles should be vehicles propelled by pure hydrogen produced as far as possible from renewable energies. Use of mixtures of hydrogen and natural gas/biomethane to propel vehicles must be no more than a transitional technology;
- the definition of "hydrogen powered vehicle" is amended to mean any motor vehicle that uses hydrogen as fuel to propel the vehicle. The Commission had defined it as any motor vehicle that uses pure hydrogen or a mixture of hydrogen and natural gas as fuel to propel the vehicle;
- hydrogen leakage detection sensors are subject to type-approval;
- lastly, the obligation to type-approve components is limited to those using compressed (gaseous) hydrogen at a pressure higher than 3.0 MPa.

Motor vehicles: type-approval of hydrogen-powered vehicles

The European Parliament adopted, by 644 votes to 2 with 11 abstentions, a legislative resolution amending the proposal for a regulation of the European Parliament and of the Council on type-approval of hydrogen powered motor vehicles and amending Directive 2007/46/EC. The report had been tabled for consideration in plenary by Anja WEISGERBER (EPP-ED/DE) on behalf of the Committee on the Internal Market and Consumer Protection. The amendments were the result of a compromise between Parliament and Council.

The main amendments were as follows :

- "hydrogen powered vehicle" means any motor vehicle that uses hydrogen as fuel to propel the vehicle. The Commission had defined it as any motor vehicle that uses pure hydrogen or a mixture of hydrogen and natural gas as fuel to propel the vehicle;
- the Commission must adopt certain implementing measures. These include the detailed rules for labelling or other means of clear and rapid identification of the vehicle as set out in Annex VI point 16, which states that labels or other means of identification shall be used to indicate to rescue services that the vehicle is powered by hydrogen and that liquid or compressed (gaseous) hydrogen is used. These measures must be adopted in accordance with the regulatory procedure with scrutiny;
- the Commission may adopt certain other implementing measures, including specification for the requirements relating to, inter alia, the use of pure hydrogen or a mixture of hydrogen and natural gas/biomethane; and impact protection of the vehicle with regard to the integrity of hydrogen components and systems. Those measures must also be adopted in accordance with the regulatory procedure with scrutiny;
- Parliament made some amendments to the annexes, particularly Annex I (list of components subject to type-approval) and Annex VI (requirements for the installation to hydrogen components and systems) Hydrogen leakage detection sensors are subject to type-approval.

Members inserted some new recitals into the text:

- the CARS 21 High Level Group final report stated that efforts with a view to increasing international harmonisation of motor vehicle regulations should be maintained where appropriate, with a view to involve the key vehicle markets and to extend harmonisation to areas not yet covered, notably both in the framework of the 1958 and the 1998 Agreements of the UNECE. In line with this recommendation, the Commission should continue to support the development of internationally harmonised requirements for motor vehicles under the auspices of UNECE. In particular, if a Global Technical Regulation (GTR) on hydrogen and fuel cell vehicles is adopted, the Commission should consider the possibility of adapting the requirements of this Regulation to those of that GTR;
- hydrogen mixtures could be used as a transition fuel towards the use of pure hydrogen, to facilitate the introduction of hydrogen powered vehicles in countries where there is a good natural gas infrastructure. The Commission should therefore develop requirements for the use of mixtures of hydrogen and natural gas/biomethane, especially a mixing ratio of hydrogen and gas which takes account of technical feasibility and environmental benefits;
- owing to the characteristics of the fuel, hydrogen powered vehicles may require a specific treatment from rescue services. It is, therefore, necessary to lay down requirements for the clear and rapid identification of such vehicles to inform those services of the fuel stored on board the vehicle. Whilst the identification should be fit for purpose it should, as far as possible, avoid being of a nature that is likely to concern the public;
- hydrogen powered vehicles are unlikely to be successful on the market unless adequate filling station infrastructure is available in Europe. The Commission should therefore look into suitable measures to support the establishment of a Europe-wide filling-station network for hydrogen powered vehicles;
- innovative small vehicles, designated under EC type-approval legislation as L category vehicles, are considered as early adopters of hydrogen as a fuel. This is because introducing hydrogen for these vehicles requires less effort, as the technical challenge and level of investment required is not as high as with cars. The Commission should, no later than 1 January 2010, evaluate the possibility of regulating the type-approval of hydrogen L category vehicles.

Motor vehicles: type-approval of hydrogen-powered vehicles

PURPOSE:to incorporate hydrogen vehicles of categories M and N in the EU whole vehicle type approval framework.

LEGISLATIVE ACT: Regulation (EC) No 79/2009 of the European Parliament and of the Council on type-approval of hydrogen-powered motor vehicles, and amending Directive 2007/46/EC.

CONTENT: the text underlines that hydrogen is considered as a clean way of powering vehicles for the future, on the way towards a pollution-free economy based on the reuse of raw materials and on renewable energy resources, as vehicles propelled with hydrogen emit neither carbon-based pollutants nor greenhouse gases.

Since hydrogen is an energy vector and not an energy source, the climate-policy value of hydrogen power depends on the source from which the hydrogen is obtained. Care should therefore be taken that hydrogen fuel is produced in a sustainable manner, as far as possible from renewable energy resources, so that the overall environmental balance of introducing hydrogen as a fuel for motor vehicles is positive.

Following the agreement reached at first reading with the European Parliament, the Regulation establishes requirements for the type-approval of motor vehicles with regard to hydrogen propulsion and for the type-approval of hydrogen components and hydrogen systems. It also establishes requirements for the installation of such components and systems.

For the purposes of this Regulation, "hydrogen-powered vehicle" shall mean any motor vehicle that uses hydrogen as fuel to propel the vehicle.

This Regulation shall apply to:

- hydrogen-powered vehicles of categories M and N, as defined in Section A of Annex II to Directive 2007/46/EC, including impact protection and the electric safety of such vehicles;
- hydrogen components designed for motor vehicles of categories M and N, as listed in Annex I;
- hydrogen systems designed for motor vehicles of categories M and N, including new forms of hydrogen storage or usage.

Manufacturers shall ensure that hydrogen components and systems are designed in such a way that they can be installed in accordance with the requirements of Annex VI on the requirements for the installation of hydrogen components and systems.

From a technical point of view, the Commission shall adopt specific implementing measures which will contain more precise technical requirements to vehicles and their hydrogen systems. Those measures shall be adopted in accordance with the regulatory procedure with scrutiny.

The Commission shall be empowered to: (i) establish the requirements and test procedures relating to new forms of hydrogen storage or usage, additional hydrogen components and the propulsion system; (ii) establish specific procedures, tests and requirements with regard to the impact protection of hydrogen-powered vehicles and integrated system safety requirements.

The Regulation provides for transitional periods to allow vehicle manufacturers sufficient time.

The text underlines that innovative small vehicles, designated under EC type-approval legislation as L category vehicles, are considered as early users of hydrogen as a fuel. The Commission should, no later than 1 January 2010, evaluate the possibility of regulating the type-approval of hydrogen L category vehicles.

ENTRY INTO FORCE: 24/02/2009.

APPLICATION: from 24/02/2011, with the exception of certain measures which shall apply from the date of entry into force of this Regulation or from 24/02/2012.