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REVIEW

Exploring CETA's Relation to Environment Law

Delphine Misonne

Belgium Requests an Opinion on Investment Court System
in CETA

Laurens Ankersmit

Sustainability and Precautionary Aspects of CETA Dissected

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The Volkswagen Scandal - Air Pollution and Administrative Inertia

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Editorial

The current issue of elni Review is inter alia dedicated to a subject that has been on the Top Agenda in 2016: The Comprehensive Free Trade Agreement between the EU and Canada.

On 8 September 2016 an ELNI Forum on CETA took place at the St. Louis Faculty of Law in Brussels. A small group of environmental lawyers debated intensively different aspects of this far-reaching agreement and its impact on environmental law in Europe in particular. Delphine Misonne gives an introduction on the potential impact of CETA on environmental law, Laurens Ankersmit and Wybe Th. Douma analyse the dispute settlement schemes under CETA and shortcomings of the agreement concerning sustainability and precautionary aspects. Nicolas de Sadeleer then explains the sophisticated ratification process for CETA and the legal uncertainty surrounding it. Details of these analyses can be found in the articles of *Delphine Misonne*, *Laurens Ankersmit* and *Wybe Th. Douma*.

Besides a number of legal details, the interesting general aspect of *who should negotiate* such types of agreements arose during the discussion in the Forum. Given that CETA claims to be a progressive environmental agreement (which it is obviously not), it must be criticised that it has been negotiated only by trade experts and not by environmental experts. Whatever the outcome of this dossier is in the end, it has to be noted that public pressure and the scientific debate improved the Agreement considerably, even though it is still not sufficient from an environmental point of view.

Another persistent environmental issue in 2016 – and foreseeably also well beyond – is the so-called ‘Volkswagen Scandal’; a symbol for a confidence crisis caused by and affecting not only the VW AG but also other major car manufacturers. A contribution by *Ludwig Krämer*, ‘The Volkswagen Scandal – Air Pollution and Administrative Inertia’ deals with the manipulation of NO_x emissions from Volkswagen diesel cars on the one hand, and the manipulation of CO₂ emissions from its diesel and petrol cars on the other. Not all details of the manipulations have been made public until now. A number of conclusions may nevertheless already be drawn.

In this context, the editors would also like to draw the readers’ attention to the related analysis by *Dé-fense Terre* (‘Strengthening the regulation of defeat devices in the European Union’, Legal Note, June 2016) as well as to the expert opinion by *Martin Führ* for the German Bundestag’s Committee of Inquiry with respect to the car emissions affair.

A further article addresses the Aarhus Regulation which provides an opportunity for environmental non-governmental organisations (ENGOS) to request an internal review of an EU institution or body that has adopted an administrative act under environmental law, or should have done so in the case of an alleged administrative omission. *Thirza Moolenaar* and *Sandra Nóbrega* investigate whether the criteria that have to be met for an ENGO to be entitled to make such a motion are sufficiently clear, and whether they contribute to the objective of providing wide access for ENGOS to the internal review procedure.

This elni Review’s *Recent Developments* section starts off with a report of C-673/13 *Commission v. Greenpeace and PAN Europe* by *Bondine Kloostra*, the representative of the two NGOs involved. In its Judgment of 23 November 2016 the CJEU rules that the concept of ‘emissions into the environment’ is not limited to emissions from industrial installations. Rather it includes the release into the environment of substances such as pesticides and biocides. This landmark decision will most likely influence future access to information practice – not limited to the context of pesticides. Lastly, *Elhoucine Chougrani* examines the opportunities and the challenges in applying environmental law and enforcing the sustainable development goals in Morocco and *Lynn Gummow* reports on the 5th Lucerne Law and Economics Conference.

The editors welcome submissions of contributions to the next elni Review until 1 April 2017. Please refer to www.elni.org for further detail on the call and for the author guidelines.

Gerhard Roller/ Julian Schenten
December 2016

The Volkswagen Scandal - Air Pollution and Administrative Inertia

Ludwig Krämer

1 Introduction

This contribution* deals with the manipulation of NOx emissions from Volkswagen diesel cars on the one hand, and with the manipulation of CO₂ emissions from diesel and petrol cars by Volkswagen on the other. The scandal became public in 2015. Volkswagen is a German car manufacturer; to the company also belong Porsche, Audi, Skoda, Scania, Ducati, Seat, Bentley, Bugatti, Lamborghini and Quattro.

It might be pre-emptive to already write a contribution about this scandal. Indeed, the first information on it was published in September 2015. Since then, Volkswagen has tried, largely with success at least in Europe, to maintain its sovereignty over the information flow concerning the details of the scandal. Practically every piece of information that was and is being published in Europe, stems directly or indirectly from Volkswagen and is, of course, all too often apologetic. No Government, public agency or the European Commission has sought to inform the public on the details of the scandal, retrace past suspicions, publish studies or other findings, or bring complementary information into the public debate which would confirm or refute the statements by Volkswagen. Accusations by environmental organisations - there are very few in Europe which are specialised on technical/car issues - were not commented on by public authorities and immediately rejected by car-friendly media. Overall, the atmosphere in Europe is marked by the tendency to be lenient with Volkswagen, as it is an important car producer, taxpayer and job-creator.

The situation is different in the United States, where the scandal and its follow-up are being handled by the Environmental Protection Agency (EPA) and the Californian Air Resources Board (CARB). Neither agency appears to show any inclination of being as indulgent to Volkswagen as public authorities in Europe. This might also be due to the fact that both agencies have the statutory task to protect the environment, among other areas also with regard to the pollution by cars. No such body exists in Europe. Furthermore, any passivity by the US authorities, which have the task of ensuring compliance with air pollution standards, could be used by citizen suits (class actions) against Volkswagen; public handling of such lawsuits would then indirectly blame the passivity of EPA or CARB. And generally, public opinion as a watchdog over the activities of private companies and public authorities

is much more alert and attentive in the US than in Europe.

2 The history of the scandal

It seems that around 2005-2006, Volkswagen began using software in order to manipulate the nitrogen oxide (NOx) emissions of diesel cars, beginning with the model year 2009. Volkswagen was apparently of the opinion that only with such manipulated software would it be able to comply with the NOx emission standards not only in the United States, but also in other parts of the world.

Who exactly gave the order within Volkswagen to use the software is not known. Volkswagen itself has maintained until now that this was the initiative of some (subordinate) engineers and that the higher management did not know of the manipulation. This position becomes more understandable, if one realises that under German criminal law, a legal person cannot be held criminally liable. Only physical persons can be held criminally responsible. If it cannot be proven that the Volkswagen Chief Executive Officer (CEO) at the time the manipulation began or later ordered its use or accepted that it was used, he cannot be held criminally responsible. This could have implications not only for the criminal, but also for the administrative or civil liability of Volkswagen.

The software used was able to identify when a car was being tested in a car laboratory versus on the road. During the laboratory testing, the software was able to recognize that only two wheels of the cars were moving, while the steering was not.¹ In such a case, an additive (Adblue) was added to the diesel liquid which partly dissolved the NOx, so that the NOx emissions were reduced. During the use of the car on a road, the additive only was added to the fuel in specific, exceptional circumstances. This had the consequence that the recharging of the additive was less frequently necessary.

The software was supplied to Volkswagen by Bosch, a German supply company. There is information published that Bosch warned Volkswagen in 2007 that the use of the software in cars was not allowed; however, officially, this information has not yet been confirmed. On 23 September 2015, Volkswagen publicly admitted that it had installed the software in question in some

* An earlier French version of this article is published in *Revue du droit de l'Union Européenne* 2016, pp. 265-290.

1 In its 'Notice of Violation' letter of 18 September 2015, the EPA stated: "VW manufactured and installed software in the electronic control module (ECM) of these vehicles that sensed when the vehicle was being tested for compliance with EPA emission standards. For ease of reference, the EPA is calling this the 'switch'. The 'switch' senses whether the vehicle is being tested or not based on various inputs including the position of the steering wheel, vehicle speed, the duration of the engine's operation and barometric pressure".

11.5 million diesel cars worldwide. For some countries, the precise figures of manipulated cars were made public.² Volkswagen also admitted to the EPA that its diesel cars with 2.0 litre engines had been equipped with a defeat device since 2009.

The scandal was starting to come to light in the United States. In 2014, private environmental organisations informed the EPA and CARB that for Volkswagen diesel cars the NOx emissions during normal road use differed significantly from the officially registered emissions. The authorities had started an investigation and discussed the matter with Volkswagen. Volkswagen had argued that technical issues were the cause of the differences, and even recalled a number of cars. As, however, the differences remained, US authorities pursued the matter further. In the autumn of 2015, they threatened to withhold a type approval for Volkswagen diesel vehicles for 2016, unless the differences were eliminated. It was at that point, on 3 September 2015, that Volkswagen admitted to US authorities that it had used software to influence NOx emissions during laboratory tests.

On 18 September 2015, the EPA and CARB sent a formal 'Notice of Violation' to Volkswagen and made that letter public.³ On 20 September 2015, Volkswagen admitted to the manipulation; on 23 September, it admitted that the software had been installed in some 11.5 million cars worldwide. Since then Volkswagen has negotiated with US authorities, and also with the authorities of other countries, over the refitting, restoration, repair, compensation and take-back of cars. These negotiations have not been made public.

In Germany, Volkswagen reached an agreement with the Federal Motor Transport Authority (KBA) about ways to re-equip the affected cars. The details of the agreement were not made public. It is to be noted, though, that legally, once a car has received a type approval in one EU Member State – by the KBA or by another equivalent body – it is valid in all other EU Member States. As the KBA issues type approvals for cars, but does not deal with conformity certificates,⁴ it must be assumed that the KBA issued a new type approval for the affected Volkswagen cars. How many types are affected remains unclear, as the type was equipped with a supplementary device to bring NOx emissions to the legally prescribed levels.⁵ The re-equipment of the individual car is now in the hands of Volkswagen, which started this re-equipment action in Germany in early 2016.

On 2 November 2015, the EPA also accused Volkswagen of having manipulated approximately 10.000 3.0 litre engines cars in the US to indicate falsely low NOx and carbon dioxide (CO₂) emissions. Volkswagen contested the accusation, but on 19 November 2015 officially admitted that the defeat device had also existed in all of its 3.0 litre diesel models in the US (Volkswagen and Audi) since 2009.

On 3 November 2015, Volkswagen published a declaration according to which "*irregularities had been found*" in about 800.000 cars worldwide, which showed deceptively low fuel consumption and CO₂ emissions.⁶ Some 100.000 of these cars ran on petrol fuel. The manipulation was declared to have taken place during the type-approval of the cars; no software was involved. On 8 December 2015, Volkswagen declared that the CO₂ values had not, or only for few cars, been manipulated; no precise figure for the number of cars affected was given, though the media reported it at around 36.000 cars. During this time no information came from any European or national authority on the issue. They appeared to be waiting to see whether and when Volkswagen would be willing to provide further information.

3 The legal provisions of placing cars on the EU market

European legislation on cars is largely harmonised at the EU level, in order to guarantee the free circulation of cars within the EU. National legislation continues to exist in almost all Member States. This mainly deals with competent authorities and sanctions and refers, for the rest, largely to EU legislation. This EU legislation was established in 1970 and was successively elaborated and adapted; following the progressive integration of the EU, it went from directives on optional harmonisation⁷ via directives on total harmonisation⁸ to regulations. Such EU regulations are of general application. They are binding in their entirety and directly applicable in all Member States.⁹

The approval of cars is regulated by Directive 2007/46.¹⁰ When a manufacturer wants to put a new car on the market, he must first produce a model ('type'). This type must conform in all aspects to the existing EU legislation. The manufacturer must hand over to the competent national authority an infor-

2 2.4 million cars in Germany, 683.626 cars in Spain, 482.000 cars in the United States.

3 EPA letter of 18 September 2015, signed by P. A. Brooks and addressed to Volkswagen AG; CARB letter of 18 September 2015, signed by A. Hebert, Ref. IUC-2015-007.

4 See below for more on these aspects.

5 These levels are laid down in EU Regulation 715/2007, OJ 2007, L 171 p. 1.

6 Frankfurter Allgemeine Zeitung, 21 November 2015, p. 21: "*Irregularities have been found in the determination of CO₂-levels for the type approval of cars. About 800.000 cars may be affected. The economic risks are calculated, according to a first estimation, to be about two billion euro*" (own translation).

7 An EU directive on optional harmonisation leaves the national legislation on cars untouched. However, it applies to all cars which cross the border to another Member State.

8 An EU directive on total harmonisation requires the Member States to align their national legislation to all requirements of the EU directive.

9 Article 288 Treaty on the Functioning of the European Union (TFEU).

10 Directive 2007/46 establishing a framework for the approval of motor vehicles and their trailer, and of system components and separate technical units intended for such vehicles, OJ 2007, L 263 p. 1.

mation folder in which it is laid down evidence – test results etc. – that the type meets all of the relevant regulatory acts of EU law which are listed in Annex XI. Compliance with EU legislation is to be demonstrated by means of appropriate tests performed by designated technical services (Article 11). This means that the car manufacturer may choose certified technical bodies to conduct the necessary laboratory tests; it may even conduct these tests in its own laboratories. In any case, it is not the public authority which conducts the tests.

The EU provisions on tests are general and vague as regards the formal conditions of conducting the tests. The following is a list of examples, assembled from specialised and general media publications, of practices used to influence the test results:¹¹ The test area is in light decline; the asphalt is extremely soft; at the front of the car all openings are taped; the tires are over-inflated; the average speed during the test is 34 km/h; all electrical instruments (air conditioning, day lights, etc.) are switched off; the temperature in the laboratory is warmed up; the battery is fully charged before the beginning of the test; the light machine is switched off; the side mirrors are folded; special lubricants are used.

It is true that Article 6(8) of Directive 2007/46 provides that the car manufacturer make available to the approval authority as many vehicles as are necessary to enable the type approval procedure to be conducted satisfactorily. However, this provision is of a theoretical nature. Mostly, the approval authorities do not possess the technical equipment to perform the tests. Also, the car manufacturer may choose any authority within the EU, to submit its type approval application. As the approval authorities depend, as regards their budget, largely on the fees of the car manufacturers,¹² there is competition, and an authority might be prudent to being too critical with its requirements for type approval tests.

Finally, it should be mentioned that Annex I to Directive 2007/46 contains the following general remark: *“If the systems, components or separate technical units have electronic controls, information concerning their performance must be supplied.”* Therefore, the information folder for the approval authority must also contain information on the software which is used for a given car. Car manufacturers normally invoke intellectual property rules and commercial secrecy grounds to keep that information confidential and do not inform the authorities of defeat devices in electronic form.¹³

11 See also European Parliament, Resolution of 27 October 2015 on emission measurements in the automotive sector (2015/2865(RSP)) no 22.

12 The UK and German authorities are said to have their budget dependent up to 70 percent on car manufacturers' fees.

13 I am grateful to Professor Martin Führ for having drawn my attention to this provision.

Once a type approval is given for a specific prototype, the manufacturer may produce cars identical to that type. For each car it must issue a conformity certificate, in which it ensures that the car is in all parts identical to the approved type.¹⁴

The payment of taxes for the car is the responsibility of the EU Member States. In many EU Member States, tax amounts vary for diesel and petrol cars. For about a decade, Member States have oriented their legislation for the car tax according to the CO₂ emissions of the car; the higher the emissions, the higher the tax.

When a car has the certificate of conformity, it may be used on the road. There are no further tests by public authorities on whether the emissions of the car during its lifetime – which is between 12 to 15 years on average – correspond to the emissions of the type-approved car.¹⁵ However, the roadworthiness of cars is regularly tested, on the basis of an EU directive.¹⁶ The testing programme is a minimum programme which allows Member States to provide for more stringent requirements. Exhaust emissions are to be measured according to Annex I no. 8.2 to the Directive. Measurement instruments are used which probably allow the measuring of all air pollutants.¹⁷ However, according to the Directive, a negative result on the test is only given when the carbon monoxide (CO) values are exceeded.¹⁸

CO₂ emissions of passenger cars are regulated under Regulation 443/2009.¹⁹ This Regulation fixes average emission limit values for the car fleet of a manufacturer, such that an individual person cannot claim that his car emits too much CO₂.²⁰

4 The prohibition of the use of defeat devices and its enforcement

As regards the emissions from cars, Regulation 715/2007 lays down the emission limit for light passenger and commercial vehicles.²¹

14 Directive 2007/46, Article 5 and 12 and Annex IX.

15 This is a marked difference to the situation in the United States, where cars are regularly tested, by the EPA and CARB, when they are used on roads. The present scandal broke out, when private environmental organisations found out that the NO_x emissions of the Volkswagen diesel cars were up to 40 percent higher than indicated in the approval papers.

16 Directive 2014/45 on periodic roadworthiness tests for motor vehicles and their trailers, OJ 2014, L 127 p. 51.

17 Directive 2014/45, Annex I, no. 8.2 *“measurement using an exhaust gas analyser in accordance with [EU legislation]”*.

18 UNECE Regulation 83 provides in no. 5.3.1 which emissions shall have to be tested. However that Regulation has not yet entered into effect at the EU level.

19 Regulation 443/2009, OJ 2009, L 140 p. 1. CO₂ emission limit values for light commercial vehicles are fixed in Regulation 510/2011, OJ 2011, L 145 p. 1. For heavy duty vehicles, there is no limitation of CO₂ emissions, see Regulation 595/2009, OJ 2009, L 188 p. 1.

20 This is further complicated by the fact that car manufacturers may together form a group, which has the consequence that the average emission of the group is calculated.

21 Regulation 715/2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro

Article 5(2) of Regulation 715/2007 states: “*The use of defeat devices that reduce the effectiveness of emission control systems shall be prohibited*”. A defeat device is defined, in Article 3 no. 10 of the Regulation, 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*”.

Article 13 of the Regulation requires Member States to “*lay down provisions on penalties applicable for infringements by manufacturers of the provisions of this Regulation and shall take all measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive. Member States shall notify those provisions to the Commission by 2 January 2009. [...] The types of infringements which are subject to a penalty shall include: [...] (d) use of defeat devices*”.

This prohibition of defeat devices was not the first laid down in EU law. Already in 1999, a directive laid down “[*T*]he use of defeat devices and/or irrational emission control strategy is forbidden”²². In 2000, the European Commission became aware that some lorries had been manipulated with defeat devices.²³ It thus introduced an amendment to an earlier Directive including a definition of defeat devices and repeating the prohibition of the use of defeat devices.²⁴ The provisions of Regulation 715/2007 did thus not constitute an innovation at all.

The Commission does not publish which Member States comply with the obligations under Article 13 of Regulation 715/2007. On a request for information by this author, it stated that the United Kingdom, Germany, France, Italy and Spain had not sent information.²⁵ On 1 October 2015, after the Volkswagen scandal became public, it sent a letter to Member States, compelling the implementation and application of the provision of Article 13 of Regulation 715/2007.

Germany answered that cars in Germany were required to comply with the requirements of Regulation 715/2007.²⁶ The German KBA, the type approval agency, was entitled to withdraw the type approval in

full or in part, in particular when it was found that vehicles with a conformity certificate did not conform to the approved type.²⁷ No prohibition of defeat devices was laid down and no sanction for the use of defeat devices was established. In order to explain this deficiency, Germany further pointed out that an explanatory note to the Vehicle Approval Regulation had stated: “*Certain infringements during the approval procedure, such as the submission of falsified test results or technical specifications or incomplete statements, (are) usually committed intentionally and are thus subject to the special provisions of the Penal Code (fraud, forgery of documents)*”²⁸.

It remains, though, that Germany has not provided any specific penalty for the use of defeat devices, contrary to the requirement of Article 13 of Regulation 715/2007. Furthermore, the Volkswagen scandal clearly shows that criminal law might not be a sufficient deterrent: at least in Germany, the physical person who ordered the use of defeat devices must be identified in order to be held criminally liable. Finally, the threat of the withdrawal of the type approval is purely theoretical: nobody would dare to withdraw the type approvals on the basis of which 11.5 million cars were put into circulation. Moreover, the position of Volkswagen in the German and European economy (jobs, tax revenue) is much too important to even consider such withdrawals.

French legislation neither includes a prohibition of defeat devices nor a sanction for using such devices. In a letter to the Commission from 2013,²⁹ the French authorities referred generally to the sanctions provided in the Code de la Route, in the Code de la Consommation, in the Code Pénal and in the Code du Commerce. The type approval of a car may be withdrawn, when cars are circulating with a conformity certificate but without conforming to the type approval. The legislation is silent on the question of what happens when the approved type of a car does not comply with EU law.

Italian³⁰ and Spanish³¹ legislation contain neither prohibitions of defeat devices nor sanctions for using them. There is no specific provision on sanctions in the case of a type approved car which does not comply with EU legislation.

6) and on access to vehicle repair and maintenance information, OJ 2007, L 171 p. 1.

22 Directive 1999/96 on air emissions from vehicles, OJ 1999, L 44 p.1, Annex 6.1.1.

23 See Written Question 0460/03 Lange, OJ 2003, C 192 p.189; Written Question Caveri 0104/03, OJ 2003, C 242E p.95; Written Question Lange and Swoboda, 0530/04, OJ 2004, C 84E p. 422.

24 Commission Directive 2001/27, amending Directive 88/77, OJ 2001 L 107 p.10, Annex 6.1.21.

25 Commission, letter of 27 November 2015, GROW/C4/SP/Ares(2015)5738971.

26 Article 47(1)(a) Strassenverkehrszulassungsordnung of 26 April 2012, BGBl.2012, I p. 679.

27 See Article 25(3) of the Verordnung über die EG-Genehmigung für Kraftfahrzeuge und ihre Anhänger (EC Vehicle Approval Regulation), of 3 February 2011 (BGBl 2011, I p.126): „Das Kraftfahrt-Bundesamt kann die Typengenehmigung ganz oder teilweise widerrufen, insbesondere wenn festgestellt wird, dass Fahrzeuge mit einer Übereinstimmungsbescheinigung [...] nicht mit dem genehmigten Typ übereinstimmen”.

28 Germany indicated that this note was published in the Federal Ministry of Transport Gazette 2009, no 9, p.340.

29 Ministère de l'Écologie, du Développement Durable et de l'Énergie, Letter of 27 February 2013, entitled: “Arsenal juridique français, permettant de sanctionner les infractions visées par l'article 46 de la directive-cadre 2007/46 et par certains de ses règlements d'application”.

30 Decreto Ministeriale of 28 April 2008, Gazz.Uff. 162, Supplemento Ord. n.167 of 17 July 2008.

31 Real Decreto 750/2010 de 4 de junio, por el que se regula los procedimientos de homologación de vehículos de motor, BOE 2010, no. 153, p.55026.

Under United Kingdom law, it is an offence to have the wrong type approval - i.e. a type approval which does not comply with the relevant EU law - issued, when this was done deliberately.³² The sanction is an unlimited fine.³³

A short comparison with US law might be useful. Under the US Clean Air Act the sale, offer for sale or import of a motor vehicle is not allowed, when this vehicle is not covered by a valid certificate of conformity; the sanction is 37, 500 US dollars.³⁴ There is no corresponding provision which sanctions the seller (importer, manufacturer) in Europe. Apparently, it did not strike the minds of the national or EU legislators that a manufacturer could sell cars which did not have a valid certificate of conformity, because the underlying type approval had been - as in the case of Volkswagen - falsified by the seller (manufacturer).

In the US, a car may not be put into circulation when it has a defeat device which was knowingly added; the maximum sanction is 3,730 US dollars.³⁵ In Germany, the maximum sanction in the case that a car does not have a valid certificate of conformity is 2,000 euros,³⁶ in France 1,500 euros³⁷ and in Italy 335 euros.³⁸ There is no specific sanction in Spanish law. The fine is of an unlimited amount in the United Kingdom.

In the US, the actual sanction must take into consideration the gravity of the action, the economic benefit, the size of the business, the history of compliance, remedial actions which were undertaken and the capacity to pay.³⁹ A corresponding provision does not appear to exist in EU law or in any national legislation of a Member State.

As regards Article 13 of Regulation 715/2007, this provision must be understood as requiring Member States to provide in their national legislation a specific sanction for the use of defeat devices and to inform the Commission thereof. EU legislators apparently considered that general sanctions for criminal action or for administrative offences were not sufficient, because Article 13 explicitly enumerates the different cases for which sanctions had to be established at the national level.

When the Commission did not receive the information on such penalties, it should have asked Member States for it. Instead, between 2009 and the end of 2015, the Commission remained passive and accepted the non-compliance of (some) Member States with Article 13.

There is another provision in Regulation 715/2007 which is relevant for the present case: Article 14(3)

provides: “*The Commission shall keep under review the procedures, tests and requirements referred to in Article 5(3) [tailpipe emissions, including test cycles, temperature emissions, emissions at idling speed, evaporative emissions and crankcase emissions measurement of greenhouse gas emissions and fuel consumption; author’s note] as well as the test cycles used to measure emissions. If the review finds that these are no longer adequate or no longer reflect real world emissions, they shall be adapted so as to adequately reflect the emissions generated by real driving on the road*”.

This provision means that the tests on the emissions of cars were to reflect the situation of “*real driving on the road*”. However, there were numerous complaints by individuals and organisations that the air emissions and the fuel consumption of cars in practice differed considerably from the indications in the type approval of the car and the certificate of conformity.⁴⁰ Between 2007 and the end of 2015, the Commission remained passive in this regard. It neither published data nor comparisons of laboratory test results with real driving results. Only at the end of 2015 did it initiate procedures to have a new test cycle for car emissions adopted, which oriented itself on real driving emissions (RDE).⁴¹ No explanation was given for why the Commission was passive between 2007 and 2015. Unconfirmed reports contend, that the Commission was informed already in 2011 by its Joint Research Centre that there were considerable discrepancies between the fuel consumption and air emission test results from laboratory tests and the real driving conditions on road.

At present, diesel cars in the EU may legally emit 80 mg/km of NOx.⁴² The Commission’s proposal suggests that the RDE test for cars should signal ‘compliance,’ when the NOx levels do not exceed 168 mg/km, as of 2021 onwards 120 mg/km. Despite some controversial discussions among Member States⁴³ and in particular in the European Parliament,⁴⁴ this proposal was not objected to and will thus become applicable as of 1 January 2017.

32 Road Vehicles (Approval) Regulations 2009.

33 Legal Aid, Sentencing and Punishment of Offences Act 2012 (Fines on Summary Conviction) Regulations 2015.

34 US Clean Air Act, §7522(a)(1) and § 7524.

35 US Clean Air Act § 7522(a)(3)(B).

36 Article 37 Type Approval Act (*supra* note 26).

37 Article R-321-4 Code de la Route.

38 Article 71(6) Italian Highway Code.

39 US Clean Air Act § 7524(b).

40 See EPA letter to Volkswagen (*supra* note 1), p. 4: “*emissions of NOx increased by a factor of 10 to 40 times above the EPA compliant levels, depending on the type of drive cycle (e.g. city, highway)*”. No public authority in Europe issued a similar a statement, though the difference may be equally high.

41 The procedure for adopting such new test method is that of the comitology procedure: the Commission submits a proposal to a group, where Member States are represented. If the group agrees, the European Parliament has up to three months to object to the proposal. When the European Parliament agrees, the Commission adopts the corresponding text. In the case of the new test cycle, the Member States’ committee and the European Parliament agreed to the proposed text which will be published in the first months of 2016.

42 Regulation 715/2007.

43 See El País, 23 October 2015, p. 46: “*Alemania presiona para rebajar los controles de contaminación en los coches*”.

44 See El País, 4 February 2016, p. 49: “*La Eurocámara permite doblar las emisiones en el test de carretera*”.

5 Damage caused by Volkswagen

The public discussion centers around the question of how much compensation Volkswagen should have to pay to the different damaged persons and bodies. Very little attention is paid to the question of what should be considered damage, and how it may be claimed from Volkswagen. A distinction appears appropriate.

5.1 Damage to car buyers and users

Volkswagen sold some 11.5 million cars with the indication that a specific amount of NOx and CO₂ emissions would not be exceeded and, where a State had fixed emission limit values, that these values would be respected. In practically all cases, it used local traders and salesmen to contract the sale of the cars.

It is national law which decides whether deceptive information on NOx and CO₂ emissions entitles the purchaser to a reduction of the purchase price, that Volkswagen purchases back the car, a car refit free of cost for the purchaser or other remedies. EU rules do not exist on this matter.

In Europe, Volkswagen offered the installation of a supplementary device which would bring the NOx emissions of the car into line with the legal requirements. The details of such a refitting were agreed on by the German Federal Motor Transport Authority (KBA). They are not known to the public, nor do we know about the durability and reliability of the refitting device; it is not even known whether the incriminating software is taken out of the car, deactivated or otherwise treated. While the refitting is to take place free of costs for the car owner, the time expense of bringing the car to the repair garage is to be borne by the 11.5 million buyers. Nothing is known about whether a substitute car will be made available (free of cost) during the repair-refit time.

It is also not known, whether the additive which Volkswagen had added to the emissions during the laboratory test of its cars, will need to be added more frequently in the future to the combustion of diesel fuel, in order to reduce the NOx emissions. This would mean a more frequent replacement of the additive in the car, the costs of which are to be borne by the car owner.

In the US, there is not yet an agreement between the EPA, CARB and Volkswagen on how the call-back and the refitting of the cars shall take place and how car owners shall be compensated. According to media reports, Volkswagen intends to generously compensate owners - with cash payment, the re-purchase of cars, repair and a substitute car - though these are just promises so far.

The possibility for individuals to bring a court action against Volkswagen is extremely small in Europe. The individual person would have to bring an action against Volkswagen, demonstrating that the fraudulent

information on the NOx (and CO₂) emissions caused him damage. Procedural difficulties, such as the place of action, the proof of damage, the causality, pre-emption, etc. make such a claim difficult.

Class actions - several car buyers collectively bringing a claim against Volkswagen - only exist in a rudimentary form in Europe; no information is available on whether a class action has been introduced in a Member State against Volkswagen. Class actions are not allowed in Germany. In the United Kingdom, Rules 19 and 19.6 of the Civil Procedure Rules offer some possibilities for bringing a case collectively, but such an action must be authorised by the court. The group (class) depends on the opt-in of the individual buyer. Overall, the procedure is not popular in the United Kingdom and not often used.

Spanish law offers some possibilities for class action.⁴⁵ Registered consumer associations and affected individual groups are entitled to bring such an action. Individually affected groups must represent the majority of victims. They may only bring a case when the affected persons are either clearly identified or easily identifiable; the court decides whether this is the case. If this is not the case, only consumer associations may bring a case. The whole procedure is not very popular with courts and is rarely used.

Article 31 of Ley 21/1992⁴⁶ provides that it is a serious infringement to deliberately sell a product which does not comply with the applicable regulation, when this causes a serious danger (peligro) for the environment. However, it is unlikely that a Spanish judge would accept that the excessively high NOx emissions of Volkswagen diesel cars constitute a serious danger for the environment.

Italy introduced class actions in 2005.⁴⁷ The action may be introduced by an individual consumer, and there is an opt-in requirement. Little experience exists as to the application of the provision.

France introduced a form of class action in 2014:⁴⁸ national consumer organisations may bring an action for the compensation of consumers who have suffered damage from the purchase of a product. The provisions appear to have thus far been hardly applied.

Class actions in the US are widespread, also because the lawyer of the group may obtain between 10 and 40 percent of the compensation awarded (contingent fee system which is considered unethical in most parts of the EU); it is thus often the lawyer who assembles the group. According to media reports, there are some 500 class actions against Volkswagen pending, to which some 200 class actions in Canada and some 500 class actions in Australia may be added.

45 Ley 1/2000 de 7 de enero, de Enjuicamiento Civil, Article 11.

46 Ley 21/1992, de 16 de julio, de Industria, BOE A-1992 p.17363.

47 Decreto Legislativo of 6 September 2005, n.206 (Codice del Consumo), Article 140.

48 Code de la Consommation, consolidated version of 16 January 2016, Article 423-1ss.

About 20 of these class actions are also directed against Bosch, the supplier of the incriminated software.⁴⁹ Bosch's defence that it had warned Volkswagen already in 2007 that the use of the software would be illegal - if that fact is finally confirmed - is rejected by these class actions with the argument that Bosch should not have ignored the intended application of the more than 11 million instances of the 'illegal' software purchased by Volkswagen.

5.2 Damage to the environment

NOx is a powerful pollutant and responsible for a considerable part of air pollution, in particular in urban agglomerations.⁵⁰ Emissions of NOx from passenger cars are regulated in Annex I to Regulation 715/2007. According to Article 13 of that Regulation, Member States shall impose sanctions for the exceeding of the emission limit values.

At first glance, this appears to be a clear solution. However, several aspects should be taken into consideration: first, only new cars must comply with the requirements of Regulation 715/2007. This leads back to the conformity certificate of each car which is based on its type approval. Moreover, the measuring of the air emissions at this stage follows the test method laid down by the Commission according to Article 5(3) of Regulation 715/2015, which allows the emission limit values to be exceeded by 110 percent until 2019 and thereafter by 50 percent.

Second, the emissions during the ordinary use of a car are not controlled. The regular roadworthiness checks according to Directive 2014/45⁵¹ measure perhaps NOx emissions. However, the controlled car is only considered defective when CO₂ emissions limits are exceeded; NOx emissions are not taken into consideration. Once again, there is neither a body in Europe nor in the Member States which would take a number of cars which are in use and test whether they respect the legal emission limit values. The conclusion is that there is no mechanism to control NOx emissions once a car has been put into circulation.

The concentration of NOx as well as of other pollutants in the air is regulated by EU Directive 2008/50.⁵² Member States must not, on their territory, exceed the

concentration values fixed. Where this happens nevertheless, they must take measures to bring the pollution level back within the legal limits as soon as possible. The EU Court of Justice stated that the concentration limits also aim at protecting human health. For that reason, individual persons may demand in court that measures be taken in order to reach compliance.⁵³ However, some Member States interpret the term 'as soon as possible' very loosely.⁵⁴

Air quality within the EU is appallingly poor. The EU Commission has officially indicated that there are more than 400,000 premature deaths per year within the EU due to air pollution; it estimated the economic damage at 23 billion euros per year.⁵⁵ The main source of air pollution is traffic and, within the traffic, the emission of NOx by diesel cars. Because of this situation, Paris and a number of other European cities are considering restricting diesel car use within city limits. EU measures to restrict the use of diesel cars do not exist.

It is extremely difficult to draw a causal relationship between the excessive emissions of NOx by Volkswagen diesel cars and their contribution to premature deaths and serious illness. No authority in Europe exists for such undertakings. In the US, researchers from Harvard University and of the Massachusetts Institute for Technology extrapolated that the excessive, illegal emissions by the Volkswagen diesel cars have led to some 60 premature deaths, 30 cases of chronic bronchitis and a number of other diseases.

Even if this figure were multiplied by only 10 in order to cover the damage caused by excessive NOx emissions by the 11.5 million diesel cars from Volkswagen, the damage caused is considerable. No legal mechanism appears to exist anywhere in Europe - or indeed in parts of the world other than the Anglo-Saxon world (USA, Canada, Australia) to make Volkswagen compensate for this damage to the environment. Rather, that damage is taken as an Act of God (force majeure), which society has to suffer.

As regards the damage caused by excessive emissions of CO₂ which Volkswagen had admitted to on 3 November 2015, no provision in EU law on compensation exists either. Regulation 443/2009⁵⁶ provides that car manufacturers in the EU are obliged to respect certain CO₂ emission limit values. However, these values are average values for the whole car fleet of a manufacturer. The values are sent to the Commission by the Member States; the Commission then gives manufacturers the opportunity to correct errors and publishes annually the values per car manufacturer.

49 Frankfurter Allgemeine Zeitung, 13 January 2016, p.19: „Eine Frage der Ethik.“

50 See European Parliament, Resolution of 27 October 2015 (*supra* note 11) Recital B: "air pollution causes over 430.000 premature deaths in the EU yearly and costs up to an estimated EUR 940 billion annually as a result of its health impacts: [...] NOx is a major air pollutant which causes, inter alia, lung cancer, asthma and many respiratory diseases, as well as environmental degradation such as eutrophication and acidification; [...] diesel vehicle exhausts are a principal source of NOx in urban areas in Europe; [...] up to a third of the EU's urban population continues to be exposed to levels above the limits or target values set by the EU; [...] transport continues to be a main contributor to poor air quality levels in cities, and to the related health impacts; [...] over 20 Member States are currently failing to meet the EU air quality limits in particular because of urban pollution".

51 Directive 2014/45.

52 Directive 2008/50 on ambient air quality and clean air for Europe, OJ 2008, L 152 p. 1.

53 EU Court of Justice, case C-237/07, Janecek, ECLI:EU:C:2008:447.

54 See the facts of Court of Justice, case C-404/13 ClientEarth v. United Kingdom, ECLI:EU:C:2014:2382, where the United Kingdom tried to apply a period of time of more than 13 years.

55 Commission, A clean air programme for Europe COM(2013) 718 p. 2.

56 Regulation 443/2009.

As regards the values for 2014 of Volkswagen, the Commission declared:⁵⁷ *“Following a statement by the Volkswagen Group on 3 November 2015 that irregularities were found when determining type approval CO₂ levels of some of their vehicles, the average specific emissions of CO₂ and the specific emission targets should not be confirmed for the Volkswagen pool and its members until further clarification is provided by the Volkswagen Group. As a consequence, the Volkswagen pool and its members [...] should not be subject to this decision”.*

Regulation 443/2009 does not contain any sanction for manufacturers. Consequently, Volkswagen successfully avoided being listed in the Commission decision. And nothing is, of course, said about CO₂ emission values of Volkswagen in previous years; it is not clear, whether the Commission is trying at all to obtain correct data for the past.

5.3 Damage by paying increased taxes

In numerous European (and probably non-European) countries, diesel fuel is less highly taxed than petrol fuel. The main underlying reason for this is probably that in this way, a hidden subvention is paid to the agricultural and transport industries. This tax differentiation constitutes a promotion of the sale of diesel cars, with consequences for air pollution, human health and economic damage. The Volkswagen scandal has not yet led to changes in the tax policy of EU governments – which are very slowly, though, becoming attentive to the ecological impact of diesel cars.

Buyers of a Volkswagen car which indicated specific CO₂ emissions, were grouped in classes in those Member States which differentiated the car tax according to the CO₂ emissions. When the CO₂ emissions are in fact higher, these buyers will be classed in another group and will have to pay higher car taxes. In a letter from November 2015 to the 28 EU Ministers of Finance, Volkswagen declared itself ready to pay retroactively the higher taxes which were due for these cars. However, nothing is known about the higher taxes which the car owner will have to pay in the future, over the remaining lifetime of the car which might be ten years or even more.

In some countries another ‘tax’ problem exists which might be illustrated by the situation in Spain. In order to promote the purchase of cars, the Spanish Government granted state aid to Volkswagen, which then lowered the purchase price of cars with low CO₂ emissions.⁵⁸ When the VW scandal broke out, the Spanish Government threatened to ask for the return of this state aid. Volkswagen declared itself ready to pay the higher car taxes for the some 50.000 cars which had benefitted from the PIVE programme, because the cars emitted in fact more CO₂ than foreseen in the PIVE

programme. However, again, this Volkswagen commitment concerned the higher taxes in the past. Nothing was said about future higher taxes which the car owner will have to pay. Whether Spain will claim back the PIVE state aid from Volkswagen remains unclear.

5.4 Damage to the financial operators

According to Article 6(1) of Directive 2003/6⁵⁹ the issuer of financial instruments shall inform the public as soon as possible of inside information which directly concerns the said issuer. Inside information is defined as *“information of a precise nature which has not been made public [...] and which, if it were made public, would be likely to have a significant effect on the prices of these financial instruments [...]”*.⁶⁰ The Member States shall impose sanctions for the violation of the Directive.⁶¹

Shares are financial instruments. As Volkswagen is a shareholder company, these provisions are fully applicable to it. The admission towards the US authority from 3 September 2015 that Volkswagen had used a prohibited defeat device in some 500.000 cars in the United States should certainly qualify as inside information. This information was not made public by Volkswagen until 23 September 2015. Persons who bought Volkswagen shares between 3 and 23 September 2015 are thus entitled to claim damages, as the real value of the shares was less than their stock exchange value at that time; indeed, after 23 September 2015, the value of Volkswagen shares fell by 20 to 30 per cent.

One might wonder, though, whether the withholding of inside information did not take place over a much longer period of time. It must not be forgotten that since 2009, Volkswagen intentionally inserted a defeat device into its diesel cars. Thus, it had information on those cars which was not publicly available and which means that in legal terms, the diesel cars were not respecting the legal requirements in the US, in Europe and elsewhere. Such information would have significantly influenced the price of the Volkswagen shares. If this assessment is correct, Volkswagen is liable for damages for the breach of its obligation to disclose inside information since 2009.

6 Criminal and administrative sanctions

EU law does not provide for criminal sanctions and normally does not even oblige the EU Member States to provide for sanctions of a criminal nature. Directive 2008/99 on the protection of the environment through criminal law requires Member States to consider as a criminal offence the emission of a quantity of material

57 Commission Decision 2015/2251, OJ 2015, L 318 p. 39, Recital 11.

58 So-called PIVE programme (Programa de Incentivos al Vehículo Eficiente).

59 Directive 2003/6 on insider dealing and market manipulation (market abuse) OJ 2003, L 96 p. 16.

60 Directive 2003/6, Article 1(1).

61 Directive 2003/6, Article 14. As regards Germany, see Wertpapierhandelsgesetz of 9 September 1998, BGBl.1998, I, p. 2708, Article 37b, which gives a right to damages, without prejudice to criminal or other liability.

into the air which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air.⁶² As this provision is part of a directive, it has to be transposed into national legislation. German legislation provides in this regard that:⁶³ “A person who, infringing administrative obligations, emits during the functioning of a machine, pollutants in a considerable quantity into the air outside the site of an industrial installation, shall be punished with imprisonment up to five years or with a pecuniary sanction”⁶⁴. The application of this provision will not further be examined, as German law does not provide for the criminal liability of legal persons.

As a sort of substitute for the absence of criminal liability of legal persons, German law contains a provision on corporate pecuniary penalties in its Act on Regulatory Offences (Ordnungswidrigkeitengesetz). The difference to the criminal law is that sanctions which concern offences committed under the Ordnungswidrigkeitengesetz do not carry with them the moral-ethical blame which is typical for a criminal offence.

Article 30 of the Ordnungswidrigkeitengesetz states: “Where someone [...] [in a responsible position within a legal person; author’s note] has committed a criminal offence or a regulatory offence as a result of which duties incumbent on the legal person have been violated [...] a regulatory fine may be imposed on such a legal person [...]”. The penalty ranges from one to 10 million euros, if the offence was found to have been committed intentionally.

According to Article 17(2), the penalty shall be proportional to the relevance of the administrative offence and the blame against the acting person. Also the economic situation of the person shall be taken into consideration. Article 17(4) provides that the penalty shall exceed the economic benefit which was obtained from the administrative offence. When the maximum legal amount is insufficient in this regard, it may be disregarded. Article 130 finally indicates that neglecting the surveillance and control obligation within a company constitutes an administrative offence, when it made possible the committing of an offence or at least made it considerably easier.

In German practice, these provisions are fully applied to legal persons and in particular to companies. For example, some years ago, Siemens was asked to pay 600 million euros in a bribery case, MAN 150 million euros and Eurostaal 149 million euros in two other corruption cases. If and to what extent German public

prosecutors will recur to these provisions in the Volkswagen case is, of course, still unknown.

In other EU Member States- with the exception of Austria - legal persons may be held criminally liable, though the main sanction in such cases is of a financial nature. Criminal offences may exist on the basis of national law. This national law is not harmonised. Therefore, the precise content of the criminal offence depends on the content of the national law. Generally, one might consider that Volkswagen committed fraud against the approval authority by applying for the type approval of a car that was equipped with a prohibited defeat device. Such fraud was also committed against the individual car purchaser, whereby Volkswagen used the car trader – who probably did not know of the existence of the defeat device - as a means to commit the fraud.

Further criminal activities include the false certification of the type-approval document and of the 11.5 million certificates of conformity which were issued for the individual cars. Furthermore, national law might consider it to have been a crime to disadvantage the public budget (tax crime), or to fraudulently obtain subventions.

According to media reports, public prosecutors are investigating criminal offences committed by Volkswagen in the United States, Spain and Sweden, though this might not be a complete picture.

7 Administrative inertia

There are more than one billion cars registered worldwide, more than 200 million cars in the EU. Cars have an average lifetime of 12 to 15 years. They are without doubt the biggest polluting product which exists on the market (raw material for production, air pollution, traffic congestion, transformation of inner cities, waste). This applies in particular to the post-marketing period: once a car is on the market, it is regulated as regards car safety, but its environmental behaviour is poorly monitored. In its EU road accidents database CARE, the Commission indicates that in 2014 25,900 persons died in car accidents; in 2013 it indicated that the total number of persons who died prematurely due to air pollution is more than 400,000 per year,⁶⁵ thus ten times higher.

In light of these figures, the legislation in Europe on cars is amazingly incomplete. That a car manufacturer is allowed to self-test its vehicles and then provide the results to the type approval authority is not serious. Other lacunae of existing legislation are: fuel consumption and pollutant emissions are measured in a laboratory, and not in real driving tests. The income of the approval authorities depends largely on the fees paid by the car manufacturer, thus providing it limited independence. Pollution emissions are tested before a car is first put on the market and shall apply through-

62 Directive 2008/99, OJ 2008, L 328 p. 28, Article 3(a).

63 Article 325 al. 2 Strafgesetzbuch. The English translation was shortened to its parts which apply to cars.

64 Own translation. The full German text of Article 325(2) Strafgesetzbuch reads: „Wer beim Betrieb einer Anlage, insbesondere einer Betriebsstätte oder Maschine, unter Verletzung verwaltungsrechtlicher Pflichten Schadstoffe in bedeutendem Umfang in die Luft außerhalb des Betriebsgeländes freisetzt, wird mit Freiheitsstrafe bis zu 5 Jahren oder mit Geldstrafe bestraft“.

65 Commission COM(2013) 718.

out the lifetime of the car. Roadworthiness tests which are made at regular intervals, do not monitor excessive NO_x, CO₂ or other polluting emissions.

The monitoring of the implementation and application of existing provisions is poor, in all Member States and at the EU level. The European Commission has been aware for about fifteen years that defeat devices have been in use within the EU. Furthermore, although it provided for corresponding legislation at the EU level which it strengthened in 2007, the EC did not monitor Member State compliance in the years following. It also failed to confront Member States by requesting information or taking formal legal action under Article 258 TFEU against those Member States which did not provide for sanctions with regard to the use of defeat devices.⁶⁶ The Commission also was aware or should have been aware that the emission of pollutants indicated in the type approval and certificate of origin of cars did not correspond to the actual fuel consumption and air emissions during the road use of the cars, but were up to 40 times higher; yet, the Commission remained passive for more than half a dozen years.

Member State authorities did not care much about EU law. Defeat devices were prohibited under EU law and that was sufficient; they did not see the need to adopt sanctions for the use of defeat devices and examine, whether defeat devices were actually in use. It was left to the car industry to align. Any market observation, controls or spot checks were not undertaken.

This administrative inertia has continued even after September 2015. Examination of the Volkswagen measures is being conducted in the US and by Volkswagen itself. In contrast, European and national public authorities in Europe have remained largely passive. Historically, the use of defeat devices in Europe first occurred with lorries (heavy duty vehicles).⁶⁷ However, the European Commission decided in Regulation 595/2009 that the use of defeat devices in lorries should be prohibited.⁶⁸ The Regulation does not take up the provisions of Regulation 715/2007 on passenger cars, which states that Member States must impose sanctions for the use of defeat devices and report on it to the Commission. Furthermore, since 2009 and in particular after September 2015, no examination by the Commission was conducted to check whether lorries in the EU actually use defeat devices.

8 Conclusion: Ten lessons learnt - or not?

Not all details of the manipulations which Volkswagen committed have been brought to public knowledge until now. There might thus be a change in the assessment of relevant acts due to new information. Yet, a number of conclusions may already be drawn.

(1) The first involves the investigation into the scandal itself. Volkswagen is a multinational company which operates worldwide and committed its manipulations in numerous countries. Yet, criminal and administrative investigations into what exactly happened, how many cars are affected, how many pollutants more than officially recognised were emitted, and other questions are lacking. Action here depends largely, if not entirely, on the initiative of national authorities.

(2) The European Commission has very limited resources. It is true that it is not itself in charge of applying EU law in practice. However, it has the obligation to “ensure the application of the treaties and of measures adopted by the institutions pursuant to them” and to “oversee the application of Union law”.⁶⁹ It failed to comply with this obligation as regards both the prohibition of defeat devices and the ensuring that car emission tests reflect real driving conditions. Moreover, it has yet to initiate a systematic investigation into whether defeat devices were used by other car manufacturers or in lorries. On 6 October 2015, the industry commissioner, Mrs. E. Bienkowska, declared in the European Parliament that the Commission did not have the competence to conduct its own investigation in the car sector. However, this statement is false: nobody and nothing can prevent the Commission from testing the compliance of a random sampling of cars against the legal standards, confronting the car industry and Member States with the findings and starting a discussion on how to improve things. The Commission does not need a ‘mandate’ here. Its passivity in the present case is rather due to the fact that it did not wish to know too precisely, what was going on.

It is of no consolation that the United Kingdom, French, German or Spanish authorities are also not conducting such an investigation, individually or jointly.

(3) This led to the absurd situation that Volkswagen announced in November 2015, that it had, since 2013, manipulated the CO₂ emissions of cars such that they indicated lower fuel consumption and lower CO₂ emissions than occurred in practice. Volkswagen mentioned that about 800,000 cars had been affected by such manipulations. However, on 8 December 2015, Volkswagen announced that the actual number of cars which were affected by this CO₂-manipulation was much smaller. The fact that Volkswagen has tried to minimize the impact of its manipulations is not surprising. However, what is scandalous is the fact that

⁶⁶ In other cases, the Commission was less hesitant: in the Court of Justice, C-184/08, *Commission v. Luxembourg*, ECLI:EU:C:2009:184, a case was brought because Luxembourg had not adopted national sanctions. In C-390/08, *Commission v. Luxembourg*, ECLI:EU:C:2009:313, case C-198/06, *Commission v. Luxembourg*, ECLI:EU:C:2006/95 and case C-191/04, *Commission v. France*, ECLI:EU:C:2005:393, the Member States were found to have infringed upon EU law, because they had not sent information to the Commission which they were obliged to send.

⁶⁷ *Supra* note 22.

⁶⁸ Regulation 595/2009, Article 5(3).

⁶⁹ Treaty on European Union, Article 17.

the Volkswagen statement has not been verified by any public authority: the message of the private company is taken to be correct, and when there is another figure given by that company within less than a month, this is again accepted as correct.

(4) Cars, it was mentioned, are the biggest and most substantial consumer product on the market. Cars have a disastrous ecological footprint. Within the EU, legislation is largely uniform. And yet, there is no EU authority - or a group of national authorities acting together - that monitors the environmental performance of cars during their time in circulation. In the EU, it is the general opinion that the standards of environmental protection in the US are considerably below the standards in Europe. However, in the Volkswagen scandal, it was US stubbornness and initiative which brought the scandal to light. It was the EPA and CARB which examined, whether cars on the market complied with existing pollution requirements or whether data collected during real driving conditions deviated from the reported data. Europeans can learn a lot of this exemplary role of the US authorities. It is more likely, though, that it is easier for European authorities to continue to collude with the car industry - to the detriment of European consumers and the European environment.

(5) It is also absurd, that car manufacturers must only submit an 'information folder' to the type approval authority, and may keep confidential the software which they use for the car. No producer of pharmaceuticals or of pesticides can successfully argue that part of the data concerning his product are his intellectual property and therefore need not be submitted to the permitting authorities. Why should this be different for car producers? The present legislation can only be understood by an excess of indulgence to the car industry.

(6) The emission of regulated pollutants - for the car industry carbon monoxide (CO), hydrocarbons (HC), nitrogen oxides (NOx), particulates (PT) and carbon dioxide (CO₂) - should be regularly measured during the lifetime of a car. Where the values measured deviate from the measures indicated in the type approval/certificate of conformity, refitting should be required.

(7) That car owners depend on the grace of Volkswagen, if and when their car is refitted and with which devices, is another element which shows the weak European enforcement system. As class actions are not frequent in Europe - neither judges nor solicitors like them - Volkswagen has nothing to fear from the bargaining power of European car owners. It is time to improve EU buyers' rights in cases such as the present Volkswagen case.

(8) Diesel fuel is carcinogenic⁷⁰ and is, in European urban agglomerations, a very strong contributor to the appalling situation of air pollution. The fact that diesel fuel continues to be less taxed than petrol fuel can only be explained by the fact that the negative environmental and health effects of diesel fuel are ignored. It is time to consider the suppression of the tax privilege for diesel cars, even if the transport and agricultural sectors as well as the (German and French) car industry would strongly oppose such a measure.

(9) With all the imperfections of public authorities: it must not be forgotten that the Volkswagen scandal is an environmental scandal. A private company falsifies official documents which allow it to pollute the environment more than accepted by the legislation in force. This increased environmental pollution will not be compensated. Nobody suggests that Volkswagen pays more than the refit, etc. of cars plus some sort of criminal or administrative penalty. The environment remains without compensation. It would be possible to ask Volkswagen to pay for each quantity of NOx or CO₂, emitted in excess of existing provisions into an environmental fund which could then be used to finance environmental projects. However, no such fund exists and everybody appears to accept that environmental pollution should not be compensated. The polluter shall pay? Volkswagen probably can only laugh at this idea.

(10) A big European car manufacturer falsifies test results and markets, over seven years, about 11.5 million cars which emit more pollutants than legally allowed. Can a repetition of such action be avoided? The clear answer is no, as criminal activity is always possible and will always find a way to be exercised. It would already be progress, if European and national public authorities were willing to learn from the Volkswagen scandal and introduce a number of legal and practical improvements in order to make such criminal manipulations less easy. A first step in this direction may be the proposal of the Commission from the end of January 2016 to review the approval and market surveillance system for cars which is intended to replace Directive 2007/46.⁷¹ The Commission proposed to establish national market surveillance authorities, but to be entitled to itself conduct compliance verification tests and inspections. The Commission should be entitled to fix administrative fines of up to 30.000 euros per car, when the car emission data are found to be falsified. It remains to be seen, whether this proposal will find a majority in the European Parliament and in the Council.

70 See European Parliament (*supra* note 11), Recital C: "since 2012 the WHO International Agency for Research on Cancer (IARC) has classified diesel engine exhaust as a carcinogen, and has advised that given the additional health impacts of diesel particulates, exposure to the mixture of chemicals emitted should be reduced worldwide".

71 Commission, Proposal for a regulation on the approval and market surveillance of motor vehicles and their trailers, COM(2016) 31.

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The Öko-Institut (Institut für angewandte Ökologie - Institute for Applied Ecology, a registered non-profit-association) was founded in 1977. Its founding was closely connected to the conflict over the building of the nuclear power plant in Wyhl (on the Rhine near the city of Freiburg, the seat of the Institute). The objective of the Institute was and is environmental research independent of government and industry, for the benefit of society. The results of our research are made available of the public.

The institute's mission is to analyse and evaluate current and future environmental problems, to point out risks, and to develop and implement problem-solving strategies and measures. In doing so, the Öko-Institut follows the guiding principle of sustainable development.

The institute's activities are organized in Divisions - Chemistry, Energy & Climate Protection, Genetic Engineering, Sustainable Products & Material Flows, Nuclear Engineering & Plant Safety, and Environmental Law.

The Environmental Law Division of the Öko-Institut:

The Environmental Law Division covers a broad spectrum of environmental law elaborating scientific studies for public and private clients, consulting governments and public authorities, participating in law drafting processes and mediating stakeholder dialogues. Lawyers of the Division work on international, EU and national environmental law, concentrating on waste management, emission control, energy and climate protection, nuclear, aviation and planning law.

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The University of Applied Sciences in Bingen was founded in 1897. It is a practiceorientated academic institution and runs courses in electrical engineering, computer science for engineering, mechanical engineering, business management for engineering, process engineering, biotechnology, agriculture, international agricultural trade and in environmental engineering.

The *Institute for Environmental Studies and Applied Research* (I.E.S.A.R.) was founded in 2003 as an integrated institution of the University of Applied Sciences of Bingen. I.E.S.A.R carries out applied research projects and advisory services mainly in the areas of environmental law and economy, environmental management and international cooperation for development at the University of Applied Sciences and presents itself as an interdisciplinary institution.

The Institute fulfils its assignments particularly by:

- Undertaking projects in developing countries
- Realization of seminars in the areas of environment and development
- Research for European Institutions
- Advisory service for companies and know-how-transfer

Main areas of research

- **European environmental policy**
 - Research on implementation of European law
 - Effectiveness of legal and economic instruments
 - European governance
- **Environmental advice in developing countries**
 - Advice for legislation and institution development
 - Know-how-transfer
- **Companies and environment**
 - Environmental management
 - Risk management

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The Society for Institutional Analysis was established in 1998. It is located at the University of Applied Sciences in Darmstadt and the University of Göttingen, both Germany.

The sofia research group aims to support regulatory choice at every level of public legislative bodies (EC, national or regional). It also analyses and improves the strategy of public and private organizations.

The sofia team is multidisciplinary: Lawyers and economists are collaborating with engineers as well as social and natural scientists. The theoretical basis is the interdisciplinary behaviour model of homo oeconomicus institutionalis, considering the formal (e.g. laws and contracts) and informal (e.g. rules of fairness) institutional context of individual behaviour.

The areas of research cover

- Product policy/REACH
- Land use strategies
- Role of standardization bodies
- Biodiversity and nature conservation
- Water and energy management
- Electronic public participation
- Economic opportunities deriving from environmental legislation
- Self responsibility

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- VolkswagenStiftung
- German Federal Ministry of Education and Research
- Hessian Ministry of Economics
- German Institute for Standardization (DIN)
- German Federal Environmental Agency (UBA)
- German Federal Agency for Nature Conservation (BfN)
- Federal Ministry of Consumer Protection, Food and Agriculture

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elni

In many countries lawyers are working on aspects of environmental law, often as part of environmental initiatives and organisations or as legislators. However, they generally have limited contact with other lawyers abroad, in spite of the fact that such contact and communication is vital for the successful and effective implementation of environmental law.

Therefore, a group of lawyers from various countries decided to initiate the Environmental Law Network International (elni) in 1990 to promote international communication and cooperation worldwide. elni is a registered non-profit association under German Law.

elni coordinates a number of different activities in order to facilitate the communication and connections of those interested in environmental law around the world.

Coordinating Bureau

Three organisations currently share the organisational work of the network: Öko-Institut, IESAR at the University of Applied Sciences in Bingen and sofia, the Society for Institutional Analysis, located at the University of Darmstadt. The person of contact is Prof. Dr. Roller at IESAR, Bingen.

elni Review

The elni Review is a bi-annual, English language law review. It publishes articles on environmental law, focusing on European and international environmental law as well as recent developments in the EU Member States. elni encourages its members to submit articles to the elni Review in order to support and further the exchange and sharing of experiences with other members.

The first issue of the elni Review was published in 2001. It replaced the elni Newsletter, which was released in 1995 for the first time.

The elni Review is published by Öko-Institut (the Institute for Applied Ecology), IESAR (the Institute for Environmental Studies and Applied Research, hosted by the University of Applied Sciences in Bingen) and sofia (the Society for Institutional Analysis, located at the University of Darmstadt).

elni Conferences and Fora

elni conferences and fora are a core element of the network. They provide scientific input and the possibility for discussion on a relevant subject of environmental law and policy for international experts. The aim is to gather together scientists, policy makers and young researchers, providing them with the opportunity to exchange views and information as well as to develop new perspectives.

The aim of the elni fora initiative is to bring together, on a convivial basis and in a seminar-sized group, environmental lawyers living or working in the Brussels area, who are interested in sharing and discussing views on specific topics related to environmental law and policies.

Publications series

elni publishes a series of books entitled "Publications of the Environmental Law Network International". Each volume contains papers by various authors on a particular theme in environmental law and in some cases is based on the proceedings of the annual conference.

elni Website: elni.org

The elni website www.elni.org contains news about the network. The members have the opportunity to submit information on interesting events and recent studies on environmental law issues. An index of articles provides an overview of the elni Review publications. Past issues are downloadable online free of charge.

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