

elni

REVIEW

EU traceability of substances in articles:
supply chain communication challenges and the
perspective of full material declaration (FMD)

Julian Schenten, Martin Führ, Leonie Lennartz

Substitution requires all possible support

*Antonia Reihlen, Heidrun Fammler, Arne Jamtrot, Martyn Futter,
Jana Simanovska*

EU Emmission into the environment and confidentiality-
Comment on General Court, case T-545/11 of 21 Novem-
ber 2018

Ludwig Krämer

EU Dieselgate: unveiling the weirdness of the EU's attitude
to compliance on environmental matters

Delphine Misonne

Listen to the people: Friends of the Earth challenge 'Brexit'
public participation

William Rundle

Transparency for sustainable development
Impulse for learning processes in the value chain and in
consumer behaviour

Leonie Lennartz

CONTENTS

Editorial	31
Authors of this issue	31
EU traceability of substances in articles:	
supply chain communication challenges and the perspective of full material declaration (FMD)	32
<i>Julian Schenten, Martin Führ, Leonie Lennartz</i>	
Substitution requires all possible support.....	
	40
<i>Antonia Reihlen, Heidrun Fammler, Arne Jamtrot, Martyn Futter, Jana Simanovska</i>	
EU Emmissions into the environment and confidentiality-	
Comment on General Court, case T-545/11 of 21 November 2018	48
<i>Ludwig Krämer</i>	
EU Dieselgate: unveiling the weirdness of the EU's attitude to compliance on environmental matter.....	
	53
<i>Delphine Misonne</i>	
Listen to the people: Friends of the Earth challenge 'Brexit' public participation	
	61
<i>William Rundle</i>	
EU Transparency for sustainable development	
Impulse for learning processes in the value chain and in consumer behaviour	67
<i>Leonie Lennartz</i>	
Imprint	
	40
elni Membership	
	40

Editorial

The present issue of *elni* Review starts with two articles from the field of chemicals law.

Julian Schenten, Martin Führ und Leonie Lennartz analyse the challenges in the declaration of substances in articles in the supply chain and develop proposals on successful complete declaration. In their article “Substitution requires all possible support“ Antonia Reihlen, Heidrun Fammler, Arne Jamtrot, Martyn Futter and Jana Simanovska discuss the background and comment on the discussions of a jointly organised workshop of three EU projects which are dealing with the aim to reduce risks from hazardous chemicals.

In her contribution “EU Dieselgate: unveiling the weirdness of the EU’s attitude to compliance on environmental matters” Delphine Misonne asks whether the current inspection landscape, as applicable in the European Union and as far as environmental matters (and emissions into the environment in particular) are concerned, could have taken hold of what is now called ‘dieselgate’.

Next Ludwig Krämer comments on case T- 545/11 of November 2018 where the General General ruled that an EU substance approval dossier (for glyphosate) contains no information related to environmental emissions.

The contribution discusses once more the question, of what constitutes an emission to the environment and whether access to this information may be refused to protect confidential commercial and industrial information, unless there is an overriding public interest in disclosure.

William Rundle comments on the complaint of Friends of Earth against the United Kingdom for its failure to comply with the Aarhus Convention when legislating its withdrawal from the EU.

Finally Leonie Lennartz reports on the closing event of the project "Consumer behaviour and innovations for sustainable chemistry (KInChem)" at the Protestant Academy Loccum in September 2018.

We hope you enjoy reading the journal.

The editors welcome submissions of contributions addressing current national and international environmental laws issues in particular on the subject of strategic environmental impact assessment (SEA) for *elni* Review 2019/01 by April 2019.

Claudia Schreider / Gerhard Roller
December 2018

Authors of this issue

Heidrun Fammler

President of the Baltic Environmental Forum Group; heidrun.fammler@bef-de.org

Martin Führ

Professor of public law, legal theory and comparative law, Society for Institutional Analysis (sofia), Darmstadt University of Applied Sciences, Germany, www.sofia-research.com; fuehr@sofia-darmstadt.de.

Martyn Futter

Associate professor, Swedish University of Agricultural Sciences; martyn.futter@slu.se

Arne Jamtrot

Head of Chemicals Centre, City of Stockholm Environment and Health Administration
arne.jamtrot@stockholm.se

Ludwig Krämer

Derecho y Medio Ambiente S L, Madrid, Spain;
LKramer@clientearth.org.

Leonie Lennartz

Research Assistant at the Society for institutional

Analysis (sofia), University of Applied Sciences in Darmstadt, Germany; leonie.lennartz@h-da.de

Delphine Misonne

Professor at Université Saint-Louis Bruxelles, FNRS Research Associate; delphine.misonne@usaintlouis.be.

Antonia Reihlen

Environmental and chemicals policy consultant, Hamburg, Germany
reihlen@oekopol.de

William Rundle

Head of Legal for Friends of the Earth, Oxford, Great Britain; will.rundle@foe.co.uk

Jana Simanovska

Chair of the Board, Ecodesign Competence Centre, Latvia

Julian Schenten

Senior researcher at the Society for Institutional Analysis (sofia), University of Applied Sciences in Darmstadt, Germany;
schenten@sofia-darmstadt.de

EU Dieselgate: unveiling the weirdness of the EU's attitude to compliance on environmental matters

Delphine Misonne

1 Introduction

“Google fined €4.34bn by EU over Android antitrust violations”¹. June 2018: the European Commission imposes a record penalty, after a 39-month investigation into Google’s Android operating system. This worldwide level news confirms the power of the European Union and its Commission in relation to competition and antitrust issues: a direct power to investigate and a power to sanction². By contrast, European environmental law looks like a ‘parent pauvre’. In this area, the European Commission does not enjoy a similar centralized investigative power, not even a faint shadow of it. No European Union institution or agency has such power in environmental matters, not even the European Environmental Agency³. While the Commission’s role is to ensure the full application of Community legislation on the environment⁴, enforcement of environmental law is and has always been primarily a responsibility of the Member States⁵. The question we want to address in the present paper is whether the current inspection landscape, as applicable in the European Union and as far as environmental matters (and emissions into the environment in particular) are concerned, could have taken hold of what is now called ‘dieselgate’ and if both aspects (dieselgate and inspection) are, somehow, interrelated.

2 Dieselgate

Dieselgate is about cheating and lying. It is the name given to a fraud. A fraud on compliance with emissions standards for automotive vehicles, orchestrated at a large scale.

The main pollutant concerned is nitrogen oxide (NO_x), emitted during fuel combustion, in particular from diesel engines⁶. That pollutant is a serious concern for public health and is associated with premature death due to respiratory- and cardiovascular-related effects. It contributes to the formation of smog. NO_x concentrations in Europe still exceed legally binding air quality standards and national reduction commitments. Member States struggle with the difficulty of meeting air quality values for NO_x⁷.

2.1 Dieselgate in the US

Dieselgate was unveiled in the US, quite incidentally. It all started in 2012 with a tender invitation circulated by a non-profit organization, the International Council of Clean Transportation (ICCT), to test clean diesel technology used in German car manufacturing in real conditions⁸. At the time, there was a huge advertising campaign in the US, diffusing the message that consumption and emission values of a Volkswagen or Audi diesel car were just as good as Toyota’s Prius hybrid, but with superior engine power and performance⁹. ICCT, aware of the resistance carmakers demonstrated in Europe in relation to stringent emissions limits, wanted to know more about that ‘clean diesel’. It was even enthusiastic about the idea ‘they could make it in the US’¹⁰. Three students from West Virginia University answered the call. Their institute was equipped with a portable measuring engine. The tests were conducted in California for practical

¹ The Guardian, Wednesday 18 July 2018 (£3.8bn).

² Art. 105 TFUE: “the Commission shall ensure the application of the principles laid down in Articles 101 and 102. On application by a Member State or on its own initiative, and in cooperation with the competent authorities in the Member States, which shall give it their assistance, the Commission shall investigate cases of suspected infringement of these principles. If it finds that there has been an infringement, it shall propose appropriate measures to bring it to an end. If the infringement is not brought to an end, the Commission shall record such infringement of the principles in a reasoned decision. The Commission may publish its decision and authorise Member States to take the measures, the conditions and details of which it shall determine, needed to remedy the situation.”

³ On the same issue, see L. Krämer, *The Volkswagen Scandal – Air Pollution and Administrative inertia*, ELNI Review, 2016, 2, pp. 64-74.

⁴ As recalled by Regulation (EC) No 401/2009 of the European Parliament and the Council of 23 April 2009 on the European Environment Agency and the European Environment Information and Observation Network.

⁵ Art. 192 (4) TFEU, as applicable in 2018: “without prejudice to certain measures adopted by the Union, the Member States shall finance and implement the environment policy”. See also, about the importance of such sentence, J. Jans, *European Environmental Law*, Kluwer, 1990, p. 143, referring to Art. 130S(4) of the EEC Treaty, as modified by the Single Act in 1987.

⁶ European Parliament Research Service, D. Bourguignon, *At a glance*, 1 October 2015.

⁷ CJEU, C-404/13, *Client Earth*, 19 November 2014. A. Ryall, *Enforcing EU Environmental Law against Member States: Air Pollution, National Courts and the Rule of Law*, EJRR, 2/2015, pp. 305-308.

⁸ For a full story, as reported by journalists, see J. Ewing (New York Times correspondent), *Faster, Higher, Farther, The inside story of the Volkswagen scandal*, Transworld publishers, London, 2017; Spiegel Online, *The Three Students Who Uncovered 'Dieselgate'*, by Ph. Oemke, 23 October 2017, available at <http://www.spiegel.de/international/business/the-three-students-who-discovered-dieselgate-a-1173686.html>.

⁹ See Der Spiegel online, op. cit.

¹⁰ J. Ewing, op. cit., p. 205.

reasons¹¹. They revealed that real-world nitrogen oxide (NOx) emissions from the VW cars exceeded the US-EPA standard by 15 to 35 times. The cars showed much higher emissions while on the road than in the lab. The researchers released their report "In-Use Emissions Testing of Light-Duty Diesel Vehicles in the United States" months later, in March 2014, and presented their observations at a conference in San Diego, without elaborating much about the possible reasons for the observed discrepancy. Officials of the California Air Resource Board (CARB) – the state where the testing took place – decided to pursue the investigation, in dialogue with the industry. But car manufacturers did not offer the administration convincing explanation on the problem's origin¹². CARB subsequently threatened denial of the approval of a new 2016 model. Only in August 2015 did VW admit to CARB, in the presence of an official of the United States Environmental Protection Agency (EPA), the use of a defeat device in order to cheat on real emissions tests¹³. The follow-up is well known. On Sept. 18, 2015, the EPA revealed VW's diesel trickery to the world¹⁴. VW admitted that its strategy was meant to increase its market share. It had intentionally equipped its cars with a "defeat-device" since 2008, in 11 millions cars worldwide. VW's CEO apologized and resigned a few days later. Judicial proceedings followed soon after, in 2016¹⁵. In the aftermath of the global financial crisis, punishment of corporate wrongdoing was a priority in the U.S Department of Justice. Due to breaches of the Clean Air Act, but also to attempts to mislead consumers and efforts to mislead government officials, the Department filed suit to pursue the individuals responsible "for orchestrating this damaging conspiracy", first a civil complaint, followed by criminal charges.

Other suits were filed by New York, Massachusetts, Maryland, Vermont and other states, for violations of consumer and environmental laws.

2.2 Dieselgate in the EU

The same type of research on real emissions had been conducted in the European Union, and made public, as early as 2010 as far as light vehicles were

concerned¹⁶, four years before the dieselgate scandal was revealed in the US.

The European Union was long aware of the possible use of defeat devices by car producers, as demonstrated by the content of its own legislation on emissions from motor vehicles¹⁷ but also by the content of UNECE Regulations on motor vehicles it subscribes to¹⁸. This concern for defeat devices was the result of an earlier fraud that had been detected for trucks¹⁹.

The use of defeat devices was actually prohibited since the late nineties under European Union law, with some exceptions:

"The use of defeat devices that reduce the effectiveness of emission control systems shall be prohibited. The prohibition shall not apply where:

(a) the need for the device is justified in terms of protecting the engine against damage or accident and for safe operation of the vehicle;

(b) the device does not function beyond the requirements of engine starting;

or

(c) the conditions are substantially included in the test procedures for verifying

¹⁶ And even earlier with regard to trucks: in 2003, the German Federal Environment Agency revealed that European truck makers were using computers inside diesel engines to evade emissions regulations (A. Friedrich, Umweltbundesamt, 'Sachtstandpapier: Erhöhte Nox-Emissionen von Euro-2-Lkw', available at <https://www.umweltbundesamt.de/publikationen/erhoehte-nox-emissionen-von-euro-2-lkw>). Here also, a similar scandal occurred in the US, leading to a \$1 billion settlement. But no penalties were imposed in Europe, according to J. Ewing, op. cit., p. 202.

¹⁷ For instance, Directive 98/69/EC of the European Parliament and of the Council of 13 October 1998 relating to measures to be taken against air pollution by emissions from motor vehicles and amending Council Directive 70/220/EEC, Annex I, already contained a definition of defeat device (2.16): "Defeat device" means any element of design which senses temperature, vehicle speed, engine 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. Such an element of design may not be considered a defeat device if: I. The need for the device is justified in terms of protecting the engine against damage or accident and for safe operation of the vehicle, or II. The device does not function beyond the requirements of engine starting, or III. Conditions are substantially included in the Type I or Type VI test procedures.'

¹⁸ As explained, a study made for the European Parliament, 'Legal obligations relating to emission measurements in the EU automotive sector, study for the EMIS Committee, 2016, p. 15, two type-approval systems exist side by side in Europe, one of them being discussed in the framework of the United Nations Economic Commission for Europe (UNECE). Regulation No. 83 (UNECE) on Uniform provisions concerning the approval of vehicles with regard to the emission of pollutants according to engine fuel requirements (OJ L 42, 15.2.2012, p. 1–207), which entered into force in 2011, prohibits defeat devices.

¹⁹ see above, note 16.

¹¹ Over five pre-defined routes categorized based on their predominant driving conditions (highway, urban/suburban, and rural-up/downhill driving).

¹² J. Ewing, op. cit.

¹³ Id., p. 246-247.

¹⁴ As expressed by Der Spiegel, op. cit.

¹⁵ The allegations were set forth in a complaint originally filed by the United States on behalf of the EPA on January 4th, 2016, and amended on October 7th, 2016.

*evaporative emissions and average tailpipe emissions*²⁰.

The European Union was also for long aware of the importance of controlling ‘real world emissions’ and was interested in the technical feasibility of on-road emissions tests for more precise and realistic information on car air pollution emissions in real traffic conditions²¹. As a consequence, the Joint Research Center, a study center related to the Commission, tested diesel cars on the road using portable measurement equipment and presented its results at a workshop held in Brussels on 23 November 2010²². They found that Euro 4 and 5 diesel cars exhibited much higher NOx on-road emissions (up to 4-5 times the emission limit) than the type approval limit values regardless of driving conditions. As confirmed in a written report from 2011²³, published the same year²⁴, the study found that laboratory emissions testing failed to accurately capture the on-road emissions of light-duty vehicles: if real driving emissions of petrol engines were in general well controlled, NOx emissions from diesel engines were not. But these official studies were only ‘scientific’, taking care to mention that their purpose ‘was neither to test specific brands, models or cars nor to control compliance with emission levels. They were scientific studies in view of future policies, not technical controls’²⁵. The suggested follow-up was to establish a complementary emissions test procedure, together with more stringent emission limits. The conclusions led the European Commission to set up a working group in 2011 aimed at developing a complementary emissions test procedure for light-duty vehicles.

Unlike in the United States, where suspicious behaviour of diesel cars was investigated by the Californian Board and the EPA, no action was taken in Europe, except for further studies and discussions about “how to improve the tests” or change the limit

values. This despite the evident problem of air pollution in European cities. And despite the fact that, as documents later showed, European officials had already been aware of the possibility of manipulation for years²⁶.

That tranquil inertia was shaken by the US reaction to dieselgate and the EPA taking the matter very seriously into consideration²⁷. Only after the EPA’s public disclosure of the scandal in September 2015 did Germany, France, Italy, and the UK decide to open investigations²⁸ in Europe.

3 Inspection powers

3.1 Enforcement deficit in the EU

There has always been a structural problem of implementation deficit in the European Union, as far as environmental law is concerned²⁹. One of the early explanations can be traced back to the principle of state sovereignty. Criminal law was also long out of reach for the EU legislator. For a long time, the sole request it could impose on Member States regarding the proper implementation of EU environmental law was to require that their enforcement measures be proportionate, effective, preventive and non-discriminatory. Discussions have raged on for years about how to better boost Member States’ inspection powers³⁰ or to force them to impose criminal penalties³¹, but rarely about mimicking the competition model and the Commission’s superpower in this area³², nor creating an EPA ‘à l’américaine’.

Sure, there is an EPA in the European Union, the European Environmental Agency, active since the mid-nineties. Its role is very different from its homonym in the United States. The European EPA’s main task is to provide sound, independent information, collected in cooperation with other Community bodies and programmes (such as the Joint Research Center), ‘in order to help the

²⁰ 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, Art. 5(2).

²¹ See the preamble of the 2007 Regulation on type approval of Euro 5 and 6 vehicles.

²² Report online available at https://circabc.europa.eu/webdav/CircaBC/GROW/automotive/Library/commission_expert/workshop_legislation/meeting_november/101126%20Summary%20of%20workshop.pdf.

²³ JRC scientific and technical reports, 2011, Analyzing on-road emissions of light-duty vehicles with Portable Emission Measurement Systems (PEMS).

²⁴ M. Weiss, P. Bonnel, R. Hummel, A. Provenza & U. Manfredi, ‘On-Road Emissions of Light-Duty Vehicles in Europe’, *Environmental Science & Technology*, 2011, n°45, pp. 8575-8581.

²⁵ Commission DG JRC press release (no date – ref. LD-NB-25572-EN-N), available at <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC75998/dnb25572enn.pdf>.

²⁶ Spiegel Online, ‘How officials Ignored Years of Emissions Evidence’, 19 August 2016, <http://www.spiegel.de/international/business/volkswagen-how-officials-ignored-years-of-emissions-evidence-a-1108325.html>.

²⁷ L. Krämer, ‘The Volkswagen Scandal – Air Pollution and Administrative inertia’, *ELNI Review*, 2016, 2, pp. 64-74.

²⁸ M. di Rattalma, *The dieselgate – A legal perspective*, Springer, 2017.

²⁹ L. Krämer, Deficits in application of EC Environmental law and its causes), Focus on European Environmental Law, Sweet & Maxwell, Londres, 1997, p. 1; M. Heldemann-Robinson, *Environmental Inspections and the EU: Securing an Effective Role for a Supranational Union Legal Framework*, *Transnational Environmental Law*, 2017, vol.6, pp.31-58.

³⁰ J. Jans, *European Environmental Law*, Kluwer, 1990, p.143.

³¹ With the so-called Directive on Environmental Crime (Directive 2008/99/CE of 19 November 2008).

³² In its 1996 Communication on ‘Implementing Community environmental law’, the European Commission addressed the question whether there ‘might be a need for a limited Community body with auditing competences’. The follow-up rather focused on a role of assistance, dialogue and coordination.

adoption of better informed decisions and to build a coherent information network³³. It is not an inspection body, nor a control body, nor a punitive body. The European Parliament proposed that the EPA should be given investigation powers but Member States vehemently opposed the idea³⁴.

Inspection remains mainly the task of individual Member States – with, progressively, more directions being given at the EU level, either through new legislative impulse (such as the Directive on industrial emissions and its provisions on inspection) or via the coordination of a better dialogue³⁵. The Commission, despite a lack of formal power of investigation in environmental matters³⁶, is in charge of bringing cases to the fore of the Court of Justice. It can rely on numerous information canals such as individual complaints (518/year in 2017 on environmental matters³⁷), national reporting, questions raised by the European Parliament or even its own verifications³⁸. In that play and on environmental matters, the Commission's generic role in controlling the application of EU law is addressed in relation to Member States, as clearly expressed in Art. 258³⁹ of the TFUE. The Commission's role is to focus on infringements at Member State level (or by other EU institutions). It can take a Member State to the Court (173 infringement cases were launched in 2017⁴⁰).

But, by contrast, on environmental matters, the European Commission cannot – so far – take a corporation to the European Court of Justice, nor

directly fine it, based on its sole environmental competence. It can only act indirectly by suing a Member State, or act against the company on other grounds, such as a competition law issue.

3.2 *The enforcement of the type-approval procedure*

The type-approval procedure for motor vehicles is harmonized at EU level⁴¹. All 28 Member States are bound to apply identical kind of rules and to pursue the same objectives. But such harmonization is not complete, and it does not mean that Member States have no crucial role to play. First, Member States must fill in some gaps in that harmonized frame, mostly concerning the enforcement aspect and applicable penalties. As very explicitly mentioned in Art. 13 of Regulation 705/2007 of 20 June 2007 concerning emissions from Euro 5 and 6 vehicles (only applicable till 31 August 2020):

“Member States shall lay down the provisions on penalties applicable for infringement 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 and shall notify it without delay of any subsequent amendment affecting them”⁴².

The enforcement dimension is left to the Member States, resulting in a blatant lack of consistency⁴³. In the automobile sector, following the revelations in September 2015 that the Volkswagen Group used software to sidestep emissions standards, the Commission, based on various information sources⁴⁴, observed that several Member States even

³³ Council Regulation (EEC) No 1210/90 of 7 May 1990 on the establishment of the European Environment Agency and the European Environment Information and Observation Network, amended several times; codified version in Regulation (EC) No 401/2009 of the European Parliament and the Council of 23 April 2009 on the European Environment Agency and the European Environment Information and Observation Network

³⁴ P. Wenneras, *The Enforcement of EC Environmental Law*, Oxford, OUP, 2007, p. 254.

³⁵ Cf. the freshly created 'group of experts on environmental compliance and governance', by Commission Decision of 18.01.2018. Among the experts: Europol, Eurojust, but also European Union Network for Implementation and Enforcement of Environmental law (IMPEL), EU Forum of Judges for the Environment (EUFJE), European Network of Prosecutors for the Environment (ENPE), EnviCrimeNet, European Network of the Heads of Environment Protection Agencies (NEPA), European Organisation of Supreme Audit Institutions (EUROSAI).

³⁶ Except, as mentioned by M. Hedemann, *op.cit.*, in areas like radioactivity monitoring.

³⁷ Commission Report 2017, *Monitoring the application of EU law*, July 2018, statistical overview.

³⁸ J. Jans, *op. cit.*, p. 148, mentioning the visit of sites, with the consent of the Member States in question, or the request of expert reports.

³⁹ Art. 258: 'If the Commission considers that a Member State has failed to fulfil an obligation under the Treaties, it shall deliver a reasoned opinion on the matter after giving the State concerned the opportunity to submit its observations. If the State concerned does not comply with the opinion within the period laid down by the Commission, the latter may bring the matter before the Court of Justice of the European Union.'

⁴⁰ 12 July 2017, Commission report on monitoring the application of EU law.

⁴¹ For a description of the regime: N. de Sadeleer, 'Harmonizing Car Emissions, Air Quality, and Fuel Quality Standards in the Wake of the VW Scandal', *EJRR*, 2016/1, pp. 11-24; Directive 2007/46/EC establishing the framework for the approval of motor vehicles and their trailer, and of system components and separate technical units intended for such vehicles; 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.

⁴² "The types of infringements which are subject to a penalty shall include:

(a) making false declarations during the approval procedures or procedures leading to a recall;
(b) falsifying test results for type approval or in-service conformity;
(c) withholding data or technical specifications which could lead to recall or withdrawal of type approval;
(d) use of defeat devices;
(e) refusal to provide access to information."

⁴³ European Parliament, 'Legal obligations relating to emission measurements in the EU automotive sector', study for the EMIS Committee, 2016, p. 10.

⁴⁴ For instance, in the context of a request from the German Transport Ministry in September 2016 to mediate between the German and Italian authorities on a dissent on NOx emissions concerning vehicles of a type approved by Italy. In the course of the mediation process, the

failed to establish penalty systems to deter car manufacturers from violating car emissions legislation⁴⁵. Member States, most importantly, are also in charge of the application of the type-approval procedure and the delivery of the ‘CE’ certificates. The European harmonization does not create a common desk or unified entry point into the approval system (such as procedures that are applicable under the REACH regime, for instance). The regime is split into 28 potential approval authorities, from which carmakers can choose, in order to obtain the approval. Vehicles types⁴⁶ tend to be approved in their country of origin. When a manufacturer is preparing the launch of a new model on the EU market, the technical services that perform the official type-approval testing are still paid directly by car manufacturers⁴⁷. Once obtained, the type-approval is a precious key because it is valid throughout the whole EU⁴⁸. The granting of a type-approval is tightly linked to emissions or fuel consumption. While emissions limits and the prohibition of defeat devices are fixed by the European legislator and form essential parts of the European regime, the test requirements are fixed via an implementing measure, adopted by the Commission and flanked by a committee, with a possible risk of ‘regulatory capture’⁴⁹. When dieselgate emerged, it was revealed that the current tests dated back to the late 1960s and ‘were not intended to reflect real-world driving circumstances’⁵⁰. The oddity of the tests, despite persistent air quality problems in urban areas, did not provoke much ado, apparently. The harmonized regime did not foresee any mandatory testing under real-world driving conditions by an independent third party⁵¹. There was, most importantly, no counter-power, no observers and no democratic control.

4 Attitude to compliance

4.1 The hyper-tech: a temptation to cheat

*“A modern car or truck has a powerful computer under its hood and a small chemical plant, in effect, as part of its exhaust system, meaning there are many potential areas for system failure—or manipulation. All governments face significant challenges in ensuring that emissions and efficiency standards meant to protect public health and welfare are met in practice and not just in theory. Technology will continue to advance, and temptations to evade or subvert regulations will remain.”*⁵² The technical complexity and expertise to check cars, especially in order to detect sophisticated deceptive devices, raise an issue of capacity. Not only the cars have become hyper-technical, but also the applicable regulation. This situation contributes to creating an easy-to-exploit grey zone⁵³ of influence (‘many measurement regulations are specified or heavily influenced by industry players’⁵⁴) or non-compliance (‘only expert teams, mainly from manufacturers or technical services, are able to gain an overall perspective of the regulation and its practical implementation’⁵⁵), except where, like in the US, an inspectorate decides to insist in order to understand better why signs of possible non-compliance occur. A typical niche for an *écopouvoir*, observe F. Aggeri & J. M. Saussois⁵⁶, referring to Lascoumes but also to Foucault when recalling that, in the relationships large enterprises entertain with public authorities in such hyper-tech matters, the border between compliance and non-compliance can be very thin. The public authority is confronted with a necessity to manage ‘illegalism’ in all its possible declinations, sometimes with some margin of tolerance and compromise. This logic of accommodation and empathy is only interrupted when an outsider enter into the picture, such as an NGO, a researcher, or a judge⁵⁷.

The temptation to be lenient can also surge from a possible conflict of interests, on the side of national

Commission carefully assessed the NOx emissions test results provided by the German type approval authority (Kraftfahrt-Bundesamt), as well as the extensive technical information provided by Italy on the emission control strategies employed by FCA in the car type in question.

⁴⁵ While in the US this is settled under the Clean Air Act. See N. de Sadeleer, *op. cit.* L. Krämer, *op. cit.*

⁴⁶ The type designates a category of vehicles that share same specific characteristics. European Parliament, ‘Legal obligations relating to emission measurements in the EU automotive sector, study for the EMIS Committee, 2016, p. 9.

⁴⁷ As explained by the European Commission: http://europa.eu/rapid/press-release_MEMO-18-3652_en.htm.

⁴⁸ Through the principle of mutual recognition: see N. de Sadeleer, *op. cit.*

⁴⁹ *Id.*, mentioning, by contrast, a different type of regime in the US.

⁵⁰ *Id.*

⁵¹ European Parliament, ‘Legal obligations relating to emission measurements in the EU automotive sector, study for the EMIS Committee, 2016, p. 10.

⁵² ICCT website, July 2018, concluding that an essential component of clean transportation policy, therefore, is effective measures to ensure that the intended outcomes from emissions-control and fuel-efficiency programs materialize, in fact, throughout the vehicle lifecycle.

⁵³ J. Ewing, *op. cit.*, p. 206.

⁵⁴ European Parliament, ‘Legal obligations relating to emission measurements in the EU automotive sector, study for the EMIS Committee, 2016, p. 10.

⁵⁵ European Parliament, ‘Legal obligations relating to emission measurements in the EU automotive sector, study for the EMIS Committee, 2016, p. 9.

⁵⁶ F. Aggeri & J. M. Saussois, La puissance des grandes entreprises mondialisées à l’épreuve du judiciaire : de l’affaire Volkswagen au dieselgate, *Revue française de gestion*, Paris, Vol. 43, n°269, novembre 2017.

⁵⁷ *Id.*

authorities. This is similar to the first age of emissions trading in Europe where it proved difficult for national administrators to be severe with the allocation of quotas to their own industry, when not able to verify what the other concurring national authorities would do.

4.2 Do emissions into the environment matter?

Through the use of defeat devices, the industry did not make the necessary efforts to control and reduce emissions into the environment in accordance with legal requirements, among which limit values on nitrogen oxides (NOx)⁵⁸. In so doing, the sector loaded the whole complex structure of legislative and regulatory measures on air quality and emissions limits. This structure was probably too complex, and though it was supposed to function quite smoothly, it strangely enough did not. Was it taboo to question why pollution levels in cities were not dropping as much as they should have, considering how much stricter emissions rules had become⁵⁹? There is not much literature to be found on this question⁶⁰. Even on legal issues, there is a kind of silo attitude, Directive 2008/50 on Ambient Air Quality easily capturing most of the attention. It is noticeable that most declarations on dieselgate, at EU level, flow out of a concern for a smooth functioning of the internal market. The applicable legislation on car type-approval is based on Art. 114 TFUE or its former equivalents, confirming that the main drive of such provisions is the internal market. This however does not mean the environmental dimension is irrelevant. On the contrary, legislation based on Art. 114 TFUE must pursue and even guarantee a high level of protection of health and the environment. Still, a different type of anchorage - a EU Clean Air Act? - might have made a difference. In the US, the administrations which unveiled the scandal were in charge of both car type-approval and air quality, based on the Clean Air Act. Their focus was on air quality and health impacts.

4.3 The obsolescence of vehicle testing

Dieselgate in Europe revealed not only a problem in enforcement but also the obsolescence of the applicable legal regime, in many aspects.

This regime (which has now been modified by Regulation 2018/858, with new rules applicable from 1 September 2020) puts the EU vehicle testing systems in the sole hands of national authorities (with no effective control on the controller) while also basing the granting of a type approval on an inadequate test. In Europe, after the revelation of dieselgate, the scapegoat was the Member State. It was only after dieselgate that the Commission took steps against Germany, Greece, Spain, Luxembourg and the United Kingdom for failure to fulfil their obligations under EU vehicle type approval legislation and requested further information on their application of EU vehicle type approval rules. One of the problems raised was the leniency regarding the acceptance of defeat devices. But the Commission's role was also critical, as it was tasked with closely monitoring the enforcement of the applicable legislation by Member States. It was supposed to ensure that Member States comply with their reporting tasks, a decisive source of information, instead of remaining passive⁶¹. As recalled by L. Krämer, while the Commission has no direct inspection power it can command studies⁶².

Since 2015, the applicable regime on car type approval in the European Union has been overhauled, not only regarding the type of lab tests which have to be carried out but also regarding the need to include testing in real conditions (although the new regime was canceled by the General Court in *Ville de Paris & Ville de Bruxelles c. Commission*, on 13 December 2018. The Commission was not competent in changing essential elements of the applicable regime)⁶³, but also with regard to who is the controller.

"Car manufacturers have been treating emission tests laxly – some have even broken the law. The emissions scandal has shown that the responsibility to enforce the law and punish those who violate it can no longer be left solely to individual Member States", declared Commissioner Elżbieta Bieńkowska, responsible for Internal Market, Industry, Entrepreneurship and SMEs, at a Press Conference in 2017. A reform of the whole regime led to the adoption of a new framework Regulation, Regulation (EU) 2018/858 of the European Parliament and of the Council of 30 May 2018 on the approval and market surveillance of

⁵⁸ EU observer, ...: « Nitrogen oxides (NOx) have been subject to limit values in the European Union since Euro 3, which applied to all cars approved for sale by national authorities after January 2000. With every new Euro standard, the NOx limit was decreased, from 500 milligrams (Euro 3), via 250 milligrams (Euro 4, 2005), 180 milligrams (Euro 5, 2009), to the current Euro 6 standard of 80 milligrams per kilometer, in place since September 2014. But when the EU legislation that laid down the Euro 5 and 6 standards was negotiated between 2005 and 2007, there were already signs that while the limit was becoming ever more strict, real-world emissions did not match the fall.

⁵⁹ Quoting J. Ewing, op. cit., p. 202.

⁶⁰ See C. Brand, "Beyond 'Dieselgate': Implications of unaccounted and future air pollutant emissions and energy use for cars in the United Kingdom", *Energy Policy* 97 (2016) 1–12.

⁶¹ L. Krämer, op. cit., p. 68 & 73.

⁶² Id.

⁶³ Case T- T339/16, T352/16 et T391/16, *Ville de Paris & Ville de Bruxelles c. Commission*, 13 December 2018.

motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles⁶⁴. The Regulation shall be applicable from 1 September 2020, and stipulates that a stricter control on lab testing and performance of national authorities shall occur. Member States will be able to challenge each other's designation. The Commission becomes a controller: it will have the power to suspend, restrict or withdraw the designation of technical services that are underperforming and too lax in applying the rules. Another major advance: the new regulation empowers the Commission to levy penalties on non-compliant vehicles. Even more: car manufacturers who are in breach of type-approval legislation (e.g. defeat devices or fake declarations) risk administrative fines of up to € 30 000 per vehicle which can be levied by the Commission if no fine is being imposed by the Member State. Fines can also be imposed on technical services if they fail to carry out the tests rigorously enough. The level of fines will depend on an assessment of the gravity and extent of the non-compliance. The system of administrative fines and their calculation is not settled yet: it needs to be specified by a ...Commission-delegated act. A separate forum is to be created where national authorities can exchange information, without any legal powers to order checks or investigate complaints, a weak measure when one considers that a similar body for exchange of information on type approval, TAAG, already exists and failed to uncover any non-compliance up until now⁶⁵. Proposals had been made for the creation of an EU supervisory agency but were rejected, due to opposition of Member States and the European Parliament⁶⁶. More powers are given to the Commission and to the Member States indeed, but without true radical change when compared to the competition model or the US EPA. According to the NGO Transport & the Environment, a cost-effective and efficient solution would have been to coordinate activity centrally and conduct market surveillance through a European Vehicle Surveillance Agency (EVSA).

5 A Cartel

Recent developments which also reached worldwide media invite a discussion on another entry into the subject matter. In July 2017, Der Spiegel article titled "Das Kartell" revealed the possibility of a cartel between VW, Audi, Porsche, BMW and

Daimler – a collusion among the car companies in order to get a competitive advantage. This is currently the subject of an investigation, about which we do not have any information. Instead of competing with each other over which company could employ the technology faster and more effectively than the others in order to comply with new emissions limits, developers discussed the issue at length in their working groups, according to Der Spiegel⁶⁷. According to the journal, five manufacturers jointly established "technical standards" and agreed to use "only certain technical solutions" in new vehicles, including for tanks needed to reduce emissions. "This may not have posed a problem under cartel law if all automakers had been given access to the data, including competitors from France, Italy, Japan and the United States. But the members of the German group of five wanted it to remain an exclusive group"⁶⁸. Cartel authorities in Brussels and Bonn are investigating the issue. On competition, the Commission enjoys an "ambience of power"⁶⁹, with extended investigative powers and extraordinary powers to fine⁷⁰, even if not exclusive but shared nowadays with the Member States. Fraud can be costly, as demonstrated by the fine imposed to Google. In the US, the defeat devices were used to remain competitive with hybrid cars that were successfully attracting consumers with their environmental performance. Cheating on the environment in order to remain competitive, a dangerous cocktail...for all? Could we soon read headlines in the newspapers such as "X fined €4.34bn by EU over Air Quality Standards violations in order to get a competitive advantage"?

6 Conclusion

Dieselgate functions as an eye opener – An eye opener on the reality of a case of fraud in relation to emissions control. Companies, often keen to adopt voluntary agreements, happen to strangely resist the 'regulatory'. Innovation does not always lead to compliance but, on the contrary, to compliance twisting. Instead of gaining new markets in a sustainable way, this only made things worse, not only for the corporations but also for society.

We could never have known about this and pursued endless discussion about how to clean the air in cities. The triggering factor of the scandal was first a study commanded in the US by an NGO, with

⁶⁴ Amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC. OJ L 151, 14.6.2018, p. 1–218. See the Report of the European Court of Auditors, The EU's response to the "dieselgate" scandal, February 2019.

⁶⁵ According to Transport & the Environment,

⁶⁶ N. De Sadeleer, *op. cit.*

⁶⁷ 27 July 2017. The cartel. Collusion between Germany's biggest carmakers.

⁶⁸ *Id.*

⁶⁹ I. Maher, A Fine Balance: The National Courts, the European Commission and EU Competition Law, 33, *Dublin University Law Journal*, 2011.

⁷⁰ *Id.*

difficult-to-interpret results. A similar study had actually already been conducted in Europe, with similar results, but no consequences. What made all the difference was an “attitude to compliance”. Compliance was taken seriously in California. In contrast, such an attitude was not at oeuvre in Europe.⁷¹ Strange results on real emissions needed to be investigated further, found a national authority in the US. No national authority is known to have taken hold of the 2011 results which had been produced in Europe and were also quite bizarre.

Another difference was the power of the American EPA to sue the company directly, both on civil and criminal charges, once the fraud was heavily documented. In the EU, power is currently left to the Member States on environment and internal market affairs. Only after the information flow flooded the continent, or under threat of infringement procedures launched by the Commission, did national inspectorates openly take action against car manufacturers. What could be the next part of the story? Calling for the creation of an EU EPA “à l’américaine” might sound rather naïve or unrealistic at this very moment, if we look at the broader picture. Even punctually, recent attempts to create an EU supervisory agency failed, while discussing the adoption of Regulation 2018/858 on market surveillance of vehicles. At the same time, “it is difficult to see how significant progress will be achieved in addressing the current poor state of implementation of EU environmental law⁷², without a more coherent supranational framework.

Still, we observed that the leniency with regard to vehicle market surveillance is also a question of attitude, and not only one of structure.

A logic of accommodation and empathy, that can get disrupted when a few individuals start to ask the right questions and do not get satisfied with easy answers. The right questions, based on the consideration that air quality is something to genuinely care about. Because it is a matter of the utmost importance for public health. Because, as a consequence, it is a matter of rights for the individuals. Because, in many cases, it is also a matter of unfair competitive advantage.

Taking emissions control truly *au sérieux*. Could this be the refreshed base for a brand new Clean Air Act in Europe, which would also include, somehow, the market surveillance of vehicles?

⁷¹ M.Führ, Der Dieselskandal und das Recht („the dieselscandal and the law“), Neue Zeitschrift für Verwaltungsrecht (NVwZ) 36 (5), 2018, 265-273, identifies a „culture or disrespect of the law“ (Kultur der „Missachtung des Rechts“; cf. p. 273) and proposes to align the type approval context with the Aarhus principles. The piece is based on evidence the author has provided to the investigation committee of the German Parliament in 2016.

⁷² Quoting M. Hedemaan, op.cit., p. 58.

elni membership

If you want to join the Environmental Law Network International, please use the membership form on our website: <http://www.elni.org> or send this form to the elni Coordinating Bureau, c/o IESAR, FH Bingen, Berlinstr. 109, 55411 Bingen, Germany, fax: +49-6721-409 110, mail: Roller@fh-bingen.de.

DECLARATION OF MEMBERSHIP

“Yes, I hereby wish to join the Environmental Law Network International.”

There is no membership fee. The PDF-version of elni Review is included.

If you want to receive the print version of the elni Review the fee is €52 per annum for commercial users and €21 per annum for private users and libraries.

Please indicate, whether you want to receive the elni Review as print version or PDF-version.

Please transfer the amount to our account at Nassauische Sparkasse – Account no.: 146 060 611, BLZ 510 500 15, IBAN: DE50 5105 0015 0146 0606 11; SWIFT NASSDE55.

Name: _____

Organisation: _____

Profession: _____

Street: _____

City: _____

Country: _____

Email: _____

Date: _____

Imprint

Editors: Nicola Below, Martin Führ, Andreas Hermann, Gerhard Roller, Julian Schenten and Claudia Schreider

Editors in charge of the current issue:
Gerhard Roller and Claudia Schreider

Editor in charge of the forthcoming issue:
Martin Führ

The Editors would like to thank **Michelle Monteforte** (Öko-Institut) for proofreading the *elni Review*.

We invite authors to submit manuscripts to the Editors by email.

The *elni Review* is the double-blind peer reviewed journal of the Environmental Law Network International. It is distributed once or twice a year at the following prices: commercial users (consultants, law firms, government administrations): € 52; private users, students, libraries: € 30. Non-members can order single issues at a fee of € 20 incl. packaging. The Environmental Law Network International also welcomes an exchange of articles as a way of payment.

The elni Review is published with financial and organisational support from Öko-Institut e.V. and the Universities of Applied Sciences in Darmstadt and Bingen.

The views expressed in the articles are those of the authors and do not necessarily reflect those of elni.

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.

Contact

Freiburg Head Office:

P.O. Box 17 71
D-79017 Freiburg
Phone +49 (0)761-4 52 95-0
Fax +49 (0)761-4 52 95 88

Darmstadt Office:

Rheinstrasse 95
D-64295 Darmstadt
Phone +49 (0)6151-81 91-0
Fax +49 (0)6151-81 91 33

Berlin Office:

Schicklerstraße 5-7
D-10179 Berlin
Phone +49(0)30-40 50 85-0
Fax +49(0)30-40 50 85-388

www.oeko.de

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

Contact

Prof. Dr. jur. Gerhard Roller
University of Applied Sciences
Berlinstrasse 109
D-55411 Bingen/Germany
Phone +49(0)6721-409-363
Fax +49(0)6721-409-110
roller@fh-bingen.de

www.fh-bingen.de

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

sofia is working on behalf of the

- 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

Contact

Darmstadt Office:

Prof. Dr. Martin Führ - sofia
University of Applied Sciences
Haardttring 100
D-64295 Darmstadt/Germany
Phone +49(0)6151-16-8734/35/31
Fax +49(0)6151-16-8925
fuhr@sofia-darmstadt.de

www.h-da.de

Göttingen Office:

Prof. Dr. Kilian Bizer - sofia
University of Göttingen
Platz der Göttinger Sieben 3
D-37073 Göttingen/Germany
Phone +49(0)551-39-4602
Fax +49(0)551-39-19558
bizer@sofia-darmstadt.de

www.sofia-research.com



sofia



NATUUR
& MILIEU



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.

elni Board of Directors

- Martin Führ - Society for Institutional Analysis (sofia), Darmstadt, Germany;
- Jerzy Jendroska - Centrum Prawa Ekologicznego (CPE), Wrocław, Poland;
- Isabelle Larmuseau - Vlaamse Vereniging voor Omgevingsrecht (VVOR), Ghent, Belgium;
- Delphine Missonne - Centre d'étude du droit de l'environnement (CEDRE), Brussels, Belgium
- Marga Robesin - Stichting Natuur en Milieu, Utrecht, The Netherlands;
- Gerhard Roller - Institute for Environmental Studies and Applied Research (I.E.S.A.R.), Bingen, Germany.

elni, c/o Institute for Environmental Studies and Applied Research
FH Bingen, Berliner Straße 109, 55411 Bingen/Germany

www.elni.org