

EMIS hearing on 21 June 2016

Replies to the Questionnaire to Commission Representatives on TCMV and TAAEG

No	Question	Reply
		TCMV
1.	Is there a difference between the RDE-LDV expert group, the RDE-LDV working group and the RDE taskforce? What are these groups exactly, to which organisation do they report, who participated in these groups and what role did they play in the process? Could you please provide us with a detailed composition per grouping, and any of its subgroups (exact number of members with detailed specification per organisation represented)?	The Real Driving Emission-Light Duty Vehicle (RDE-LDV) working group is the main group set up in January 2011 with the objective to support the development, by the Commission, of a complementary test procedure that ensures that the emissions of regulated pollutants are appropriately controlled under normal conditions of vehicle use. Two expert groups were set up as sub-groups of the RDE-LDV WG (the so-called "RDE-LDV expert groups") to discuss and develop specific aspects: (1) the Task Force on Data Evaluation set up in November 2013 with the mandate to assess the potential data evaluation methods and to further fine-tune them; and (2) the PEMS procedure drafting group set up in June 2014 with the mandate to collect expertise on instrumentation and testing and, based on the initial draft prepared by the JRC, to support the development of the structure of the procedure. The role of these groups is to provide specific advice and expertise to the Commission services with regard to the specific tasks allocated to them. The outcome of the two expert groups is discussed in the RDE-LDV working group. The proposals of the later are then discussed at TCMV level.
		The group is open for participation to everyone interested in its work and, in fact, experts representing NGOs, academia, equipment manufacturers and automotive industry associations, as well as Member States' authorities and Commission representatives are participating and contributing to its work. The Composition of the participants is balanced and at the same time reflects the specific tasks of the group and the type of expertise required for completing these tasks. All the representatives are participating on equal footing and a no voting system is applied.

		All the drafts prepared by the two sub-groups are submitted and discussed in the RDE-LDV working group and the results are made public via CIRCABC. There is only one section in the group library to which access is restricted, i.e. the one covering the work of the Task Force on Data Evaluation. Due to the sensitivity of some of the data in this section, access is only given by request and has been provided to various stakeholder groups who are contributing to its work. These include industry, Member States, academia and NGOs.
		Detailed information on the RDE-LDV working group and its sub-groups is provided in Annex I. All the information concerning the profile of each organisation represented in the RDE-LDV Working Group is publicly available and can be found on the respective organisation's website.
2.	At the Commission level the car industry is actively participating in the work of various "expert groups" providing "expertise" and technical advice. While it is clear that the car industry has a lot of useful expertise on the subject, which clearly should be taken advantage of, the influence the industry has on the final version of proposed legislative measures is rather worrying. Do you see any conflict of interest that occurs when those being regulated have vital influence on the regulation itself? Should representatives from the car industry only be consulted at an initial consultative stage of the process and further on any contact should be prohibited?	The Commission acts in the general European interest, not in the interests of any specific group or stakeholder. Stakeholder consultations are integral to well-informed decision-making and serve to improve the quality of EU law making. In this context, it is natural that the Commission closely interacts with a wide range of stakeholders and seeks their views on how to best design the regulatory framework. This has also been the case in the course of preparation of the RDE regulation, where the Commission services regularly consulted industry, Member States, research institutions and NGOs.
		However, stakeholders' input only represents a fraction of the information being assessed by the Commission when preparing a legislative proposal, which includes scientific and technical publications, results from EU funded research projects, JRC studies, etc. Hence, consulting stakeholders does not prevent the Commission from taking its decisions independently and autonomously. The Commission therefore does not consider stakeholder consultation as a potential conflict of interest or as a threat to its integrity.
		An example of how industry suggestions were treated by the Commission services in the preparation of the RDE is provided in the table attached to Annex I. It shows how the Commission dealt with comments from the European Automobile Manufacturers' Association (ACEA), the main representative of car manufacturers at European level, with regard to key elements of the 2 nd Regulation on Real Driving Emissions (RDE), namely the trip definition, boundary conditions and the transfer functions. None of the suggestions to weaken the draft Regulation were taken on board. All the discussions were taking place at

3.	During the work of the TCMV committee, ACEA made several demands which were aimed at weakening the more stringent and therefore more-difficult-to-comply-with testing conditions, which, ACEA claimed had nothing to do with realistic car use. For instance less time spent testing in towns or on motorways, narrower boundary conditions, exclusion of cold start emissions in the first package, emissions after prolonged stops not counted, no high-speed tests etc. How does the TCMV work when faced with such demands? Do you bring independent experts that can present scientific and technical facts? Or is the work of the technical committee more political than technical?
4	committee more political than technical?
4.	We understand that on 31 January 2011 DG Enterprise

the RDE-LDV working group and were led by evidence-based arguments.

During the deliberations within TCMV, any views, suggestions and recommendations from different sources (including industry and/or independent experts), can be brought to the attention of the Committee by any Member State and/or the Commission that are the only members of the TCMV unlike the industry which is not represented in the Committee. In addition, Member States are free to request additional technical or scientific expertise from the Commission or any other relevant external stakeholder, where deemed necessary.

An example of how the Commission dealt with ACEA comments in the broader context of the TCMV's work is provided in the response to Question 2 above.

organised the kick-off meeting of the RDE-LDV working group whose objective was to develop a complementary test procedure that ensures that the emissions of regulated pollutants are appropriately controlled under normal conditions of vehicle use. This took place four years after the adoption of the 2007 Euro 5/6 Regulation, which mandated the Commission to keep the test cycle under review.

We understand that between the beginning of 31 January 2011 and the end 2012 four candidate procedures were initially discussed in the RDE-LDV working group:

The Euro 5 requirements apply from September 2009 to new types of vehicles and from January 2011 to all newly produced vehicles. The Euro 6 requirements apply from September 2014 to new types of vehicles and from September 2015 to all newly produced vehicles. The provisions of Article 14 of Regulation (EC) 715/2007 make the emission test procedures conditional to a review of the emissions of Euro 5/6 vehicles. However, an assessment could only be completed once a significant number of Euro 5 vehicles were available on the market. In this regard, the outcome of the first study delivered by the JRC in 2011 was needed to provide the necessary scientific evidence and testing data for the development of real driving emission test procedures.

The RDE-LDV working group looked into four potential approaches to improve the future real driving emission (RDE) test procedures in the context of type-approval (multi-cycle testing like in the US, emissions modelling, random driving cycles and on-road emissions testing with PEMS).

Approach (i) was very much favoured and claimed to be effective by industry. It was

i. multi-cycle test approach like in the US,

ii. emissions modelling,

iii. random driving cycles,

iv. on-road emissions testing with Portable Emissions Measurement Systems (PEMS).

After that, only the two latter options were taken forward for further consideration. Only in October 2013 the work continued with a dedicated RDE task force focusing on the last option. Why did you need two years, from the beginning of 2011 until the end of 2012, in order to narrow down four options to two options?

considered to assess and test an "honest" (i.e. realistic) environment since it would in principle require the optimisation of emission control over a large area of the engine map. However, it would still leave the possibility for the use of "defeat devices", i.e. cycle sensing and subsequent adaptation of NOx control. This approach was rejected by the Commission and national regulators due to the serious concerns regarding the possible use of defeat devices. An example for this doubt is that it would have been possible for car manufacturers to reduce the level of emission control at temperatures below the lab test temperature or at driving patterns not corresponding to a regulatory cycle.

Approach (ii) was not followed up further because at that time it was not considered as technically feasible.

Approach (iii) would have offered widely randomised cycle conditions and hence it would be more difficult for car manufacturers to identify and predict these cycles. In principle, this would have reduced the risk of defeat devices. Nevertheless, the possibility of cycle sensing could not be totally excluded and hence it was not further pursued.

Approach (iv), i.e. the measurement of emissions on the road, was overall considered as the most robust approach and was hence retained. However, it was necessary to define a complex structure of boundary conditions to ensure unbiased driving (see Annex I). Instead of calculating boundary conditions, the Commission also considered the possibility of supplementing the RDE test procedure with random cycle testing, since this random cycle testing would have been calculated automatically, without any human interventions. However, in light of the identified disadvantages outlined above, this approach was abandoned.

It should be noted that by early 2012, the Commission had narrowed down the four options to two options (on road testing/PEMS + random test cycle), despite heavy criticism of the industry which favoured the US approach (multi-cycle testing). Once this decision was taken, several options of combining these two methods for the different stages of the type approval were discussed (e.g. use random test cycle for the initial type approval test and PEMS testing for the validation testing; or use the random test cycle for PN testing and PEMS for NOx testing) in the course of the year 2012 until early 2013. In the end, for reasons of simplicity and regulatory trust, only the on-road testing with PEMS technology

		was retained.
5.	When exactly did the Commission begin to examine whether the New European Driving Cycle was still contemporary or needed readjustments?	Regulation (EC) No 715/2007 requires the Commission to keep under review the representativeness of the test cycles and test procedures. The need for a new more realistic test procedure became apparent already from the entry into force of that Regulation and the Commission therefore immediately supported the work that was initiated in 2008 at the United Nations Economic Commission for Europe (UN/ECE) in developing a new more representative laboratory test procedure — the World Harmonised Light Vehicle Test Procedure. The WLTP was agreed at UNECE level in March 2014 and the Commission is now proposing to replace the New European Drive Cycle (NEDC) and introduce the WLTP for the purpose of CO ₂ and fuel consumption testing from 1 September 2017.
		The WLTP is expected to significantly reduce the difference between the CO_2 emissions measured in the laboratory and those measured under real driving conditions. It will provide a drive cycle that is more representative of EU driving conditions and a test procedure that is more strictly defined, minimising the use of tolerances and reducing the difference in technology performance between the test and real-world conditions.
		The Commission has also commissioned several studies to better understand the gaps between the CO_2 emissions measured NEDC and real-world emissions and these results have fed into the development of the WLTP. The results will also be of importance to understand how to ensure that the new procedure continues to reflect real driving conditions over time.

Was the Commission already aware of the temperature-sensing software that reduces the efficiency of emission reduction systems in cars, or the use as defeat devices, as well as other devices with the same function? If they were, since when and what was known? Has the Commission been in contact with the manufacturers regarding this matter? If that is the case, when was this topic first discussed in the working groups with inclusion of the member states?

No. The Commission was not aware of any instances of use of defeat devices.

Please also refer to the written reply to Question 3a of the EMIS Committee questionnaire provided by DG JRC prior to the hearing on 19 April 2016. ¹

¹ Question 3a: In 2013, two years before the Volkswagen scandal, you had warned EU officials of the dangers of defeat devices. What was the basis for your reference to the possible use of defeat devices by car manufactures in your 2013 report?

Response: The 2013 report had the objective to assess random cycles and on-road testing with PEMS as two RDE candidate procedures. The assessment was based on emissions tests conducted at the JRC and expert judgement. The on-road emission measurements reported by JRC did not allow to establish whether the elevated NOx emissions were due to insufficient emission control, just "negligent" calibration thereof, or an intentional manipulation of vehicles. The JRC did not have any concrete information that car manufacturers applied illegal defeat strategies at any point in time. Specific search for defeat devices was not in the scope of the JRC work; testing for the existence of illegal defeat devices according to the legal definition would have required a much deeper and more sophisticated analysis, for which resources (e.g. special IT knowledge) were not available.

The JRC was aware of the possibility that defeat devices could, in principle, be applied. In 1998, US-EPA accused several US heavy-duty vehicle manufacturers of violating the Clean Air Act by installing illegal defeat devices. As part of the resulting settlement with the EPA, these manufacturers received heavy fines and were subjected to new emissions standards which included on-road testing. A subsequent law suit in 2001 was settled in 2003 with a general agreement between heavy-duty vehicle manufacturers and EPA on provisions of on-road emissions testing with PEMS. In Europe, Regulation 715/2007 explicitly prohibits defeat devices, thus implicitly deducing that such devices could also be applied in light-duty vehicles, in particular with vehicle control software becoming increasingly sophisticated. Against this background, the 2013 report by the JRC concluded that random cycle testing in the laboratory may be less robust than on-road testing with respect to the application of defeat strategies. This conclusion, alongside the explanations in Box 2 of the 2013 JRC Report, is derived from Regulation 715/2007, past experiences and a risk assessment based on expert judgement and deductive reasoning.

7.	According to your knowledge, why were car manufacturers not obliged to disclose if they have used the exemptions for defeat devices provided for in Article 5(2) of Regulation (EC) 715/2007?	Manufacturers have the obligation to respect the law and EU Member States have the standing obligation to enforce it. This also applies to the ban on the use of defeat devices. In Regulation (EC) 715/2007, there is no explicit requirement for manufacturers to disclose relevant information on whether they make use of the exemptions under Article 5(2). After the VW revelations, the Commission provided in the 2 nd RDE Regulation (EU) 646/2016 for the obligation of the car manufacturers to declare their emission reduction strategy.
8.	Did the TCMV discuss the public reports regarding the significant and increasing discrepancies observed in PEMS tests in real world riving as regards NOx emissions compared to the legal limits? Did the Commission or representatives of Member States' authorities express their intention to pursue with compliance action, or was there perhaps a coordinated view not to pursue the evidence of NOx exceedances? Did the Commission present a legal or other advice on what type of compliance action should be taken?	The 2011 and 2013 studies of the JRC have been made publicly available and their content was discussed with Member States and stakeholders when developing the RDE test procedure in the RDE-LDV Working Group (2011-2013) and in the TCMV (2014-2015). Neither the Commission services nor the Member States' representatives in the TCMV had, at the time, expressed any specific intention to pursue (or not) compliance actions due to NOx exceedances, since the type-approval framework which both the Commission and the national authorities of the Member States are implementing and ensuring compliance with requires the NOx limits to be met in the laboratory tests set out in Union law. Commission services were of the opinion (as concluded in the 2013 JRC study) that the best way to minimize high real driving emissions was through the development of RDE procedure. High on-road emissions due to potential illegal defeat devices, as described in Union law, therefore remained very much in focus.
		In 2012 the Commission sent letters to all Member States stressing the need to enhance market surveillance mechanisms and to ensure that Member States had the necessary structures and resources in place to identify and take corrective actions in relation to vehicles that either did not comply with the relevant EU type-approval requirements, or were representing a serious risk to safety and the environment.
9.	So-called on-board-diagnostic-systems (OBD) are necessary for precise monitoring of in-use emissions. Does the Commission receive dimensional results from the OBD-systems? Who else has access to those results? Do the dimensional results indicate deviations of the exhaust emissions even when the emissions	OBD provides information and data stored and displayed in individual vehicles. Their main purpose is to alert the driver in case of technical failures and deterioration of components leading to a failure of emission control with respect to the level of a "new" vehicle. These data are not collected systematically or centrally, therefore neither the Commission nor national authorities are in possession of comprehensive OBD data. Manufacturers may of course collect OBD data, e.g. during regular technical maintenance or periodic inspections. Contrary to the US there is no obligation in Europe to communicate such data to authorities

	exceed the set limits? Does the Commission have indepth knowledge of the involved software (source codes) and the measuring parameters?	in a systematic manner (the only exemption being in-use-performance ratios (IUPR), which provide some information about the statistical functioning of OBD in real traffic, but not on actually identified failures).
		It should be noted that OBD systems in most cases do not measure emissions directly, they rather measure other parameters (e.g. the pressure loss at a particle filter) allowing conclusions to be drawn on the malfunctioning of these components with respect to their proper state on the basis of modelling. By their very definition, OBD systems are not suitable for monitoring real emissions, their purpose is different. A "new" vehicle with emission control systems installed, as intended by the manufacturer, would never produce OBD alerts, even if the emissions of this vehicle were very high in real driving.
		The Commission does not receive sufficient information from manufacturers to acquire indepth knowledge about OBD software.
10.	The ICCT has recently published initial results of the diesel emissions screening campaign conducted by the French, UK and German governments (links below). Can you provide us with more details on the French testing where the results were anonymized? Especially which cars were tested and with which results? Can you elaborate on whether and why the same car models scored differently in each test? http://www.theicct.org/blogs/staff/first-look-results-german-transport-ministrys-post-vw-vehicle-testing	The Commission does not have any more information on the French testing than what was made publicly available. While the Commission has repeatedly asked relevant Member States authorities for full access to the results of their investigations, none of them has provided it with technical information beyond that in publicly available reports. The Commission is currently analysing all reports and data received and we intend to provide a separate report at the end of the investigation period, when all the data from national investigations are available.
11.	What exactly happened in the meeting of 28 October 2015 when the conformity factor (i.e. the multiplier	In view of the vote on the 2 nd RDE Regulation, Commission services prepared an analysis of the future regulatory RDE conformity factors (CF), details of which could be explained in a
	used to calculate the allowable emissions during the on- road test with respect to the Euro 6 limit) was raised	separate document. The most challenging part of the analysis consisted in taking into account several sources of error, in particular statistical errors of the test procedure ² and of

A conformity factor (CF) defines an upper limit for the emissions during a PEMS trip, while the regulatory emission limit roughly corresponds to the average emissions of all PEMS trips.

from 1.6 to 2.1 for the first stage of application of the regulation, and from 1.2 to 1.5 for the second phase? The original lower CFs proposed by the Commission indicate that it is technically feasible to have lower factors. In fact, already at this early stage in the work of the EMIS committee we had several speakers confirming that the European car manufacturers can deliver clean cars respecting EU legal NOx limits in real world driving without any necessary adjustments (conformity factors) as introduced in the new RDE test. How is the aim of a high level of environmental protection in the Euro 6 regulation now being implemented?

According to the Commission, are the agreed conformity factors, in the light of technical expertise presented by several organisations, justifiable? Why the technical committee's decision concerning RDE does not reflect scientific facts?

the measurement equipment. It has to be understood that due to these sources of uncertainty one may not assume that the emission limit defined in Regulation (EC) 715/2007 for normal conditions of use of a vehicle would imply a CF equal to 1. On the basis of this technical analysis, possible ranges for the CF were identified.

The initial Commission draft was very ambitious as it was based on CFs identified at the lower end of identified ranges and thus corresponded to the strongest environmental objectives. This draft had to be modified towards higher CFs, within the limits of the identified ranges, in order to obtain a qualified majority in support of the proposal by EU Member States during the TCMV meeting. The agreed CFs remain within the initial ranges identified by the Commission (between 1,6 and 2,2 for the 1st step and a margin between 0,2 and 0,6 for the 2nd step). The Regulation adopted by the Commission was afterwards subjected to the right of scrutiny by the European Parliament and the Council, neither of which opposed to it.

There will be an annual review of the portable measurement technology that will be used for potentially reducing the value of the *margin* in the definition of the CF. In its statement "Towards comprehensive and efficient emission testing in the EU", the Commission committed to make use of this revision clause to reduce the second conformity factor already in 2017 and on an annual basis. The respective legal obligation for performing this review is explicitly included in the 2nd RDE Regulation.

No	Question	Reply
		TAAEG
1.	What are the differences between national authorities type-approval (e.g. extent to which the testing is done by private companies and whether their links with the automobile industry are somehow monitored; whether it was aware of the use of defeat devices and whether and how they had been justified by auto manufacturers)? Was TAAE aware of that the different practices between national authorities could lead to strategic selection of approval-sites (e.g. How it would account for the fact that the auto industry would not authorize its vehicles where they would be sold or produced, but where lower standards were the norm). Could the TAAE define those practices ("golden cars", defeat devices, testing temperatures etc.) that could most likely be used to deviate testing results from real driving emissions, and to what extent they were used by company/by country?	Technical services are designated by Type-approval authorities (TAA) to carry out tests on their behalf. The national administrative organisation of Member States, as such, has not been discussed in the Type-approval Authorities Expert Group (TAAEG). Its work focuses on technical questions. TAAEG was set up in 2010 by the Commission in the form of a consultative body composed of representatives of the national type-approval authorities to assist the Commission and Member States in implementing harmonised practices across the internal market. Therefore, TAAEG is aware of possible different interpretations of the law. Questions in TAAEG are raised by the Commission or by Member States, usually after having been discussed in the so-called Type Approval Authorities Meetings "TAAM" where only Member States are present. TAAEG operates in an informal setting and thus cannot take any binding decisions. Its purpose lies not in decision taking at all, but rather in an exchange of information.
		The use of "golden cars" has not been discussed in TAAEG. Neither were defeat device and cycle beating before the VW revelations. Differences between laboratory test results and on-road test results have been /are being addressed through the introduction of a more representative test cycle (WLTP) and of a real driving emissions (RDE) testing.
2.	Please explain from your point of view why many manufacturers are requesting type-approvals be carried out in Luxembourg or Malta - countries without any car production? What could be the	Information on the number of type-approvals granted by Member States during 2009-2014 can be found in the impact assessment of the recent proposal for a Regulation on type approval of motor vehicles and market surveillance ³ . During

http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016SC0009

Please note, there is a typo on the dates as the reference period covered is 2009-2014 and not 2009-2011 as indicated in the impact assessment.

	reasons for that? How many vehicle types have been certified in these countries in the last five years?	this period, 1002 approvals were issued by Luxembourg (2 nd biggest figure in the EU after Germany with 1209 approvals granted) and 344 approvals were granted by Malta (6 th biggest figure in the EU).
		The impact assessment points out that the distribution of the numbers of approvals granted by each Member State "simply indicate that the technical and administrative capacity to carry out verification testing and to issue type-approvals is unevenly distributed in the EU and not always focussed in the main producer countries. However, it could also be related to differences in the stringency that type-approval authorities and their technical services apply, which could induce applicants to selectively apply for type-approval with those approval authorities who are likely to be the most lenient. Therefore, it is important, to ensure that the observed pattern is not the result of unfair competition between national type-approval authorities and their technical services. In order to be able to better verify this in the future, more data from an improved monitoring of these bodies would be highly useful."
3.	Which concrete results has the Type-Approval Authorities Expert Group so far delivered with regard to a more harmonised interpretation and application of the current rules? When exactly and in which form has the Commission reminded the Member States and/or their type-approval authorities of their standing obligations and recalled the need to establish effective market surveillance mechanisms at their territories? Please list the respective results, the Commission's reminders as well as reactions of the Member States.	The work of TAAEG usually results in a reply to a particular question or highlights the need for the Commission to clarify the legislation via future amendments. Several concrete results can be found in the TAAEG minutes (publicly available) where the Commission reminded Member States of the requirements under the EU legislation, e.g. concerning the harmonized application of Regulation (EC) 661/2009 on vehicle general safety and the implementation of Directive 2006/40/EC (MAC).
4.	Which measures have been adopted by the Commission to verify that national authorities granted type approval reflecting real driving conditions? Could you explain the role of the Commission in ensuring that car manufacturers got type approval on vehicles fully reflecting those that will be then placed on the market? According to your knowledge, has the Commission ever checked	The Commission is entrusted with legislative initiative and supervision of the implementation of EU law in the Member States. The existing EU legislation on type approval does not provide a role for the Commission during the actual type approval process. As a consequence, the Commission cannot directly verify that vehicles approved by national authorities and placed on the market comply with their approved type, including as regards their real driving emissions. The

whether the cars receiving clearance for type approval were exactly the same as the ones placed on the market and driven in real world conditions? Which measures in general were adopted by the Commission to verify the correct implementation of the law with respect to emissions limits?

Commission can only take indirect actions, by launching infringement proceedings against the relevant Member States when it has court proof evidence that they fail to act against non-compliant products. One example of such an (on-going) infringement procedure in the automotive sector concerns the alleged failure of Germany to ensure the effective implementation of the Directive 2006/40/EC on Mobile Air Conditioning (MAC).

The Commission's recent proposal for a Regulation on the type approval of motor vehicles and market surveillance would, if adopted as proposed, significantly change the current situation by entitling the Commission services to carry out checks on vehicles placed on the market and to directly impose penalties in case of non-compliance.

What kind of relationship do car manufacturers, type approval 5. authorities, technical services and laboratories have with each other? Is there a possible conflict of interests between the car manufacturers and technical services? If there is, was the Commission aware of any instances and was this issue ever raised in the Expert Group? For example, sometimes car companies operate as technical services. The UK's Vehicle Certification Agency (VCA) has accredited a facility called JLR Product Compliance Centre Emission Test Laboratory. This shares its address with the car manufacturing plant of Jaguar Land Rover (JLR). Do you know if the JLR test lab also tests Jaguar or Land Rover cars for type approval? Do you believe this would constitute a conflict of interest? If a car company also owns and runs accredited technical services, is this within the current type approval rules? Will this be allowed under the new rules proposed by the Commission in their proposal for a new type approval framework? How will the new proposal ensure there are no conflicts of interest? Who oversees self-testing by car

The Commission has no concrete indications of a direct conflict of interests or collusion between car manufacturers and technical services. It is common practice in most of the regulated product sectors that the manufacturer pays for the compliance costs for authorising its products for placing on the market. 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.

However, given the potential conflict of interest arising from the possible financial links between technical services and manufacturers, and to preserve the independence of testing, the Commission proposed to modify the existing remuneration system in its proposal for a Regulation on the type-approval and market surveillance. The proposal was, inter alia, presented to TAAEG for consultation and comments.

Under the new rules, technical services would no longer receive direct payments from manufacturers but instead all fees would be collected by the Member States. Member States would have to establish a comprehensive national fee structure. This would cover the costs of testing and inspections carried out by the technical services they have designated, as well as to cover the costs of the certification, market surveillance activities and conformity of production review assessments. The proposal also foresees more stringent

manufacturers? Why wasn't the independence of technical tests strengthened earlier at a European level?

performance criteria for technical services. They will be regularly and independently audited to obtain and maintain their designation.

The reference to JLR is not accurate. JLR was notified by the UK as a technical service for individual approvals, not for type-approvals. Individual approval is a procedure used to certify a vehicle by a particular person. Self-testing is allowed for a limited number of simple issues (e.g. space for the registration plate) by the current framework as well as by the new text (see list of Annex XV). It does not concern emissions. It is normally not applicable to large volume manufacturers because it is too costly and lengthy in time. So it is not about self-testing but to provide testing facilities close to home for citizens.

Testing on the premises of the manufacturer for practical reasons (lack of test houses), is also allowed by both the current and the proposed framework; however, these tests are performed or supervised by a 'real technical service'.

It has been a common knowledge that car industry uses practices that, whilst not against the law, are certainly not in the spirit of the law (for instance preparing 'golden cars' for tests or use of defeat devices). The new Regulation on type-approval does not clarify the issue of defeat devices, which are being widely misused by manufacturers due to a lack of clarity over how a defeat device is defined. Could you please explain why the final text does not include a concrete definition of what constitutes a defeat device including obligations for car manufacturers to disclose and justify the installation of any auxiliary devices, which change the normal functioning of a vehicle? Could you please explain why the final text does not include any provisions prohibiting too flexible interpretation of the Regulation by the manufacturers and thus making the use of 'golden cars' illegal?

6.

Since Regulation (EU) 715/2007 entered into force, the Commission has not received a single request from Member States' authorities or industry representatives pointing to the need to clarify its provisions. The Regulation already contains a definition and rules for defeat devices that provide sufficient legal clarity, even if the implementation faces certain factual/technical challenges. In order to ensure a coherent/ uniformly effective implementation of this ban of defeat devices across all Member States, the Commission has provided for an obligation for car manufacturers to disclose and justify the installation of devices under Article 5(2) in the 2nd RDE Regulation (EU) 646/2016.

The issue of "golden cars" is different from the use of defeat devices. The practice of using "golden cars" for type approval is addressed through the introduction of RDE and WLTP.

7. Which type-approval authorities of the Member States are already now executing regular ex post checks of cars in circulation? Which are the Member States with effective and sufficient market surveillance to control the conformity of cars already in use?

Checks on cars already in circulation are carried out in accordance with Directive 2009/40/EC⁴, repealed by Directive 2014/45/EU⁵ from 20 May 2018, which requires each Member State to ensure that vehicles registered in its territory are periodically tested by testing centres authorised by the Member State in which those vehicles are registered. Roadworthiness tests may be carried out by a public body entrusted with the task by the Member State or by bodies or establishments designated and supervised by that Member State, including authorised private bodies. Testing of exhaust emissions is included in the list of minimum requirements to be checked within the roadworthiness tests.

As regards vehicles placed on the market, the market surveillance authorities of the Member States are responsible for ensuring that those vehicles are in conformity with their approved type. Market surveillance is organised at national level and Member States are required to ensure an appropriate set of infrastructures for that purpose and to prepare national market surveillance programmes. The responsibilities of the national market surveillance authorities include the tasks of keeping citizens informed about potential risks and ensuring that corrective measures (including bans, withdrawals, recalls or any other measures that ensure that conformity is re-established) are taken against non-compliant products. The level of the sanctions is also determined at national level.

In 2012, the Commission reminded the Member States of their obligation to establish on their territories effective market surveillance systems and to ensure that the necessary structures and resources are put in place to identify and take corrective actions in relation to vehicles that either do not comply with the relevant EU type-approval requirements, or represent a serious risk to safety and the environment.

⁴ OJ L 141, 6.6.2009, p. 12.

⁵ OJ L127, 29/4.2014, p. 51.

8.	The Commission describes the task of your expert group on its website as to "monitor the development of national policies and the enforcement of EU legislation by national authorities". Did you monitor the enforcement of the Commission's regulation from the year 2007 prohibiting defeat devices after your in-house colleagues from the Joint Research Centre pointed out in 2011 and 2013 that such devices were being used?	The Commission was not aware of any instances of use of defeat devices before the outbreak of the VW scandal. The statement that the JRC reports from 2011 and 2013 indicated that such devices were being used is factually wrong. In fact, the 2011 report only concludes that "the results indicate that NO_X emissions of light-duty diesel vehicles substantially exceed the Euro 3-5 emission limits: by a factor of 4-7 as averages over entire test routes and up to a factor of 14 for individual averaging windows. The increasing stringency of European emission limits has, thus, not resulted in an equivalent reduction of on-road NO_X emissions of light-duty diesel vehicles." Further on, the 2013 Report points out that "PEMS appears to be more effective in preventing the detection of emissions tests by vehicles and thus the use of defeat strategies under normal conditions of vehicle use", however, it does not suggest or provide any evidence that defeat devices might have been used on the tested vehicles.
9.	Could you please provide an overview for the 15 most sold diesel models in the European Union in 2011, 2012, 2013, 2014 and 2015 providing information on where and by which organisation the emissions, emissions-related technologies and the engines of the models were tested (the relevant test organisations) and type approved (the relevant type approval authorities for preproduction type approval)?	The Commission does not have the information requested by the European Parliament. Member States are not obliged to provide such information under the current legislation. In the new Regulation for type-approval of motor vehicles and market surveillance it is proposed that Member States make available to the Commission all data related to the type-approval by establishing a database. General information on the most sold models of vehicles in Europe is however available on the Internet.
10.	Could you also indicate which Conformity of Production (CoP) checks and In-service conformity (ISC) checks were carried out for these models, and by which organisation? Were for these models supplementary checks carried out by the national authorities (independent from the check by car manufacturers)? If yes, which national authority and when?	These questions need to be addressed to the respective TAA who approved the vehicles concerned. The Commission is not in the position to provide this information.
11.	Did the TAA Expert group discuss the public reports regarding the significant and increasing discrepancies observed in PEMS tests in	No, these issues were not discussed in the TAAEG meetings before the outbreak of the VW scandal, as they were discussed with Member States in the

real world driving as regards NOx emissions compared to the
legal limits? Did the Commission or representatives of Member
States' authorities express their intention to pursue with
compliance action, or was there perhaps a coordinated view not
to pursue the evidence of NOx exceedances? Did the Commission
present legal or other advice on what type of compliance action
should be taken?

context of other platforms (for example the TCMV).