

Measuring on-road air pollution from cars

Although emissions of air pollutants from transport have fallen considerably in recent decades, current levels still have adverse effects on health and the environment. In implementing regulation on new tests that better reflect real on-road emissions, the Commission sets higher limits than current standards, but below current levels of emissions. A motion for a resolution blocking the Commission draft is due to be submitted to the plenary in January.

Background

While the transport sector in the European Union (EU) has considerably reduced its emissions of air pollutants in recent decades, the sector accounted for 46% of nitrogen oxides (NO_x) and about 14% of particulate matter (PM) emissions in the EU in 2013, according to the [European Environment Agency](#) (EEA). These two pollutants are associated with adverse effects on health, the environment and the climate. The EEA estimates that every year in the EU-28, 72 000 premature deaths are attributable to NO₂ and 403 000 to PM. According to the [European Commission](#), the total health-related costs of air pollution in the EU are in the range of €330-940 billion per year.

Emission limits for NO_x, PM and other pollutants are set in the [Euro 5 and 6 Regulation](#). However, the Commission's Joint Research Centre (JRC) noted in 2013 that on-road NO_x emissions from diesel cars (which account for 80% of NO_x emissions from transport) were approximately two to five times higher than their type-approval standards as measured under laboratory conditions. This problem was highlighted in the recent [VW case](#). The EEA indicates that this discrepancy explains in part why NO_x emissions have not fallen as much as expected given the increased stringency of Euro standards since their introduction in 1992 (when the NO_x emission limit was 970 mg/km). NO_x concentrations in Europe regularly exceed EU air quality standards, and the 2010 [National emission ceilings](#) targets for NO_x have not been met in six Member States.

Real driving emissions

In 2011, the European Commission set up a working group tasked with developing tests that better reflect real on-road emissions. In October 2015, Member States' representatives issued a positive opinion on a [draft Commission regulation](#) introducing real driving emissions (RDE) tests using portable measurement systems as of September 2017 for new types of vehicles (as of September 2019 for all new vehicles). The draft regulation establishes 'not to exceed' limits for NO_x on the basis of Euro 6 emission limits (80 mg/km) multiplied by a 'conformity factor'. From 2017, this factor is set at 2.1 (i.e. allowing 168 mg/km) with a view to gradually reducing the gap between type-approval and on-road emissions. From 2020 onwards, it is set at 1.5 (i.e. allowing 120 mg/km), leaving a margin for measurement errors. Parliament and Council each have the power to block the adoption of the draft Commission implementing regulation.

European Parliament objection

In a [motion for resolution](#) adopted on 14 December 2015, the Committee for Environment, Health and Food Safety opposed the Commission draft regulation on the grounds that it would effectively introduce a blanket derogation from applicable emissions limits, and hence is not compatible with the aim and content of the basic Regulation. The motion also urges the Commission to submit a new draft without delay, and by April 2016 at the latest. The plenary is expected to vote on the resolution in January.

Stakeholders have expressed diverging opinions. Automobile industry association [ACEA](#) highlights that the 'not to exceed' limits will be 'extremely difficult' to reach, with 'serious economic implications' for manufacturers and impacts on CO₂ reductions. Environmental NGO [ClientEarth](#) argues that setting the proposed limits is a political and not a technical decision, and calls for the conformity factor to be set at no more than 1.3.