










# Procedure file

Basic information				
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 <a href="#">1995/0209(COD)</a> Amending Regulation (EU) No 167/2013 <a href="#">2010/0212(COD)</a> Amending Regulation (EU) No 1024/2012 <a href="#">2011/0226(COD)</a> See also <a href="#">2018/0220(COD)</a> Amended by <a href="#">2020/0113(COD)</a> Amended by <a href="#">2021/0129(COD)</a>				
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	
	 Environment, Public Health and Food Safety	 <a href="#">GARDINI Elisabetta</a>  Shadow rapporteur  <a href="#">DANCE Seb</a>  <a href="#">DUNCAN Ian</a>  <a href="#">HUITEMA Jan</a>  <a href="#">EICKHOUT Bas</a>  <a href="#">EVI Eleonora</a>		10/02/2015
	Committee for opinion	Rapporteur for opinion	Appointed	
	 Internal Market and Consumer Protection	 <a href="#">POSPÍŠIL Jiří</a>		05/11/2014
Council of the European Union	Council configuration	Meeting	Date	
	<a href="#">Agriculture and Fisheries</a>	<a href="#">3481</a>	18/07/2016	
European Commission	Commission DG	Commissioner		
	<a href="#">Internal Market, Industry, Entrepreneurship and SMEs</a>	BIEŃKOWSKA Elżbieta		
European Economic and Social Committee				
Key events				

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	<a href="#">A8-0276/2015</a>	Summary
26/04/2016	Approval in committee of the text agreed at 1st reading interinstitutional negotiations	<a href="#">PE610.750</a> GEDA/A/(2017)007928	
04/07/2016	Debate in Parliament		
05/07/2016	Results of vote in Parliament		
05/07/2016	Decision by Parliament, 1st reading	<a href="#">T8-0296/2016</a>	Summary
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
	Repealing Directive 97/68/EC <a href="#">1995/0209(COD)</a> Amending Regulation (EU) No 167/2013 <a href="#">2010/0212(COD)</a> Amending Regulation (EU) No 1024/2012 <a href="#">2011/0226(COD)</a> See also <a href="#">2018/0220(COD)</a> Amended by <a href="#">2020/0113(COD)</a> Amended by <a href="#">2021/0129(COD)</a>
Legal basis	Treaty on the Functioning of the EU TFEU 114
Other legal basis	Rules of Procedure EP 159
Mandatory consultation of other institutions	<a href="#">European Economic and Social Committee</a>
Stage reached in procedure	Procedure completed
Committee dossier	ENVI/8/01933

## Documentation gateway

Legislative proposal	<a href="#">COM(2014)0581</a>	25/09/2014	EC	Summary
Document attached to the procedure	<a href="#">SWD(2014)0281</a>	25/09/2014	EC	
Document attached to the procedure	<a href="#">SWD(2014)0282</a>	25/09/2014	EC	

Economic and Social Committee: opinion, report		<a href="#">CES6067/2014</a>	18/02/2015	ESC	
Committee draft report		<a href="#">PE557.123</a>	07/05/2015	EP	
Amendments tabled in committee		<a href="#">PE557.137</a>	10/06/2015	EP	
Committee opinion	IMCO	<a href="#">PE549.464</a>	24/06/2015	EP	
Amendments tabled in committee		PE564.906	03/07/2015	EP	
Committee report tabled for plenary, 1st reading/single reading		<a href="#">A8-0276/2015</a>	30/09/2015	EP	Summary
Text adopted by Parliament, 1st reading/single reading		<a href="#">T8-0296/2016</a>	05/07/2016	EP	Summary
Draft final act		<a href="#">00021/2016/LEX</a>	14/09/2016	CSL	
Commission response to text adopted in plenary		<a href="#">SP(2016)657</a>	12/10/2016	EC	
Coreper letter confirming interinstitutional agreement		GEDA/A/(2017)007928	24/08/2017	CSL	

### Additional information

European Commission

[EUR-Lex](#)

### Final act

[Regulation 2016/1628](#)

[OJ L 252 16.09.2016, p. 0053](#) Summary

[Corrigendum to final act 32016R1628R\(02\)](#)

[OJ L 231 06.09.2019, p. 0029](#)

Final legislative act with provisions for delegated acts

### Delegated acts

[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

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

**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 (NO<sub>x</sub>) 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.

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

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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 0.1 µm 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 not 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 locomotives 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

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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

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**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 (NO<sub>x</sub>) 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.