

# The new EU-NRMM-Regulation

**7. VERT-Forum  
EMPA-Academy, CH-8600-Dübendorf**

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# NRMM = Non Road Mobile Machinery

*Proposal for a new EU-Regulation on  
Emission limits and type-approval for  
internal combustion engines for non-road  
mobile machinery (September 2015)*

COM (2014) 581 + Annexes

**Contribution of VERT and AK** on NRMM for  
the EU-Decision-making process under  
[www.akeuropa.eu](http://www.akeuropa.eu)



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# Objectives of NRMM

## New framework for Off-road-engines

*Target: offroad=onroad*

- Emission values for Stage V
- Type approval
- Market surveillance



# Main Issues for today



- **State of Play in the EU-decision- making process**
- **Particle count criterion (NRMM)**
- **DPF-Retrofit**



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# State of Play in the EU-decision making process

- **Council Position on NRMM in June 2015**
- **Report of EP-Committee on Environment on NRMM in September 2015**
- **Compromise between EP and Council (“Trilogue”) expected in spring 2016**



# PN Count criterion

- The new NRMM-Regulation will have provisions on  $PN < 10^{12}$  P/kWh
- NRE ( $19 \leq P \leq 560$ ) – *Construction + NRMM general*
- NRG ( $P > 560$ ) - *Gensets*
- IWP ( $P \geq 300$ ) – *Ship propulsion*
- IWA ( $P \geq 300$ ) – *Ship Auxiliary*
- RLR ( $P > 0$ ) - *Railcars*
- But: **exemption clauses**

**and replacement engines!**



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# Engine categories

- **Mandatory date of application of this Regulation differs according to engine category:**
  - **Type approval 2018 – 2021**
  - **Placing on the market 2019 -2022**



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# NRE



Engines for non-road  
mobile machinery  
intended and suited to  
move, or to be moved, by  
road or otherwise,



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# NRG



Engines having a reference power that is greater than 560 kW exclusively for use in generating sets;



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# NRSh



hand-held Self Ignition engines having a reference power that is less than 19 kW exclusively for use in hand-held machinery;

# NRS



SI engines, having a reference power that is less than 56 kW and not included in category NRSh

# IWP



Engines exclusively for use in inland waterway vessels, having a reference power that is greater than 1 kW,

# IWA



Auxiliary engines  
exclusively for use  
in inland waterway  
vessels, having a  
net power that is  
greater than 19 kW.



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# RLL



Engines exclusively for use in locomotives, for their propulsion or intended for their propulsion

# RLR



Engines exclusively for use in railcars, for their propulsion or intended for their propulsion;



SI engines  
exclusively for  
use in  
snowmobiles.



# ATS



SI engines  
exclusively for use in  
all terrain



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# Replacement engine / 1

**replacement engine” means an engine that:**

- *(a) is exclusively used to replace an engine already placed on the market and installed in a non-road mobile machinery, and*
- *(b) complies with an emission stage which is lower than the one applicable on the date of the replacement of the engine;*



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# Replacement Engine / 2

*Text still to be agreed:*

- Member States shall authorise the placing on the market of replacement engines, for a period not longer than [15] [25] years, starting from the applicable dates for placing on the market of Stage V engines set out in Annex III, provided that the engines:

# Retrofit/1

- **16a) Given the long lifetimes of non-road mobile machinery it is appropriate to *consider retrofitting the 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.**
- **Member States should take into account the principles of UNECE Regulation 132 on Retrofit Emission Control (REC).**



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# Retrofit/2

- *the assessment of the possibility of laying down harmonised measures for the **installation of retrofit emission control devices on engines in non-road mobile machinery** that has already been placed on the Union market, including **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, in due respect of the Union rules on state aid.*



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# Protection of Public Health and Workers

- *This Regulation is **without prejudice** to Member States' entitlement to day down, in due observance of the Treaties, such requirements **as they may deem necessary to ensure that the public and workers are protected when machinery referred to in this Regulation is used, provided that such requirements do not affect the placing on the market of the engines in question.***



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# Built-in-Agenda of NRMM/1

- 1. By 31 December 2018, the Commission shall submit a report to the European Parliament and to the Council regarding:
  - (a) the assessment of further pollutant emission reduction potential, on the basis of available technologies and cost/benefit analysis *adding PN and NOx limit values to those NRMM categories that do not have one set in Annex II of this Regulation;*



**Thank you for your  
attention!**

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