

## Directives on emissions from non-road mobile machinery

The legislative file of Non-Road Mobile Machinery (NRMM) contains today seven directives: the "mother" **Directive 97/68/EC**, the amendments **Directive 2002/88/EC**, **Directive 2004/26/EC**, **Directive 2010/26/EU**, **Directive 2011/88/EU**, and the last amendment **Directive 2012/46/EU**:

Directive 97/68/EC of the European Parliament and of the Council of 16
December 1997 on the approximation of the laws of the Member States
relating to measures against the emission of gaseous and particulate
pollutants from internal combustion engines to be installed in non-road
mobile machinery (OJ L 59, 27.2.98).

Directive 97/68/EC (first publication in the Official Journal)

Directive 97/68/EC - consolidated text

- Directive 2002/88/EC of the European Parliament and of the Council of 9
  December 2002 amending Directive 97/68/EC on the approximation of
  the laws of the Member States relating to measures against the emission
  of gaseous and particulate pollutants from internal combustion engines
  to be installed in non-road mobile machinery
- Directive 2004/26/EC of the European Parliament and of the Council of 21 April 2004 amending Directive 97/68/EC on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery Corrigendum to Directive 2004/26/EC
- Council Directive 2006/105/EC of 20 November 2006 adapting Directives 73/239/EEC, 74/557/EEC and 2002/83/EC in the field of environment, by reason of the accession of Bulgaria and Romania
- Commission Directive 2010/26/EU
   31 March 2010 amending Directive 97/68/EC on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery

- Directive 2011/88/EU of the European Parliament and of the Council of 16 November 2011 amending Directive 97/68/EC as regards the provisions for engines placed on the market under the flexibility scheme
- Commission Directive 2012/46/EU of 6 December 2012 amending Directive 97/68/EC on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery

The NRMM Directive regulates exhaust emissions from and test procedure for the different types of engines.

The "mother" directive, 97/68/EC, covers diesel fuelled engines for common NRMM. It became effective from 1 January 1999 for certain types of engines. The first stages presented in 97/68/EC, stage I (1 January 1999) and stage II (1 January 2001), covers diesel fuelled engines between 37 and 560 kW.

The second directive, 2002/88/EC, extends the scope of 97/68/EC to cover spark ignited engines (petrol engines) up to 18 kW for engines installed in andheld and non-handheld equipment. Stage I (and stage II) became effective in August 2004 with some exemptions for certain applications. The work with transposition is going on in the Member States.

The third directive, 2004/26/EC, extends the scope of 97/68/EC, which covers diesel fuelled engines from 19 kW to 560kW for common NRMM and regulates the emission in 3 further stages. The directive includes also to constant speed engines as well to railway and inland maritime engines (inland waterway transport sector). For the 2 latter categories there are no upper limits concerning engine power. The different stages in the 2004/26/EC directive are as follows:

- Stage III A covers engines from 19 to 560 kW including constant speed engines, railcars, locomotives and inland waterway vessels.
- Stage III B covers engines from 37 to 560 kW including, railcars and locomotives.

- Working Party on Pollution and Energy (UNECE) is working with a world wide harmonised test procedure.

The fourth directive, 2006/105/EC, introduced some modifications to the Directive 97/68/EC, amending Annex VIII, point 1, section 1. This concerns the approval certificate numbering system, with the code for each MS.

The fifth directive, 2010/26/EU, modifies type approval requirements for stages IIIB and IV.

The sixth directive 2011/88/EU revises the flexibility percentage for Stage IIIB engines.

The seventh directive 2012/46/EU is related to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in NRMM. Directive 2012/46/EU updated Directive 97/68/EC so as to reflect technical progress in areas such as:

- Symbols and abbreviations, specifications and tests, specification of conformity of production assessment and parameters defining the conformity of production (ANNEX I).
- Type-approval process with reference to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery (ANNEX II).
- Test procedures for combustion ignition engines (ANNEX III).
- Analytical and sampling procedures for gaseous emissions tests (ANNEX IV).
- Type approval certificate modifications (ANNEX VII)
- Data sheet for type approved engines (ANNEX XI)
- Recognition of alternative type approvals (ANNEX XII)