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The vehicle type approval framework regulation (2018/858):  
A post-Dieselgate paradigm shift for EU vehicle regulations or a missed opportunity?

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Abstract: The Dieselgate emission scandal has laid bare all deficiencies of the type approval system present in the European Union. Aside from inaccurate testing and manufacturer fraud, the problem lay in the type approval procedures, which were opaque and provided plenty of opportunity for excessive leniency for manufacturers. The new Type Approval Framework Regulation seeks to address these issues with Commission supervision, adding market supervision, giving type approval authorities more competences and co-ordination. The area especially expanded upon, and previously all but ignored, has been the checks of actual vehicles whose model had already been homologated, to verify whether the real cars introduced to the market actually conform to the type approval regulations. The author argues that deciding not to create a European Union agency for vehicle type approval would have been a superior choice to attempting to coordinate and supervise so many national authorities, and far more effective at achieving the uniform application of the TAFR. For this reason, despite addressing all major faults of the current regulation, it may be seen as a missed opportunity.

Rozporządzenie w sprawie homologacji i nadzoru rynku pojazdów (2018/858). Fundamentalna zmiana regulacji homologacji pojazdów czy utracona szansa?

Abstrakt: Skandal Dieselgate obnażył wszystkie niedoskonałości systemu homologacji pojazdów obowiązującego w Unii Europejskiej. Oprócz niedokładnych testów po stronie organów państw członkowskich i oszustw producentów problem tkwił w procedurach homologacji typu, które były
Introduction

This paper is an analysis of the future impact of the EU Type Approval Framework Regulation 2018/858 (TAFR, the Regulation), a new piece of EU legislation which modifies the way in which vehicles are homologated and registered, and introduces new supervision, and will apply from 1st September 2020. The main research question posed is whether this regulation is merely a collection of minor changes to the status quo, or a paradigm shift for the automotive industry, all but making another Dieselgate scandal impossible. This paper is especially directed at readers interested in EU law governing the automotive sector, through attempts to aid in explaining certain technical concepts and describes the most significant changes to the current regulation.

The legal changes are analysed with reference to the current type approval framework directive 2007/46/EC, set to be replaced by TAFR. It must be stressed that vehicle type approval is a process verifying a number of different requirements such as crash safety and recyclability, which includes emissions standards. This work deals with type approval (homologation) as a whole, with no particular focus on emissions standards, but frequently provides examples involving emissions standards, as the Dieselgate emissions scandal was so far the biggest breach of type approval regulations. Therefore most of the lessons learned by the EU lawmaker stem from the Dieselgate scandal, which permeates through the text of the TAFR.

Before moving to the changes to the type approval process themselves, type approval should be briefly explained. Vehicle type approval is an administrative decision, which allows a manufacturer to introduce a model (type) of vehicle to the market. This decision is made based on testing pre-production prototypes to ensure they comply with regulations. The manufacturer must then ensure that actual production vehicles are identical to the tested prototypes — and therefore, that they, too, fulfil the type approval requirements and would theoretically pass the same tests. Type approval (or homologation) must not be confused with registration of vehicles — registration is a document assigned to a production vehicle, based on
the certificate of conformity with the type approval. The Dieselgate scandal is an example of a manufacturer creating vehicles that did not conform to the requirements. This was possible partly due to weak supervision, ineffective “safeguard clauses”, and a lack of EU-wide oversight and communication between Member States’ authorities. The TAFR seeks to address these issues.

1. Institutional status of the TAFR in EU law

The type of act chosen to once again regulate vehicle type-approval is a regulation, repealing Directive 2007/46/EC. This choice fits a trend of replacing EU directives with regulations, such as the General Data Protection Regulation (EU) 2016/679 or the Prospectus Regulation (EU) 2017/1129.

According to recital 64 of the TAFR, the objective of laying down administrative provisions and technical requirements cannot be achieved by the Member States — which is simply correct, as they failed to prevent or even discover the Dieselgate scandal. Furthermore, this objective can be better achieved at Union level and the Union may therefore adopt measures “in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on the European Union”. Supervision of national type-approval authorities by the European Commission is by far the most significant novelty of the TAFR, a competence sorely lacking during the Dieselgate scandal, the lack of which largely prevented EU-wide measures.

The subject matter of the Regulation is similar to that of the Directive in that it concerns administrative provisions and technical requirements for type-approval (Article 1 of the TAFR). The difference with regard to the type of act is that the regulation, which is directly applicable and imposes obligations on individuals, introduces those administrative provisions itself, rather than obliging the Member States to do so.

2. Obligations of Member States and national authorities

For greater oversight over their own type approval authorities, and to increase the supervisory powers of these authorities, Article 6 defines the obligations of the Member States themselves, even though a regulation is directly applicable.

The new obligation to inform the Commission of the appointment and designation of approval authorities seeks to add accountability and previously absent EU-level oversight. Member States will be obligated to review the activities of the authorities at least every four years. This measure provides transparency needed especially in Member States where the automotive sector is a nationally vital industry, and whose interest it is for that industry to be successful and problem-free. Type approval authorities in these Member States can be overly lenient when it comes to supervising their own industry, and Article 6 provides pressure for that
supervision to be effective, and seeks to end the secrecy that helped foster fraudulent practices, resulting in the Dieselgate scandal.1

Article 6(7) obliges the Member States to introduce measures enabling the supervisory authorities to enter the premises of economic operators (and thus, according to the TAFR, manufacturers, their representatives, distributors and importers) in order to take the necessary samples of vehicles and their parts. Access by authorities to these facilities is a significant extension of the administrative competences of Member States’ authorities and will allow more effective enforcement of type approval regulations. Entering the premises of an economic operator also means that it is possible to verify that production units conform to the approved type, which is currently left to the manufacturer. It is clear that the manufacturer could manipulate some characteristics of pre-production prototypes.2 Article 7 contains the obligations of the approval authorities equivalent to Article 4 of Directive 2007/46/EC (entitled “Obligations of the Member States”; the TAFR will be directly applicable and may therefore impose obligations directly on the authorities).

3. An unprecedented addition: market surveillance authorities

Article 8 sets out the obligations of market surveillance authorities, in addition to type approval authorities. These obligations consist of checks of registered examples of approved vehicle types, and verifying whether the vehicles on the road truly conform to the type approval documentation. Market surveillance authorities are required to regularly check a minimum of “one for every 40,000 new motor vehicles registered in that Member State in the preceding year, but shall not be less than five tests”. Therefore, in contrast to the current regulation, where testing only takes place before type-approval and actual conformity of real vehicles to the type-approved model is entrusted to the manufacturer, new vehicles will be randomly tested by the market surveillance authorities, including under road conditions (Article 8(1) of the TAFR).

Since such tests will be performed regularly after the entry into force of the TAFR, the possibility of detecting a manufacturer trying to deceive an authority on emissions will increase significantly. Furthermore, the performance of these tests by the market surveillance authority introduces a different entity to the process, separate from the approval authority. This, again, reduces the risk of excessive leniency of an approval authority, which has been the case in some Member States. The surveillance authority does not need to conduct complete vehicle tests, comparable

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1 F. Roscher, “Watchdog and Industry Accomplice?”, Handelsblatt 15.08.2017, https://www.handelsblatt.com/today/politics/dieselgate-collusion-watchdog-and-industry-accomplice/23571756.html (accessed: 1.07.2019).
2 European Parliament, Report Denmark replies to EMIS Questionnaire, http://www.europarl.europa.eu/cmsdata/106055/Denmark_replies%20to%20EMIS%20Questionnaire.pdf (accessed: 28.05.2019).
to those required for type-approval — Article 8 imposes such an obligation for at least 20% of the smallest number of tests — only on those authorities that carry out more than five tests per year. This means that these obligations will apply only to the authorities of the Member States where at least 200,000 vehicles are placed on the market annually.

Thus, in Germany, where 3.4 million passenger cars were registered in 2017, assuming the same number of registrations with TAFR in force, 85 actual vehicles would be checked by the market authority, of which 17 would be subjected to tests similar to those performed in the type approval process. This could potentially be one of the strongest means of preventing or possibly detecting further attempts at fraud by manufacturers, since the Dieselgate scandal itself was discovered while testing a registered vehicle by the International Council for Clean Transportation (ICCT), an NGO — regular checks could make it all but impossible to commit similar fraud.

Article 8(13) of the TAFR introduces the coordination of market surveillance authorities of Member States. These provisions may be burdensome to market surveillance authorities, giving them many new competences and obligations, some of them completely new and never before performed.

There is still no EU-wide agency for vehicle type approval, akin to similar organisations for aircraft, maritime, or rail transportation. Instead, new, much needed obligations are outsourced to market surveillance authorities. The lack of an EU agency must be described as a missed opportunity, because it leaves room for forum-shopping for states where vehicles can be more easily approved, or where fewer vehicles get tested and where none at all would be tested under conditions of Article 8 of the TAFR (the re-testing of type approval parameters on manufactured examples of already type-approved models). The new competences of the Member States may also prove meaningless if there is no will to use them to enforce type approval regulations.

4. Supervision and competences of the European Commission

The competences to test whether currently manufactured vehicles conform to type approval regulations are provided by Article 9 of the TAFR to the European Commission. The Commission will carry out the tests at its own expense and may use the technical services of the approval authorities in Member States, but is obliged to use a different service from that which tested the vehicle for the approval

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3 Jahresbilanz der Neuzulassungen 2017, statistics on registered vehicles, Kraftfahrt-Bundesamt (German approval authority), https://www.kba.de/DE/Statistik/Fahrzeuge/Neuzulassungen/n_jahresbilanz.html (accessed: 5.07.2019).
4 A. MacDougald, “United States of America”, [in:] The Dieselgate: A Legal Perspective, ed. M. Frigessidi Rattalma, Cham 2017, pp. 94–95.
authority. Furthermore, these tests may be carried out on new vehicles as well as those already registered in agreement with the owner of the vehicle. To enable the Commission to freely perform its research, the manufacturers are obliged to deliver a statistically significant number of already manufactured vehicles or their parts, and provide all relevant information not given in the type approval certificate. Member States also provide any information unavailable in the type approval certificate and cooperate with the Commission. It appears that such additional possibilities for checking vehicles after type-approval are a measure designed not only to encourage correct behaviour on the part of manufacturers but also on the part of the Member States and their authorities, by adding some pressure. Article 9 may introduce some discipline to the process.

Article 10 gives the Commission the ability to assess the performance of the type approval authorities based on vehicle types approved picked at random. The assessments, as Article 10(2) states, are meant to ensure the uniform application of the TAFR and encourage good practices. The assessment of the Commission seems quite an invasive procedure, especially given the principle of subsidiarity in EU law. To alleviate this, the TAFR sets limits of Commission assessments — they must be performed according to the law of the Member State in which they are performed, confidential (that is, keeping trade secrets) and proportional.

5. Forum for Exchange of Information on Enforcement

Article 11 introduces the Forum for Exchange of Information on Enforcement, a gathering of authorities, the Commission and industry representatives, where assessments and reviews will also be made available to the Commission (Article 6(9)) in order to increase transparency. The current Directive 2007/46/EC did not introduce such a transparent measure, and thus all research findings and the content of the type approval decision itself were kept confidential. This situation has caused secrecy, silence and unofficial leniency towards national manufacturers.

The Forum will consist of representatives of the type approval and market surveillance authorities and other parties as observers, such as representatives of the European Parliament, environmental and industrial stakeholders (Article 11(1), third sub-paragraph). The Forum will examine the results of Commission reviews, potential or actual infringements and the uniform interpretation of the TAFR (Article 11(2)). In addition, the Commission shall report annually to the European Parliament on the activities of the Forum, which adds an element of political accountability and enhances transparency on the issue of vehicle approval. The Forum adopts its own rules of procedure and acts by a majority of its members when issuing opinions or recommendations (each Member State has one vote). All Member States participate in the Forum, meaning it includes Member States such as Denmark, where no EC type-approval is granted at all.⁵

⁵ European Parliament, op. cit.
The Forum may, given a perfect and effective application of TAFR provisions, create an unprecedented system of checks and balances in the EU type approval system, where different stakeholders could influence one another in type approval issues, and do so in a transparent environment, which may seem promising. Nevertheless, it seems like an EU agency for type approval with full transparency would nullify the need to create even more bodies and entities, not to mention involving the market surveillance authorities.

### 6. Obligations of manufacturers and economic operators

The duties of manufacturers remain largely unchanged compared to the 2007/46/WE directive: ensuring the conformity of new vehicles with the approved type, establishing a representative in the case of third country manufacturers, and ensuring that the certificate of conformity (and actual vehicle) reflects the type-approval certificate.

Article 13(5) introduces another Dieselgate-inspired change to the existing regulations, however, as vehicles and their parts must not be “designed to incorporate strategies or other means that alter the performance exhibited during test procedures in such a way that they do not comply with this Regulation when operating under conditions that can reasonably be expected in normal operation”. This reinforces the ban of defeat devices (which facilitate emissions testing cheating) introduced in the emissions standards regulation 715/2007. The EU lawmaker has included Article 13(5) in the TAFR, it seems, out of caution, to extend the ban on defeat devices to more aspects of type approval in the Regulation such as passenger or pedestrian safety and NVH (Noise, Vibration and Harshness). This could prevent a manufacturer potentially making a vehicle that would only have appropriate noise levels in test conditions, yet exceed limits in normal operation.

Some obligations such as providing the statutory plate and registered trade name of the vehicle, have been moved from annexes to the 2007/46/WE directive to the Regulation itself.

Article 14 obliges manufacturers to, in the event of non-conformity of the vehicle or its component, to take corrective measures immediately and, if it presents a serious risk, to inform the approval authority of the risk and of the measures taken. Importers, on the other hand, are obliged to check whether a vehicle is accompanied by a certificate of conformity (Article 16(1)) in order to place it on the market and, in the case of a serious risk, like manufacturers, to inform the authorities. The obligations of distributors mainly reflect those of importers. In particular, they are not allowed to place a vehicle or part thereof on the market unless it complies with the TAFR.

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6 J. Carpenter et al., *Road Transportation Vehicles*, Cambridge 2008, p. 441.
7. EU type approval procedures

EC type-approval procedures are renamed as the EU type-approval procedures by the TAFR. The latter reflect the existing EC type-approval procedures of Directive 2007/46/EC (as this Directive was adopted before the entry into force of the Lisbon Treaty, the remaining name of the EC type-approval). As in Directive 2007/46/EC, there are different types of approval procedures. This paper describes the most important differences relevant from the perspective of preventing further manufacturer fraud. Article 25(4) TAFR is such a provision. It establishes the access of the approval authority to the software and algorithms used in the vehicle to detect potential manipulations. This is an *ex ante* measure preventing the issuance of a type-approval, as opposed to *ex post* checks that may invalidate the approval in case of infringements. Many provisions have been recycled from Directive 2007/46/EC in whole or in part. For example, Article 26(5) of the TAFR empowers authorities to refuse to grant approval if, despite compliance with the TAFR, a vehicle or part of it presents a serious risk and obliges them to inform the Commission thereof. This is the equivalent of Article 8(3) of Directive 2007/46/EC. This is a common feature of EU vehicle type-approval law as many provisions in this directive are also carried over from the prior system of directives.

The main innovation of the EU type-approval certificate is the harmonisation of forms, certification, and spreadsheets of testing results available online. To that end, the Commission will adopt implementing acts up to 2022. This should make the results more comparable, especially for the Forum, or national authorities coordinating with each other. This issue is another one that would not exist if a EU agency for type-approval were established.

8. Revisions, extensions and termination of type-approval

The 2007/46/EC directive provided the possibility of revisions and extensions of type-approval. The TAFR also includes this measure (in Article 34), which is designed to allow manufacturers to “refresh” their vehicles without introducing an all-new model. A conformity check by the approval authority every 7 years (or 10 years for lorries and buses) has been introduced in Article 35, however. This is a procedure performed by the type-approval authority, which pertains not to vehicles on the market (like the Commission and market surveillance authority checks), but to the approved type itself. The check verifies whether the vehicle type still complies with new regulations. This 7 or 10 year deadline is counted from the last update of the information package, i.e. the granting of the approval or its revisions or extensions. If a verified EU type-approval does not comply with the provisions in force at the time of verification, it will cease to be valid. It is surprising that this check has not already been introduced. The result of this check is an addition
to the other events resulting in termination of validity of type-approval given in Article 35(2)(a) of the TAFR and carried over from directive 2007/46/EC.

The most obvious example is the impossibility to register new vehicles based on the type-approval or the type-approval expired. Another carry-over invalidation of type-approval is definitive voluntary discontinuation — meaning a model is discontinued, typically replaced with a newer generation car. “Definitive” probably implies the re-tooling of factories for that vehicle. In TAFR, Article 35(2)(f) is particularly targeted at manipulations similar to those which caused the Dieselgate scandal, as it states that the approval expires “where the type-approval was found to be based on false declarations, falsified test results or where data were withheld which would have led to the refusal to grant the type-approval”. This is a major change, as the approval expires automatically without a decision. This is an extremely severe sanction for the fraudulent manufacturer — if the approval expires due to this reason, the manufacturer will not be able to place new vehicles on the market and all vehicles already placed on the market and registered based on such a false type-approval (as mentioned in Article 35(2)(f)) would become legally unfit for use on the road.

As far as the validity of the approval is concerned only partially (e.g. concerning the vehicle version), the TAFR regulation remains the same as the existing Directive. The certificate of conformity, like the EU type-approval certificate, will initially be issued in a paper format determined by the Commission and then in an electronic format. With growing regulatory requirements, it must be appreciated that the EU lawmaker has decided to still include the innovation-friendly provisions that allow exemptions for new technologies or new concepts in Article 39 of the TAFR.

9. Safeguard clauses and European Commission competences

Safeguard clauses in Articles 29–30 of the current directive 2007/46/EC have never been used — not even during the Dieselgate scandal. To improve upon that act, Chapter IX of the TAFR has significantly revised the safeguard clauses.

The TAFR includes market surveillance authorities as entities authorised to trigger the safeguard clauses. The new procedure is as follows: if the supervisory authority of a Member State considers that a vehicle or part of a vehicle presents a serious risk to human health or safety, it can require the economic operator to take corrective measures to eliminate the risk. If these measures are not adopted, the national authorities can provisionally prohibit the sale of the vehicle or component thereof. A Member State which has adopted corrective or restrictive measures informs the other States and the Commission. They then supply additional information (for example, data from their own checks by the supervisory authorities) and are given the opportunity to object to the measures taken, but if they do not raise objections within one month, the measure is to be deemed justified and will be adopted in all Member States.
This model would almost certainly be effective in a Dieselgate-style scenario. In the case of the Dieselgate scandal, Member States could not question the approvals issued by the German approval authority — Kraftfahrt-Bundesamt (KBA), and only the KBA could withdraw vehicles from the market (it did not) or adopt other measures under Article 30 of Directive 2007/46/EC. In Italy, the consumer authority AGCM tried to argue that the approval of vehicles with software manipulating the test results was invalid, but the actual effect of invalidity of the type-approval did not exist under the directive.

Once the TAFR will have entered into force, aside from more transparency, it will be possible for any Member State to act in case of vehicles posing a risk of non-conformity, without relying on the Member State whose approval authority has issued the type-approval (as in the current Directive).

Article 54 of the TAFR is significant, because it allows a type-approval authority to refuse to recognise a type-approval issued by another Member State’s authority, which is an exception of the principle of recognising one another’s type approvals expressed in Article 6(5). The authority whose approval is questioned may object, which triggers consultations with the Commission.

Conclusion

The TAFR may yet prove an act as disruptive as the GDPR proved to be for data protection. Both acts are EU regulations replacing a directive, taking into account prior experience of enforcement and breaches or violations, and both introduce many potentially onerous obligations on businesses and authorities.

The adopted text seems to address the exact weak points of the 2017/46/EC directive laid bare by the Dieselgate scandal.

The main weakness of the TAFR remains the continued absence of a European Agency for the approval of vehicles along the lines of the European Union Agency for Railways, the European Union Aviation Safety Agency and the European Union Maritime Safety Agency. TAFR corrects many of the errors of the current system, but is an evolution rather than a complete redesign, while keeping Member States’ authorities maintains a political element in the approval of vehicles, which may continue to have a negative impact on the effectiveness of the approval. Moreover, the introduction of market surveillance authorities, although it is intended to make supervision more effective and transparent, may prove unprepared for vehicle testing in many Member States and, as a result, overburdened with new obligations. Some solutions, such as the safeguard clauses of Directive 2007/46/EC already existed, but were not used by Member States — without the willingness to actually apply the rules and the new regulations may be partially or

7 G. Posio, “Italy”, [in:] The Dieselgate..., p. 51.
fully ineffective. It is therefore the conclusion of this paper that the TAFR has not, in fact, gone far enough.

References

Literature
Carpenter J., Gibb J., Pesaran A., Marlin L., Kelly K., Road Transportation Vehicles, Cambridge 2008.
The Dieselgate: A Legal Perspective, ed. M. Frigessi di Rattalma, Cham 2017.

Legal acts
Directive 2007/46/EC of the European Parliament and of the Council of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, OJ L 263 9.10.2007.
Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information, OJ L 171, 29.06.2007.
Regulation (EU) 2018/858 of the European Parliament and of the Council of 30 May 2018 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC, OJ L 151, 14.06.2018.

Online sources
European Parliament, Report Denmark replies to EMIS Questionnaire, http://www.europarl.europa.eu/cmsdata/106055/Denmark_replies%20to%20EMIS%20Questionnaire.pdf.
Jahresbilanz der Neuzulassungen 2017, statistics on registered vehicles, Kraftfahrt-Bundesamt (German approval authority), https://www.kba.de/DE/Statistik/Fahrzeuge/Neuzulassungen/n_jahresbilanz.html.
Roscher F., “Watchdog and Industry Accomplice?”, Handelsblatt 15.08.2017, https://www.handelsblatt.com/today/politics/dieselgate-collusion-watchdog-and-industry-accomplice/23571756.html.