Improving air quality
Reducing emissions from Non-Road Mobile Machinery

Government Response
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The consultation sought views on the implementation of EU Regulation (2016/1628) governing the emissions standards for engines intended for fitment to Non-Road Mobile Machinery, which encompasses a wide range of portable or self-propelled machinery. This Regulation introduced higher environmental standards for such engines.

Generally the consultation was well-received and the Government's proposals were supported. In particular, respondents were content that it was correctly transposing the EU Regulation.

There was also substantial support for penalties for supplying an engine or machine with a defeat strategy, with some reservations expressed in relation to penalising dealers who would not have the ability to detect such strategies. The proposal has accordingly been modified to focus on penalising manufacturers, in line with recently introduced regulations on the same topic covering road vehicles.

I am very grateful to all who took part in the consultation. It provided the opportunity to gather stakeholders' views as to the different models and options for the regime for mobile machinery after our Exit from the European Union. These views will inform our continuing work to offer business and other stakeholders as much certainty as possible during the process.

Jesse Norman MP
Parliamentary Under Secretary of State for Transport
1. Introduction

1.1 The type approval regime for engines intended for fitment in Non-Road Mobile Machinery is regulated under EU Regulation 2016/1628. The regulation is vital to ensure high environmental standards, and to minimise costs whilst maintaining market access for manufacturers of various types and sizes of engines.

1.2 The main issue under consideration in the consultation was the introduction of penalties for non-compliance with EU Regulation 2016/1628 in domestic law, with both civil and criminal penalties being proposed.

1.3 As well as implementation of the EU Regulation, the consultation covered our proposal to make the supply of engines or machinery fitted with defeat strategies an offence, and the potential for application of penalties to different parties in the supply chain.

1.4 The scope of the consultation (and the responses detailed in this report) cover both Great Britain and Northern Ireland. The consultation ran for 3 weeks from 20 March 2018 to 6 April 2018.

Responses

1.5 The Department received 14 responses. Two responses were from public bodies, ten from industry associations (five from associations of manufacturers and five from associations of machinery operators/users) and two from individual businesses.

1.6 Table of questions

| Q1 | Are you content with the draft regulations (Statutory Instrument)? |
| Q2 | Do you agree that the draft regulations would not impose a new burden on business, beyond that imposed by the underlying EU Regulation? |
| Q3 | Are there any areas of the EU Regulation 2016/1628 that you are not content with? |
| Q4 | Are you content with the proposal to create penalties around use of defeat strategies, both for designing an engine using such a strategy and for supplying an engine using such a strategy? |
| Q5 | Do you have any other comments on implementation? |
| Q6 | What would you like to see in this area of regulation following Brexit? |
Next steps

1.7 The Non-Road Mobile Machinery (Type Approval and Emission of Gaseous and Particulate Pollutants) Regulations 2018 will be laid in Parliament in due course.

EU Referendum

1.8 The government triggered Article 50 of the Treaty on European Union on the 29th March 2017 to begin the process of exit. Until exit negotiations are concluded, the UK remains a full member of the European Union and all the rights and obligations of EU membership remain in force. During this period the Government will also continue to negotiate, implement and apply EU legislation. The outcome of these negotiations will determine what arrangements apply in relation to EU legislation in the future once the UK has left the EU.
2. Responses in detail

New domestic regulations

Q1: Are you content with the draft regulations (Statutory Instrument) at Annex B?

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<th>Q1</th>
<th>No. Respondents</th>
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2.1 All respondents who expressed an opinion on this question were content in principle with the draft regulations.

2.2 Generally, no further comment was provided.

2.3 One major rail industry association argued that rail is a niche market, making up 1% of NRMM, with NRMM itself making up 1% of all engine manufacture. Therefore, in their opinion it is important to carefully weigh up the economic impact of developing and adapting emissions abatement technologies for rail applications against the environmental benefits.

Options under EU regulation

Q2: Do you agree that the draft regulations would not impose a new burden on business, beyond that imposed by the underlying EU Regulation?

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<th>Q2</th>
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2.4 All respondents who expressed an opinion on this question were content that the draft regulations would not create a significant burden on business over and above the existing EU regulation.

2.5 One stakeholder from the manufacturing industry was content with the domestic regulations but believed that the new EU regulation would create a burden with the
introduction of standards for All-Terrain Vehicles (ATV). However, it is our understanding that the EU standards for ATVs are comparable to the American standards so this should not require any technical development to comply with.

Q3: Are there any areas of the EU Regulation 2016/1628 that you are not content with?

2.6 Several respondents mentioned areas they were not content with.

2.7 The stakeholder whose response is summarised under paragraph 2.5 above were not content with how they understood the EU Regulation would affect engines for ATVs.

2.8 Two respondents had concerns about the In-Service Conformity monitoring procedures in the EU Regulation, affecting rail vehicles and agricultural vehicles.

2.9 One stakeholder thought the durability regime for small engines was too onerous.

2.10 One government stakeholder thought that the standards for engines of categories NRE-1, 2 and 7 should be higher. This covers power ratings below 19kW and above 560kW.

2.11 One stakeholder asked how enforcement would take place.

**Defeat strategy penalties**

Q4: Are you content with the proposal to create penalties around use of defeat strategies, both for designing an engine using such a strategy and for supplying an engine using such a strategy?

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<th>Q4</th>
<th>No. Respondents</th>
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<td>No</td>
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<td>No answer</td>
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2.12 All respondents who expressed an opinion on this question were in favour of ensuring that circumvention of regulations in this way should be penalised, although a number added caveats.

2.13 Three industry association respondents caveated their support for defeat strategy (alternatively known as defeat device) penalties with the proviso that dealerships and importers should not be subject to penalty. This was because they believed that it was not reasonable to expect an importer or distributor to independently evaluate whether a machine contains an engine using a defeat strategy. One respondent noted that a manufacturer has to declare that a defeat strategy is not present during the type approval process.

2.14 One local government respondent advised of a different kind of defeat strategy: using two engines with power outputs below the thresholds for a Clean Air Zone, rather than one engine subject to inspection as part of a Clean Air Zone. This results in small engines with generally lower standards being utilised. They noted that the solution to this would be to change the scope of the Clean Air Zone.
2.15 One respondent requested assurances that the regulations will support and will not penalise the uptake of retrofitting of older NRMM equipment and other innovative technologies such as hybrid fuels or clean fuels.

**Other issues**

Q5: Do you have any other comments on implementation?

2.16 Four respondents raised concerns regarding tampering with engines in service, and believed that the Government should outlaw tampering with emissions control devices, for example chip-tuning, ad-blue emulators, after-treatment removal. They argued that it should be an offence for companies to carry out such tampering and that companies set up to supply goods or services in this field should be prohibited.

2.17 One respondent asked who would be enforcing the new regulations.

2.18 A major rail industry association understood that there would be a review of the EU Regulation at EU level in 2018, and asked for standards for engines used in rail to be aligned with relevant American (EPA) standards.

2.19 An aviation association noted that they are working to develop and deploy low emissions alternatives to ground vehicles that operate airside, such as baggage transport, self-propelled aircraft stairs, and aircraft tugs. This association requested that government support for ultra-low emissions vehicles (ULEVs) should be extended to specialist airport vehicles, enabling operators to replace or convert equipment to more sustainable options. They noted that this would require the correct infrastructure close to airports, such as electric vehicle charge points.

2.20 This aviation association also mentioned that a clearer registry of emissions of approved NRMM would be helpful to managing emissions airside, as it can be difficult to ascertain the level of emissions from equipment and machines in use.

2.21 Also on the topic of registration of NRMM, a local government body requested that central government set up a central register of NRMM to assist with local Clean Air Zones where NRMM is required to meet a minimum standard. They argued that the NRMM equivalent of a number plate linked to a central online database of machinery details would reduce inspection time in enforcing such schemes considerably and help contractors maintain use of their machines rather than take them out of use for an inspection. It was argued that such a register would also help the DfT enforce the regulations.

2.22 The local government body also encouraged the Government to consider whether new powers could enable central or local government to drive more rapid reductions in pollutants emissions from this sector. They believe that at minimum, such powers should include the ability for relevant tiers of government to set zonal restrictions where NRMM not meeting specific emissions stages can be either charged or banned.

2.23 One company asked for the introduction of stricter standards for auxiliary engines which are mounted on lorries and provide power for equipment like refrigeration units. They argued that the nitrogen oxide (NOx) and particulate matter emissions from such auxiliary engines are currently allowed to be much higher than from the lorry’s propulsion engine, which is required to meet the Euro VI standard.
Q6: What would you like to see in this area of regulation following Brexit? Do you have any views on whether the UK should continue to follow this approval scheme after Brexit?

2.24 Five industry associations were in favour of maintaining regulatory alignment in this subject area with the EU following exit, rather than setting bespoke UK standards. In their opinion, harmonisation and mutual recognition should be aimed for. This was primarily on the basis of minimising costs for industry, and also maintaining consumer choice.

2.25 One rail industry association suggested that any departure from the current regime should be as a result of a clear change in government policy, following consultation with stakeholders and take into account whole lifecycle costs for the rail industry as a whole.

2.26 One operators’ association believed that we should remain aligned with EU regulation for reasons of air quality. A local government body had similar views and emphasised that if the EU make stricter rules in future, the UK should adopt them too.

2.27 One manufacturer believed that there would be benefit in following American standards for certain engine categories in the future.

2.28 One operators’ association believed that EU Exit provided the opportunity for the UK to become a leader in initiatives such as electrically powered NRMM.

2.29 The need for continuity and certainty after the UK's exit from the EU was also raised.
3. Conclusion - Government Response

3.1 Following publication of this response, the Department for Transport intends to proceed to make and lay a Statutory Instrument, the Non-Road Mobile Machinery (Type Approval and Emission of Gaseous and Particulate Pollutants) Regulations 2018. This will implement EU Regulation 2016/1628, governing European type approval of engines for NRMM.

3.2 Two groups of changes to the regulations following consultation have been made: 1) amendments to legal terminology to reflect latest Court procedures, mainly affecting Scotland and Northern Ireland, and 2) the insertion of detailed drafting creating a defeat strategy offence.

3.3 On defeat strategies, there was strong support for introducing penalties for manufacturers supplying an engine or machine with a defeat strategy, alongside opposition to penalising dealers, as it was suggested that they do not have the ability to detect such devices. Thus the offence as finally drafted would only apply to a manufacturer or his wholly owned subsidiary. This is the same policy as was implemented recently in equivalent regulations covering other vehicle categories.

3.4 Several responses asked about enforcement. The Department of Transport has appointed the Driver and Vehicle Standards Agency to carry out market surveillance and enforcement of the obligations which are placed upon NRMM engine manufacturers.

3.5 Responses raised as a result of questions 5 and 6, concerning other suggestions for improving regulation on NRMM and for post EU Exit regulation in this sector, will be evaluated separately and taken forward as relevant. Stakeholders were generally of the view that the technical requirements in the Regulations are appropriate and of a high standard. In general the stakeholder consensus was that the UK should prioritise avoiding placing additional burdens on industry whilst maintaining a high level of environmental protection.