Basic information

2014/0268(COD) COD - Ordinary legislative procedure (ex-codecision procedure) Regulation	Procedure completed
Emission limits and type-approval for internal combustion engines for non-road mobile machinery Repealing Directive 97/68/EC 1995/0209(COD) Amending Regulation (EU) No 167/2013 2010/0212(COD) Amending Regulation (EU) No 1024/2012 2011/0226(COD) Amended by 2020/0113(COD) Amended by 2021/0129(COD) Amended by 2022/0080(COD) See also 2018/0220(COD) **Subject** 2.10.03 Standardisation, EC/EU standards and trade mark, certification, compliance 3.40.03 Motor industry, cycle and motorcycle, commercial and agricultural vehicles 3.70.02 Atmospheric pollution, motor vehicle pollution	

Key players

European Parliament

Committee responsible	Rapporteur	Appointed
ENVI Environment, Public Health and Food Safety	GARDINI Elisabetta (PPE)	10/02/2015
	Shadow rapporteur DANCE Seb (S&D) DUNCAN Ian (ECR) HUITEMA Jan (ALDE) ECK Stefan (GUE/NGL) EICKHOUT Bas (Verts/ALE) EVI Eleonora (EFDD)	

Committee for opinion	Rapporteur for opinion	Appointed
IMCO Internal Market and Consumer Protection	POSPÍŠIL Jiří (PPE)	05/11/2014

Council of the European Union

Council configuration	Meetings	Date
Agriculture and Fisheries	3481	2016-07-18

European Commission	Commission DG	Commissioner
	Internal Market, Industry, Entrepreneurship and SMEs	BIEŃKOWSKA Elżbieta

European Economic and Social Committee

Key events

Date	Event	Reference	Summary
25/09/2014	Legislative proposal published	COM(2014)0581	Summary
12/11/2014	Committee referral announced in Parliament, 1st reading		
15/09/2015	Vote in committee, 1st reading		
15/09/2015	Committee decision to open interinstitutional negotiations with report adopted in committee		
30/09/2015	Committee report tabled for plenary, 1st reading	A8-0276/2015	Summary
26/04/2016	Approval in committee of the text agreed at 1st reading interinstitutional negotiations	PE610.750 GEDA/A/(2017)007928	
04/07/2016	Debate in Parliament		
05/07/2016	Decision by Parliament, 1st reading	T8-0296/2016	Summary
05/07/2016	Results of vote in Parliament		
18/07/2016	Act adopted by Council after Parliament's 1st reading		
14/09/2016	Final act signed		
14/09/2016	End of procedure in Parliament		
16/09/2016	Final act published in Official Journal		

Technical information

Procedure reference	2014/0268(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Regulation
Amendments and repeals	Repealing Directive 97/68/EC 1995/0209(COD) Amending Regulation (EU) No 167/2013 2010/0212(COD) Amending Regulation (EU) No 1024/2012 2011/0226(COD) Amended by 2020/0113(COD) Amended by 2021/0129(COD) Amended by 2022/0080(COD) See also 2018/0220(COD)
Legal basis	Treaty on the Functioning of the European Union TFEU 114
Other legal basis	Rules of Procedure EP 165
Mandatory consultation of other institutions	European Economic and Social Committee
Stage reached in procedure	Procedure completed

Committee dossier	ENVI/8/01933

Documentation gateway

European Parliament

Document type	Committee	Reference	Date	Summary
Committee draft report		PE557.123	07/05/2015	
Amendments tabled in committee		PE557.137	10/06/2015	
Committee opinion	IMCO	PE549.464	24/06/2015	
Committee report tabled for plenary, 1st reading/single reading		A8-0276/2015	30/09/2015	Summary
Text adopted by Parliament, 1st reading/single reading		T8-0296/2016	05/07/2016	Summary
Text agreed during interinstitutional negotiations		PE610.750	20/09/2017	

Council of the EU

Document type	Reference	Date	Summary
Draft final act	00021/2016/LEX	14/09/2016	
Coreper letter confirming interinstitutional agreement	GEDA/A/(2017)007928	24/08/2017	

European Commission

Document type	Reference	Date	Summary
Legislative proposal	COM(2014)0581	25/09/2014	Summary
Document attached to the procedure	SWD(2014)0281	25/09/2014	
Document attached to the procedure	SWD(2014)0282	25/09/2014	
Commission response to text adopted in plenary	SP(2016)657	12/10/2016	

National parliaments

Document type	Parliament /Chamber	Reference	Date	Summary
Contribution	ES_PARLIAMENT	COM(2014)0581	03/11/2014	
Contribution	PT_PARLIAMENT	COM(2014)0581	19/11/2014	
Contribution	IT_SENATE	COM(2014)0581	24/11/2014	

Other institutions and bodies

Institution/body	Document type	Reference	Date	Summary

EESC	Economic and Social Committee: opinion, report	CES6067/2014	18/02/2015	

Additional information		
Source	**Document**	**Date**
European Commission	EUR-Lex	

Final act

Corrigendum to final act 32016R1628R(02)
OJ L 231 06.09.2019, p. 0029

Regulation 2016/1628
OJ L 252 16.09.2016, p. 0053 Summary

Delegated acts

Reference	Subject
2018/2690(DEA)	Examination of delegated act
2016/3048(DEA)	Examination of delegated act
2016/3049(DEA)	Examination of delegated act
2017/3033(DEA)	Examination of delegated act
2018/2708(DEA)	Examination of delegated act
2021/2752(DEA)	Examination of delegated act
2022/2815(DEA)	Examination of delegated act

Emission limits and type-approval for internal combustion engines for non-road mobile machinery

2014/0268(COD) - 14/09/2016 - Final act

PURPOSE: to adopt stricter emission limits for internal combustion engines for non-road mobile machinery.

LEGISLATIVE ACT: Regulation (EU) 2016/1628 of the European Parliament and of the Council on requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery, amending Regulations (EU) No 1024/2012 and (EU) No 167/2013, and amending and repealing Directive 97/68/EC.

CONTENT: the Regulation updates the current legislation (Directive 97/68/EC) which no longer corresponds to the most recent technological developments. It sets new requirements to reduce pollutant emissions from non-road mobile machinery engines. These requirements address air pollution at source to protect the health of EU citizens and the environment.

This Regulation seeks to ensure the good functioning of the internal market and to strengthen market surveillance while protecting human health and the environment. It also addresses competitiveness and compliance aspects, with the aim of removing obstacles to external trade by reducing the regulatory barriers that result from diverging emission requirements

Scope: the Regulation shall apply to **different categories** of internal combustion engines in non-road mobile machinery (NRMM), such as lawn mowers, bulldozers, diesel locomotives and inland waterway vessels, which will be divided into sub-categories according to the power of the engine.

Emission limits: for each category, it sets emission limits for carbon monoxide (CO), total hydrocarbons (HC) and oxides of nitrogen (NOx) and particulate matter (PM) and deadlines for implementing them, starting from 2018. The new emission limits will be applied to engines for non-road mobile machinery as well as for agricultural and forestry machinery.

Engines intended for export to third countries and use by the armed forces are not subject to the emission limits laid down in the Regulation.

Certain **exemptions** from the emission limit requirements are also provided for engines for use in potentially explosive atmospheres and for non-road mobile machinery that is exclusively used for the launch and recovery of lifeboats.

EU type-approval procedures: the Regulation lays down the requirements for EU type-approval. **Only engines which are in compliance** with the requirements on emission limits and the type-approval procedures will be allowed on the market. Manufacturers shall keep the EU type-approval **certificate** with its attachments and, where applicable, a copy of the statement of conformity at the disposal of the approval authorities for a period of **10 years** after the placing on the market of an engine.

Before an EU-type-approved motor is placed on the market, importers must ensure that the EU type-approval certificate is accompanied by its attachments.

An importer that has reason to believe or considers that an engine is not in conformity with this Regulation, and in particular that it does not correspond to its EU type-approval, **shall not place the engine on the market** until it has been brought into conformity.

Engine types and engine families shall be designed and fitted with emission control strategies in such a way as to **prevent tampering** to the extent possible.

ENTRY INTO FORCE: 6.10.2016.

APPLICATION: from 1.1.2017.

DELEGATED ACTS: the Commission may adopt delegated acts in respect of the monitoring of in-service emission performance, technical tests and measurement procedures, conformity of production, separate delivery of engine exhaust after-treatment systems, engines for field-testing, engines for use in explosive atmospheres, equivalence of engine EU type-approvals. The powers to adopt such delegated acts is conferred on the Commission for a period of **five years** (tacitly renewable) from 6 October 2016. The European Parliament or the Council shall have the right to object to a delegated act with a period of two months (extendable two months) from the date of notification of the act.

Emission limits and type-approval for internal combustion engines for non-road mobile machinery

2014/0268(COD) - 05/07/2016 - Text adopted by Parliament, 1st reading/single reading

The European Parliament adopted by 623 votes to 57 with 27 abstentions, a legislative resolution on the proposal for a regulation of the European Parliament and of the Council on requirements relating to emission limits and type-approval for internal combustion engines for non-road mobile machinery.

Parliament's position adopted in first reading following the ordinary legislative procedure amended the Commission proposal as follows:

Objective and scope of the regulation: the regulation aims to: (i) broaden the scope of Union legislation in the field of **market harmonisation**, while minimising the risk of market distortions; (ii) **simplify the current legal framework**, and to improve the general conditions for enforcement of such legislation, in particular by strengthening the rules on market surveillance.

The legislation will define the categories of internal combustion engines in non-road mobile machinery (NRMM), such as lawn mowers, bulldozers, diesel locomotives and inland waterway vessels, which will be divided into sub-categories according to the power of the engine. For each category, it sets **emission limits for CO, HC, NOX and particulate matter (PM)** and deadlines for implementing them, starting from 2018. The new emission limits will be applied to engines for non-road mobile machinery as well as for agricultural and forestry machinery.

Engines for **export** and for use by the **armed forces** should not be subject to the emission limits laid down in the regulation. However, in order to distinguish such engines from engines that are subject to those emission limits, markings should be required in certain cases.

The new regulation also provides for (i) certain exemptions to the emission limit requirements in respect of engines to be used in potentially explosive atmospheres and in lifeboat launch vehicles; (ii) certain exemptions and rules in respect of engines that incorporate new technologies or new concepts.

Protection for persons working in the vicinity of machinery: Parliament stressed the need to keep the cumulative exposure of persons working in the vicinity of several different items of mobile machinery and equipment as low as possible. It recommended that technology that is currently available should be used to minimise emissions.

Member States are free to lay down such requirements as they may deem necessary to ensure that the public and workers are protected whenever non-road mobile machinery is in use, provided that such requirements do not affect the placing on the market of engines for such machinery.

Retrofitting of engines already in service: given the long lifetime of non-road mobile machinery, Members proposed considering the retrofitting of engines already in service. Such retrofitting should, in particular, target densely populated urban areas as a means of helping Member States to comply with Union air quality legislation.

Obligations of economic operators: **manufacturers** should keep the EU type-approval certificate with its attachments and, where applicable, a copy of the statement of conformity at the disposal of the approval authorities for a **period of 10 years** after the placing on the market of an engine. They should provide national authorities, upon reasoned request and via the approval authority, with a copy of the EU type-approval certificate for an engine.

An **importer** that has reason to believe or considers that an engine is not in conformity with the regulation, and in particular that it does not correspond to its EU type approval, should not place the engine on the market until it has been brought into conformity.

Engine types and engine families should be designed and fitted with emission control strategies in such a way as to **prevent tampering** to the extent possible. The use of **defeat strategies should be prohibited.**

Monitoring of emissions of in-service engines: Members suggested that testing should be conducted under the **responsibility of the manufacturer** and in compliance with the requirements of the approval authority.

The Commission shall conduct **monitoring programmes** for each engine category to determine to what extent the emissions measured from the test cycle correspond to the **emissions measured in actual operation**. Those programmes and their results shall, on a yearly basis, be the subject of a presentation to the Member States and, subsequently, of a communication to the public.

Statement of conformity: the statement of conformity shall specify the particular features and restrictions that are to apply to the engine. It may also be delivered in the form of a secure electronic file.

The Commission may adopt implementing acts laying down the template for the statement of conformity, including the features aimed at preventing forgery and allowing verification of the secure electronic file.

Exchange of data and information: national authorities should be required to cooperate efficiently with each other and with the Commission, and to exchange data and information relating to EU type approvals by means of the Internal Market Information System ('IMI'). A module of IMI specifically customised for non-road mobile machinery should be established. Manufacturers and technical services may use IMI for the exchange of data and information on engines for non-road mobile machinery.

Transitional provisions: during the period between the repeal of Directive 97/68/EC and compulsory dates for Phase V, it should not only still be possible to grant EU type-approvals under Directive 97/68/EC, but also the applicable exemptions. Transition engines may continue to be placed on the market during the transition period provided that the machinery in which the transition engine is installed has a production date not later than **18 months** following the start of the transition period.

For engines of the category NRE used in **mobile cranes**, Member States shall authorise an extension of the transition period by an additional 12 months.

For a period **not exceeding 10 years** from the applicable date for the placing on the market of Stage V engines set out in Annex III, Member States may authorise the placing on the market of engines of category RLL with a maximum net power greater than 2000 kW that do not comply with the emission limits set out in Annex II, and which are to be installed in **locomotives** which only run on a technically isolated 1520 mm railway network.

Review: by 31 December 2018, the Commission shall submit a report regarding the assessment of the possibility of laying down **harmonised measures for the installation of retrofit emission control devices in engines in non-road mobile machinery** that has already been placed on the Union market. That report shall also address technical measures and financial incentive schemes as a means of helping Member States to comply with Union air quality legislation, by assessing possible action against air pollution in densely populated areas, and with due respect for the Union rules on state aid.

Emission limits and type-approval for internal combustion engines for non-road mobile machinery

2014/0268(COD) - 30/09/2015 - Committee report tabled for plenary, 1st reading/single reading

The Committee on the Environment, Public Health and Food Safety adopted the report by GARDINI (EPP, IT) on the proposal for a regulation of the European Parliament and of the Council on requirements relating to emission limits and type-approval for internal combustion engines for non-road mobile machinery.

The parliamentary committee recommended that the European Parliament's position adopted at first reading following the ordinary legislative procedure amends the Commission proposal as follows.

Purpose: in addition to broadening the scope of Union legislation in the field of market harmonisation, while minimising market distortions, Members consider that this Regulation should aim to **simplify the current legal framework, including measures for simplifying administrative procedures**, and to improve the general conditions for enforcement, in particular by strengthening the rules on market surveillance.

Definition of "engine": Members clarified the definition in order to cover all engine technologies, in particular with a view to whether or not they use electronic control unit(s) (ECUs) or after-treatment systems.

Retrofitting the engines already in service: given the long lifetimes of non-road mobile machinery, Members suggest that it is appropriate to consider retrofitting the engines already in service. Such retrofitting should in particular target **densely populated urban areas** and those in breach of Union air quality legislation.

Protection for persons working in the vicinity of machinery: Members stressed the necessity to keep the cumulative exposure of persons working in the vicinity of several different items of mobile machinery and equipment as low as possible. They recommend in this regard that **state-of-the-art technologies should be used** to minimise emissions.

Member States should have the power to **prohibit** the use of combustion engines for reasons of health and safety at work, in particular in poor air quality hotspots.

Ultrafine particles: to ensure that emissions of ultrafine particulate pollutants (size of 0.1µm and below) are controlled, the Commission should be empowered to adopt a number-based approach drawing on the results of the Particulate Measurement Programme (PMP) of the United Nations Economic Commission for Europe (UNECE) **and should achieve at least the level of protection afforded by the existing Union legislation on road vehicles.**

Agricultural vehicles: the Regulation should also apply to agricultural vehicles covered by the provisions of Regulation (EU) No 167/2013 of the European Parliament and of the Council which replaces the repealed Directive 97/68/EC. In order to avoid unnecessary administrative burdens, the engines of the phase IIIB should be able to benefit from the transitional provisions laid down in this regulation with regard to the requirements for the application of the phase V.

Inland waterway vessels: an amendment to table I-6 in annex II expands the application of the same emission limit values as inland waterways propulsion engines to inland waterways auxiliary engines from **>560kW** only to include all powers.

Members also introduced an amendment allowing alignment of the inland waterways **propulsion engine reference power** with the American standard which does not impose a reference power greater than or equal to **37 kW**.

Monitoring of emissions of the engines in service: Members have suggested that such testing shall be conducted under the responsibility of the manufacturer or the entity entrusted with such testing and under the supervision of the national type approval authority.

The Commission should conduct **monitoring programmes** to determine to what extent, the emissions resulting from the test cycle and on which the type -approval is based, correspond to the **emissions measured in actual operation**.

Certificate of conformity: MEPs felt that the formalities should evolve with the digital age and that it was appropriate to draw to reduce administrative burdens and costs.

Thus, instead of delivering a certificate of conformity, the manufacturer may apply a **mark of conformity** to the engine. That conformity marking shall include an **electronic code** readable with widely available information technology (IT) tools and allowing the retrieval of information on the engine from the manufacturer's website.

The Commission should be empowered to adopt a template for the conformity marking and the retrievable information and to establish the acceptable types of electronic codes used to access the information on the engine.

Exchange of data and information: in this field, Members considered that using the well-established Internal Market Information System (IMI) would save costs and unnecessary administrative efforts as compared to the set-up of a new digital platform proposed by the Commission.

Financial support for retrofitting: Members proposed that the Member States may make provision for **financial incentives** that apply to the retrofitting of in-use engines which do comply with this Regulation in order to meet the emission limit values set out in the Annex applicable to the type of engine to be retrofitted.

Transitional measures: during the period between the repeal of Directive 97/68/EC and the mandatory dates for stage V, it should not only still be possible to **grant EU type-approvals** under Directive 97/68/EC, but also the applicable **exemptions**.

In addition, for engines of the category NRE used in **mobile cranes**, Member States shall authorise an extension of the transition period by an additional 12 months.

For a period not exceeding 10 years from the applicable date for the placing on the market of Stage V engines set out in Annex III, Member States may authorise the placing on the market of **engines of category RLL** with a maximum net power greater than 2000 kW that do not comply with the emission limits set out in Annex II, and which are to be **installed in locomotive**s which only run on a technically isolated 1520 mm railway network.

Finally, Members underlined the possible synergies between the non-road mobile machinery sector and heavy-duty vehicles as the related technologies are interlinked, and called on the Commission to consider further action in this area.

Emission limits and type-approval for internal combustion engines for non-road mobile machinery

2014/0268(COD) - 25/09/2014 - Legislative proposal

PURPOSE: to protect human health and the environment, and ensure the proper functioning of the internal market for engines in non-road mobile machinery (NRMM).

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

ROLE OF THE EUROPEAN PARLIAMENT: the European Parliament decides in accordance with the ordinary legislative procedure and on an equal footing with the Council.

BACKGROUND: the emissions limits for non-road mobile machinery (NRMM) are currently set out in Directive 97/68/EC. This Directive was amended a number of times, but several technical reviews have concluded that the legislation in its current form has **shortcomings**.

Non-road mobile machinery (NRMM) covers a large variety of combustion engines installed in machines ranging from small handheld equipment, construction machinery and generating sets, to railcars, locomotives and inland waterway vessels.

These engines contribute significantly to air pollution and are accountable for roughly 15% of the nitrogen oxide (NOx) and 5% of the particulate matter (PM) emissions in the EU.

The proposal also ties in with the industrial policy update of 2012 and could make an important contribution to technical harmonisation in the context of the EU-US trade negotiations (Transatlantic Trade and Investment Partnership - TTIP).

IMPACT ASSESSMENT: the impact assessment took into account in the analytical design that the preferred choice might be a **combination of elements from different options**. Alongside the no-policy change scenario, these options are:

- alignment with US standards in scope and limit values.
- step towards road sector ambition levels, for the most relevant emission sources.
- extended level of ambition through enhanced monitoring provisions.

CONTENT: the proposal **significantly upgrades** the NRMM engine type-approval system with respect to the technical requirements on emissions by adopting **stricter levels**, as well as introducing the "**split-level approach**" which is already used in other pieces of legislation in the area of EU type-approval of motor vehicles.

This approach foresees legislation in two steps:

- first, the **fundamental provisions** will be laid down by the European Parliament and the Council in a Regulation based on the ordinary legislative procedure;
- secondly, the **technical specifications** implementing the fundamental provisions will be laid down in delegated acts adopted by the Commission in accordance with Article 290 of the TFEU.

The draft proposal and its implementing and delegated acts will carry over and improve on the existing requirements laid down in Directive 97/68/EC. Compared to the existing act, the proposal for a regulation will:

- introduce **new emission limits** reflecting technological progress and EU policies in the on-road sector, with a view to achieving EU air quality targets;
- **extend the scope**, with a view to improving market harmonisation (EU and international) and minimising the risk of market distortions;
- introduce measures for **simplifying administrative procedures** and improving enforcement, including conditions for better market surveillance.

In particular, the **delegated acts** adopted under this proposal will include, amongst others:

- detailed technical requirements of the test cycles;
- technical test and measurement procedures;
- detailed arrangements and requirements for the exceptions granted under this Regulation;
- detailed provisions for type-approval procedures.

The proposal also provides general and specific **transitional periods** in order to allow sufficient lead time for engine and machinery manufacturers, as well as for administrations.

BUDGETARY IMPLICATION: the cost associated to setting up an electronic database for the exchange of type-approval information was already assessed in a feasibility study commissioned by the UNECE in June 2006.

The study predicted one off start-up costs in the **EUR 50 000 to EUR 150 000** range and operating costs of **EUR 5 000 to EUR 15 000 per month**, depending on the length of the contract with the service provider. A similar monthly range is provided for operating a help desk service, if required.

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.