European Commission - Fact Sheet

Car industry: European Commission tightens rules for safer and cleaner cars

Brussels, 27 January 2016

Proposal for a Regulation on the approval and market surveillance of motor vehicles, Real Driving Emissions testing and other relevant regulatory developments

See also IP/16/167

1. What does type approval mean and how does it work?

Typeapproval describes the process applied by national authorities to certify that a model of a certain vehicle (or a vehicle type) meets all EU safety, environmental and production requirements before authorising it to be placed on the EU market. It focuses on pre-market compliance checks of vehicles that come off the manufacturing assembly line. The manufacturer makes available about a dozen or more pre-production cars that are equal to the final product. These prototypes are used to test compliance with safety rules (installation of lights, braking performance, stability control, crash tests with dummies), emissions limits (see below) and production requirements (of individual parts and components, such as seats or steering wheel airbags). If all relevant requirements are met, the national authority delivers an EU vehicle type approval certificate to the manufacturer authorising the sale of the vehicle type in the EU. Every vehicle produced is accompanied by a certificate of conformity which is like the car's birth certificate and indicates that the vehicle corresponds to an approved type. On the basis of this document, the vehicle can be registered.

2. Can the car manufacturer choose where to get the car tested?

In most Member States the national type approval authority does not have in-house testing facilities, so it designates the technical service(s) allowed to test prototypes on its behalf. The manufacturer is in principle free to choose any available technical service to test any of the specific regulatory requirements. It can get partial type approvals in different Member States but the overall type approval will always be delivered by one national authority. The approval of a vehicle type in one EU country is valid EU-wide without the need for further tests and re-certification. This principle of mutual recognition of type approvals is at the core of the EU Single Market, but it requires strict rules and thorough enforcement.

3. What are the problems you are trying to address? Is this a reaction to the Volkswagen emissions revelations?

At the moment, the EU sets the legal framework (Directive 2007/46/EC on the common legal framework for the type approval of cars, vans trucks, buses and coaches, as well as specific legislation such as Regulation 715/2007/EC on emissions limits), but national authorities are fully responsible for checking car manufacturers' compliance. The draft Regulation on the approval and market surveillance of motor vehicles maintains the principle of mutual recognition, which is at the core of the EU Single Market, but addresses current flaws in the system. A "fitness check" of the current framework in 2013 concluded that differences in the interpretation and application of the rules by national type approval authorities and technical services could undermine the effectiveness of the system across Member States, highlighting the need for more efficient enforcement. The Commission was finalising a legislative proposal to review the current system when the revelations of emissions manipulations emerged. The Commission has since concluded on the need for more far-reaching reform to prevent cases of non-compliance from happening again. The proposal for a Regulation will support this by:

- **Reinforcing the independence and quality of testing that allows a car to be placed on the market:** The Commission proposes to modify the remuneration system to avoid any possible financial links between technical services and manufacturers. The proposal also foresees more stringent performance criteria for these technical services and that they are regularly and independently audited to obtain and maintain their designation. National type approval authorities will be subject to peer reviews to ensure that the relevant rules are implemented and enforced rigorously across the EU.
- **Introducing an effective market surveillance system to control the conformity of cars already in circulation:** The current framework focuses heavily on the approval of a vehicle type

before it is placed on the market (*ex ante* checks) but there is insufficient surveillance of the cars already in circulation (*ex post* checks). In the future Member States and the Commission will carry out compliance verification spot-checks of vehicles on the market. All Member States should be able to take safeguard measures against non-compliant vehicles on their territory without waiting for the one that issued the type approval to take action. Member States will have to review regularly the functioning of their market surveillance activities and make the results publicly available.

- **Reinforcing the type approval system with more European oversight:** The Commission will have the power to suspend, restrict or withdraw the designation of technical services that are underperforming and too lax in applying the rules. In the future the Commission will also be able to carry out ex-post verification testing (through its Joint Research Centre) and, if needed, initiate recalls. The Commission will be able to impose penalties on car manufacturers and technical services. The Commission will also chair an Enforcement Forum which will develop common compliance verification strategies with Member States and organise joint audits of technical services and peer reviews of type approval authorities.

Additionally, the proposal includes provisions to reinforce the existing ban on **defeat devices.** The current ban on defeat devices (Article 5 of Regulation 715/2007/EC), which national authorities have a standing obligation to police and enforce, remains unchanged. The proposal introduces an additional obligation on the manufacturer to allow access to the car's software protocols. This measure complements the Real Driving Emissions package, which will make it very difficult to circumvent emission requirements and requires that manufacturers disclose their emissions reduction strategy, as is the case in the US.

4. What are the roles and differences of type approval authority, technical service and market surveillance authority?

- **Type approval authorities** (e.g. KBA in Germany, RDW in the Netherlands) are national public authorities in charge of officially approving vehicles *before they can be put on the EU market*. This approval procedure takes place before a manufacturer introduces a new type of vehicle on the market (pre-market checks). The decision to approve a new vehicle type is based on compliance tests that are carried out by testing bodies and laboratories ('technical services') that are either in-house or, in most cases, specifically designated by the type approval authorities.
- **Technical services** (e.g. TUV, UTAC, IDIADA, etc.) are the test bodies and laboratories that are specifically designated by Member States' type approval authorities to carry out the type approval tests in accordance with EU legislation. Most type approval authorities designate external technical services, but there are also type approval authorities that have them in-house (e.g. the United Kingdom).
- **Market surveillance authorities** are national public authorities in charge of market surveillance. They check that the products *already available on the market* are safe and not harmful to the environment and exactly the same as the samples offered for initial testing and approval. These authorities are usually also in charge of general product safety (e.g. Consumer Rights Protection in Latvia or customs office in Italy). However, market surveillance authorities linked to vehicle compliance activities are in some cases the same as the type approval authorities.

5. What are the environmental, safety or other production requirements for vehicles that will change as a result of the new Regulation?

The environmental, safety and production requirements that need to be met differ case by case, depending on the category of vehicle and other classifications - see the current Framework Directive 2007/46/EC Annex IV for an overview. Today's proposal for a Regulation repeals and replaces that Directive and creates a new regulatory framework. However the about 70 detailed environmental and technical standards which it refers to remain the same as those currently referenced. In principle, if a car is fully compliant with today's EU legislation, there will be no changes for car manufacturers resulting from the new Regulation. However it is worth pointing out that emissions legislation will be enforced more strictly by making the testing methodology more robust (see below). Also, the validity of issued type approval certificates will now be limited in time for 5 years without the possibility of prolongation. Replacement type approval certificates can only be issued when the national type approval authority has verified that the type of vehicle continues to comply with all the applicable rules.

6. How exactly will the independence of testing bodies be reinforced?

Currently, manufacturers pay a fee directly to the technical services for the type approval testing that these technical services carry out for them. Technical services are dependent on these revenues and compete for this work. Under the new Regulation, technical services may no longer receive direct payments from manufacturers but instead all fees will be collected by the Member States. Member

States have to establish a comprehensive national fee structure (pools) to cover the costs for testing and inspections carried out by the technical services they have designated, as well as to cover the costs for the type approval certification, market surveillance activities and conformity of production review assessments. In addition, more stringent performance criteria and Commission's oversight is introduced (see below). There will be a centralised auditing system for technical services (e.g. joint audits by the Commission and national experts, peer reviews which include on-site visits to testing facilities) with the right for the Commission to suspend or withdraw designations.

7. How will technical services be supervised in the future?

The supervision will be based on joint audits of the work carried out by testing bodies and laboratories. BothMember States and Commission experts will be involved. The supervisory mechanism should be in place within two years of the new Regulation being adopted, and further details will need to be defined by a Commission delegated act. The Commission will also chair the Enforcement Forum which will be responsible for guidance, organisation and supervision of the joint audits. The Commission will also evaluate the designation and monitoring process of testing bodies and laboratories that are carried out by Member States. The supervisory system will be backed-up by scientific, technical and logistic support from the Commission on market surveillance activities. This will provide Member States with adequate tools for post-market controls and for taking effective remedial action against non-compliant and unsafe cars on the market.

8. What are the tasks of the proposed Enforcement Forum and who will be represented?

The Forum will coordinate the network of national authorities responsible for type approval and market surveillance. It will also have an advisory role to promote good practices, exchange of information on enforcement problems and penalties, cooperation, development of working methods and tools, development of an electronic information exchange platform, evaluation of harmonised enforcement projects and joint audits. Member States will nominate their representatives in the Forum. The tasks and composition of the Forum will be further specified by a Commission delegated act. Existing market surveillance platforms, such as Rapid Alert System (RAPEX) and the Information and Communication System on Market Surveillance (ICSMS) will be further used and strengthened for exchange of information of market surveillance activities.

9. Will the Commission be able to impose penalties in case of non-compliance with the rules?

The proposed Regulation increases the deterrents for unscrupulous manufacturers and underperforming technical services that place or admit non-compliant vehicles on the market, by empowering the Commission to levy penalties. Car manufactures who are in breach of type approval legislation (e.g. defeat devices or fake declarations) risk administrative fines of up to €30,000 per vehicle which can be levied by the Commission if no fine is being imposed by the Member State. Fines can also be imposed on technical services if they fail to carry out the tests rigorously. The level of fines will depend on an assessment of the gravity and extent of the non-compliance. The system of administrative fines and their calculation needs to be specified by a Commission delegated act. The Regulation maintains the existing obligation for Member States to lay down rules for effective, proportionate and dissuasive penalties. In the future, Member States have to inform the Commission every year on the penalties they have imposed. The type approval specific legislation complements the general civil and criminal law of Member States that may be applicable if allegations of fraud are confirmed.

10. Who will be able to decide on recalls or withdrawals of vehicles from the market?

In the current system, the responsibility to remedy wrongdoings lies with the Member State in which the type approval has been granted. Neither other Member States nor the Commission can initiate a recall. The Commission can only take action indirectly, as it did recently by referring Germany to the Court of Justice of the EU over its failure to take remedial action to comply with the Directive on Mobile Air Conditioning. Under the proposed Regulation, all national authorities as well as the Commission will carry out compliance verification checks on vehicles already placed on the market to verify that they comply with applicable EU legislation. Where tests and investigations show non-compliance, the market surveillance authority can decide to demand a recall or, in severe cases, full withdrawal from the market. Other national authorities will then be notified so they can also take similar action. The Commission will also have the right to order recalls or market withdrawals. This will allow the remedial measure to have an EU wide effect, which does not currently exist. The Commission will evaluate and decide on whether the measures taken by a manufacturer to remedy the situation are sufficient.

11. What will be the role of the Commission's in-house research centre (JRC)? The Joint Research Centre will be in charge of carrying out compliance and conformity checks for the Commission. It will be the technical arm of the supervisory system of the Commission and will carry out selected regulatory emissions testing in the laboratory and on the road. This will allow the

Commission to make an informed and unbiased judgement on any non-compliance.

12. Will this new legislation avoid instances of car manufacturers using defeat devices?

Defeat devices are already illegal and Member States have a standing obligation to police and enforce this ban. Defeat devices were banned by Directive 98/69/EC and later by the currently applicable Regulation 715/2007/EC. Article 3 of Regulation 715/2007/EC defines defeat device as any element of design which senses temperature, vehicle speed, engine speed (RPM), transmission gear, manifold vacuum or any other parameter for the purpose of activating, modulating, delaying or deactivating the operation of any part of the emission control system, that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use. Today's proposal for a Regulation maintains this definition of defeat devices, but tightens the screws further. It obliges manufacturers to provide access to data of vehicle software for the purpose of carrying out external checks. This will complement the Real Driving Emissions package (2nd RDE package), which introduces an obligation for the car manufacturer to declare its emissions reduction strategy. That will widen the legal basis for action in case of any irregularities. More widely, testing emissions in real driving conditions will help to a great extent limit the risk of cheating with a defeat device, and prevent that manufacturers exploit flexibility within the laboratory based test procedure.

13. When will the new framework start to apply?

The text of the Regulation will have to be negotiated and agreed by the European Parliament and the Council. Given the urgent need to restore trust in the type approval system, the Commission is hoping for a quick agreement between the co-legislators. A Regulation is fully binding and does not need to be transposed into 28 different national legal systems. The target date for implementation is in principle as soon as the legislative process will allow.

14. What is the Real Driving Emissions (RDE) regulatory package and what will it change?

The problem right now is that nitrogen oxide (NOx) emissions of diesel vehicles measured on the road in reality exceed substantially the emissions measured on the currently applicable laboratory test cycle (NEDC). The RDE procedure will complement the laboratory based procedure to check that the emission levels of nitrogen oxides (NOx), and subsequently particle numbers (PN), measured during the laboratory test are confirmed in real driving conditions. The RDE testing procedure (1st RDE package) has already been approved. From early 2016 onwards, pollutant emissions will be measured by portable emission measuring systems (PEMS) that will be attached to the car while driving in real conditions on road. This means that the car will be driven outside and on a real road according to random acceleration and deceleration patterns. Until the 2nd RDE package enters into force, RDE testing will only be done for monitoring purposes, without an impact on the actual type approval which will continue to be delivered on the basis of the laboratory measurements. On 28 October 2015, Member States meeting in the Technical Committee of Motor Vehicles (TCMV) voted by a large majority on the 2nd RDE package. They agreed that from 1 September 2017 these new RDE tests will determine whether a new car model is allowed to be put on the market. Given technical limits to improving the real world emission performance of currently produced diesel cars in the short-term, Member States agreed on a phasing-in period for reducing the divergence between the regulatory limit that is tested in laboratory conditions and the values of the RDE procedure when the car is driven by a real driver on a real road (the so-called "conformity factor"). For more details, see the press release.

15. Is it true that the EU will allow diesel cars to pollute more in the future?

On the contrary. If you look at it in terms of actual real emissions, we are moving from the current *average* real NOx emissions of 400mg/km per diesel car down to 168mg/km (September 2017), then to 120mg/km (January 2020). This is a significant reduction compared to the current discrepancy between NOx emissions measured in a laboratory and in real driving conditions (a discrepancy of 400% on average). We are more than halving the real amount of NOx emissions. And we are not stopping there. The Commission will carry out an annual review of the portable measurement technology that will be used for RDE. As this technology improves and refines, we will be able to significantly reduce the 50% error margin foreseen from 2020. The Commission is committed to activating the revision process as soon as possible, based on the information collected in the course of the RDE monitoring phase. Moreover, the RDE package will also include an obligation for the car manufacturer to declare its emissions reduction strategy. The Commission will also fine-tune the testing methods to take into account that short city trips starting with a cold engine account for most city pollution, and introduce PEMS testing for particle number (PN) emissions.

16. Will consumers have access to information on each vehicle's emissions levels?

Yes, the Commission wants to increase transparency towards consumers in this area. The Commission is preparing a proposal, which it will put forward in the course of 2016, to ensure that the real-world

emissions levels of NOx of each vehicle is shown in its certificate of conformity, the "birth certificate" which is delivered with each new vehicle in the EU. Furthermore, the Commission will specify in a delegated act which data vehicle manufacturers have to make public. As regards consumer information of CO2 emissions, the Commission will launch an evaluation of existing legislation. An evaluation of the car labelling Directive is also ongoing.

17. How are CO2 emissions tested and what is the Commission doing to address shortcomings of measuring CO2 emissions?

Currently, CO2 emissions are measured in a laboratory according to the New European Driving Cycle (NEDC). The Commission is aware of the significant divergence between current test cycle measurements and actual emissions in real world driving. These shortcomings will be addressed with the introduction of a new testing procedure, the Worldwide Harmonised Light-Duty Test Procedure (WLTP), as agreed in the framework of UNECE and requested by Regulation 333/2014 on CO2 emissions from cars. The new test procedure should ensure that the measurements better reflect emissions in real driving conditions and that there is less flexibility in carrying out the tests. The Commission is working towards September 2017 as a target date for WLTP to be in place, coinciding with the timing for the entry into force of RDE testing for NOx.

18. Is the Commission working on improving the safety of motor vehicles?

The Commission is also in the process of reviewing its vehicle safety legislation (Regulation 661/2009) and will propose a way forward in the course of 2016. There are a number of measures that are assessed in terms of their benefit and cost performance. Features that are being currently assessed range from automatic emergency braking and lane keeping assist systems to drowsiness and distraction detection systems.

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