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 (elnı) in 1990 to promote international communication and cooperation worldwide. elni is a registered non-profit association under German Law.

elnı 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.

elnı 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.

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
elnı 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.

elnı Website: elni.org
The elni website www.elni.org contains news about the network. The members have the opportunity 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).

elnı Conferences and Fora
elnı 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.

Nanomaterials as priority substances under the Water Framework Directive
Catherine Ganzleben / Steffen Foss Hansen

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Law and innovation in the context of nanomaterials: Barriers to sustainable development?
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Water is a precondition for human, animal and plant life as well as an indispensable resource for the economy. Thus, according to the European Commission the protection of water resources, of fresh and salt water ecosystems and of the water we drink and bathe in is therefore one of the cornerstones of environmental protection in Europe. Against this background the present issue of elni Review focuses on the legal framework for (the protection of) water in Europe and explains, among other things, how far it can cope with possible threats from emerging technologies and to what extent some of the legislation has been implemented in specific member States of the EU. Moreover, insights are provided into some new political or scientific initiatives to further develop the legal framework for protecting water.

First off, Catherine Ganzleben and Steffen Foss Hansen examine whether Directive 2000/60/EC (‘Water Framework Directive’, WFD), which aims to reduce and minimise the concentrations of dangerous chemicals in European waters, and related legal requirements include the right instruments to capture nanomaterials. They also consider whether techniques are available to allow for monitoring nanomaterials in surface waters and review data from modelling exercises that estimate concentrations of nanomaterials in EU waters.

Subsequently, Ana Barreira provides an overview of the main elements of the Union’s Marine Strategy Framework Directive (MSFD) and analyses how Spain, as an EU country with 8000 km of coastal fringe, is complying with the directive and will review its marine governance framework.

The third article is by Thomas Ormond and takes another perspective, evaluating how far international and European legal instruments for the regulation of ship dismantling (potentially) ensure the safe and environmentally sound recycling of European ships in regions like South Asia.

Sarolta Tripolszky explains the concept of the term ‘water services’ in her contribution and outlines the economic and legal consequences of a narrow and broad definition. In this context and with specific reference to a collective complaint started by the NGOs EEB and WWF in 2006 against 11 EU member states to enforce the correct implementation of the WFD, she also describes the development of this legal instrument.

The final article with a focus on water is by Marga Robesin and describes current discussions on the question of how to achieve substantial water footprint reduction, focusing in particular on certification and labelling.
Hong Kong Convention and EU Ship Recycling Regulation: Can they change bad industrial practices soon?

Thomas Ormond

1 Introduction

In May 2009, 63 countries adopted the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships. The agreement was meant to end the anarchy of highly dangerous and extremely polluting ship dismantling practices which are still prevalent on the scrapyard beaches of Southern Asia. However, none of the conference participants has so far ratified the Convention and its entering into force looks far off. In March 2012, the European Commission thus presented a proposal for an EU Ship Recycling Regulation in order to speed up the ratification process as well as to introduce additional measures for European ships. The following article looks at the two legal instruments and their chances of success.

2 Background

According to statistics published by the International Maritime Organization (IMO)\(^1\), the world merchant fleet has grown over the last decade from 575 million gross tons (GT) in 2001 to 958 million GT in 2010. During this time old ships amounting to between 3.7 and 25 million gross tons per year were decommissioned and dismantled worldwide. About 97 % of this activity, which is most commonly called ‘shipbreaking’ or more recently ‘ship recycling’, was and is concentrated in just five countries: India, Bangladesh, China (the Big Three), Pakistan and Turkey.

Whereas ship recycling is carried out in China on harbour piers and in Turkey on rocky or concreted slipways, the shipbreakers on the Indian subcontinent use ‘beaching’ as their standard method. It takes place at locations with particularly big tidal ranges and expansive mudflats - Alang in India, Chittagong in Bangladesh, Gadani in Pakistan – and means ships are being driven as far up the beach as possible, dismantled with cut-torches into large blocks, pulled higher with winches and progressively cut up into ever smaller pieces which are then sorted and taken away by lorries. The whole process involves the use of a large workforce instead of heavy machinery and the conditions on a tidal beach make it virtually impossible to employ cranes or scaffolding or to contain oil spills.

Ship dismantling is highly efficient in terms of material recycling, as more than 95 % of a ship’s weight – in particular steel and other metals – are recovered for use, especially in the construction industry. However, the current practices of the industry in Southern Asia pollute the local and marine environment and come at a heavy cost to life and human health. Safety precautions are scarce, accident rates high and deaths frequent, whether by falling, explosions, toxic fumes, snapping cables or other causes. To this must be added the long-term effects of exposure to hazardous materials, such as asbestos, which are contained in the structure of many old ships. As a rule, South Asian shipbreaking yards still have no or only rudimentary facilities to deal with the incoming hazardous wastes, in line with the generally poor infrastructure for waste management in the region.\(^2\)

3 The lack of a functioning legal regime

Although each of the Asian recycling states has some legislation in place regarding pollution prevention and workers’ safety and health, only China and Turkey have passed specific regulations for ship dismantling at national level (in India there is a Ship Recycling Regulation in the State of Gujarat).\(^3\) Moreover, as Puthucherril’s study shows for India, the existing rules provide only a minimal legal framework for ensuring safe working conditions and environmentally sound ship recycling, they address only some of the contentious issues raised by the industry’s operations, and even these rather perfunctorily.\(^4\)

At international level, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal of 1989 applies also to ships which go for demolition from one country to another and can be classified as hazardous waste. Under the standard formula on which the Parties to the Basel Convention agreed in 2004, a ship may become waste as defined in Article 2 of the Basel Convention and at the same time may be defined as a ship under other international rules.\(^5\) This is potentially relevant

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\(^1\) See, for example, information document MEPC 62/INF.13 of 19 April 2011, Annex, p. 3 (MEPC = Marine Environment Protection Committee of the IMO).


\(^3\) Cf. Puthucherril, op.cit., pp. 26 et seq., 54 et seq.


\(^5\) Decision VIII/26 (Environmentally sound management of ship dismantling), recital 6 of the preamble. Cf. T. Ormond, Enforcing EU environmental law
for many end-of-life ships which have hazardous materials on board (asbestos, PCB, TBT, heavy metals in paints, oils and oil sludge in tanks and engine rooms, etc.) and reach the recycling states from other countries. Not least it may concern ships that have a link to Europe and which constitute a sizeable fraction of the world fleet: According to data from late 2011, 17% of the international merchant fleet tonnage is flying flags of EU Member States and about 37% of the tonnage belongs to owners resident in the EU. Even in those cases it was difficult for EU waste shipment authorities to prove the dismantling purpose of their voyage, so that eventually the ships had to be released from custody. In many more instances, European end-of-life ships stay outside the territorial reach of the EU Waste Shipment Regulation, in ports like Singapore, Dubai or Mumbai, when their owners’ decision to send them for scrapping becomes evident.

Even though this should not prevent the notification rules of the Basel Convention from being applied by India, Bangladesh or China as import states of hazardous waste, these countries (unlike Turkey) have repeatedly declared their unwillingness to do so in relation to ships. Because of this refusal the Basel Convention has remained largely ineffective in the field of shipbreaking from other countries.

4 The Hong Kong Convention

The objective gaps of the Basel Convention (what is the ‘country of dispatch’ or export state if the shipowner decides to send a vessel for dismantling on the High Seas?), its lack of acceptance in maritime circles and the pressure of public opinion in the first decade of the 21st century led to the drafting of a new and more specific legal instrument, the International Convention for the Safe and Environmentally Sound Recycling of Ships, under the auspices of the IMO. This Ship Recycling Convention (SRC) was adopted at a diplomatic conference in Hong Kong in May 2009, which was attended by 63 states (with voting rights) and various other entities and organizations. 59 states signed the Final Act of the conference but afterwards the support of the international community for the new instrument remained rather lukewarm.

During the year when the SRC was open for signature at the IMO headquarters (until 31 August 2010) only five states - France, Italy, the Netherlands, Saint Kitts and Nevis, Turkey - took this step. Two years later, no further states have acceded to the Convention and none have so far ratified it.

The ‘Hong Kong Convention’ (HKC), as it is now commonly called, contains altogether 21 articles setting out the general legal provisions and working mechanisms and an Annex with the actual technical requirements for the design, construction and operation of ships, for the operation of ship recycling facilities, and for reporting and enforcement mechanisms. The Convention in fact addresses not only the final stage of a ship’s dismantling but is meant to provide a comprehensive regime of environmental and health protection ‘from cradle to grave’. The overarching approach is that certified ships should be recycled only at duly authorized facilities. Key elements are restrictions to the use of hazardous materials on board ships, the requirement for ships to carry an Inventory of Hazardous Materials (HIM) which should be certified and regularly updated, and a ‘Ready-for-Recycling Certificate’ on the basis of a survey prior to its final voyage, as well as the requirement for ship recycling facilities to be authorized in accordance with the Convention, to work along a general ‘ship recycling facility plan’ and to develop an individual ‘ship recycling plan’ before the dismantling of a given ship. Particularly important in substance, apart from various regulations on occupational safety and health, is Regulation 20 in the Annex which lays down the obligation to ensure the safe and environmentally sound management of hazardous materials contained in a ship.

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The HKC, according to its Article 3, only applies to ships which are entitled to fly the flag of a Party to the Convention, and to ship recycling facilities operating under the jurisdiction of a Party. Excluded from its scope – as is common for IMO conventions - are warships, other vessels on government non-commercial service, ships below 500 gross tons and those employed only in domestic transport. However, Parties are obliged to ensure that such ships act in a manner consistent with the Convention, “so far as is reasonable and practicable”. The HKC also contains a ‘no-more-favourable-treatment’ clause for non-Party ships (Article 3.4). The Hong Kong Convention is supplemented by a set of six guidelines of which four – concerning the development of the Inventory of Hazardous Materials and of the Ship Recycling Plan, Safe and Environmentally Sound Ship Recycling, as well as the Authorization of Ship Recycling Facilities – were adopted in 2011 and early 2012 by the Marine Environment Protection Committee of the IMO.

As may be expected, the HKC attracted considerable criticism from environmental NGOs and others who pointed to various deficiencies and expressed doubts as to whether the new Convention could ensure an equivalent level of control and enforcement in comparison with the Basel Convention. The study by Puthucherril, for instance, lists about a dozen drawbacks and inherent contradictions, such as the lack of clear rules on pre-cleaning of ships before arrival at the recycling yard, the non-decision on the issue of beaching – which is mentioned as a recycling method in the Guidelines although it is practically incompatible with the Convention requirements on health protection and pollution prevention – and the rudimentary reporting system, which falls far behind the Basel Convention’s principle of prior informed consent by all parties concerned.

Beyond those weaknesses – which may be seen as typical for a new legal regime that tries to balance opposing interests – the most critical element of the Ship Recycling Convention seems to be its entry-into-force provision in Article 17. The HKC differs here from all other IMO conventions in so far as it introduces, in addition to the usual quorum of an absolute number of signatories (15 states) with a combined merchant shipping volume of the signatory states during the preceding 10 years should constitute not less than 3 per cent of the gross tonnage of the combined merchant shipping of the same states. After intensive discussion within the IMO, an MEPC information paper of 2011 has interpreted this in the sense that the merchant fleet of the 15 minimum signatories should constitute not less than 383 million gross tons and their maximum annual ship recycling volumes should amount to not less than 11.5 million GT. It is still unclear whether these conditions can be met within the foreseeable future. Experts from Japan – the country who proposed the peculiar entry-into-force provision – calculate that, apart from the major shipping states with flags of convenience (Panama, Liberia, Marshall Islands etc.), ratifications by at least two of the three main recycling countries (India, Bangladesh, China) will be needed for the Convention to become effective.

5 The draft EU Ship Recycling Regulation

The European Union, which for years had only observed developments and commissioned some studies in the field of shipbreaking, began to act more forcefully in the wake of the public uproar caused in 2005-6 by the envisaged dismantling of the French aircraft carrier Clemenceau in India. After a Green Paper published in 2007, the European Commission presented a Communication on an EU strategy for better ship dismantling in November 2008. The strategy paper proposed in the first place to improve enforcement of current waste shipment rules, transpose key elements of the Ship Recycling Convention and fill some of its gaps, as well as encourage voluntary industry action. In the longer term it recommended an EU certification and audit scheme for ship recycling facilities and the creation of a ‘ship dismantling fund’ by which clean recycling operations in and outside of Europe could be financed through port fees or similar taxes on shipping activities.

Following some more research work and public consultations on the options for legislation, the Commission finally came up with a proposal for a Regulation on ship recycling in March 2012, accompanied by an extensive impact assessment and a draft Council Decision requiring Member States to

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13 Cf. however the submission of the EU and its Member States to the Basel Convention of April 2010 which regarded the level of control and enforcement provided by the Hong Kong Convention as “at least equivalent to that one provided by the Basel Convention for ships which are waste under the Basel Convention…” http://archive.basef.int/ships/oewg-vi/12-comments/comments/eu.doc.
14 Puthucherril, op.cit., pp. 173 et seq.

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ratify or to accede to the Hong Kong Convention.\textsuperscript{18} The draft Regulation (in the following text also abbreviated SRR) is meant to establish a system of survey, certification and authorization for large commercial seagoing vessels that fly the flag of an EU Member State, based essentially on the Hong Kong Convention. As the Commission estimates that the Convention will not enter into force before the year 2020, at the earliest, the proposal aims not to wait till then but to implement the treaty as quickly as possible with a directly effective Regulation and a Council Decision which obliges Member States to deposit their instruments of ratification or accession within three years after its entry into force.

The scope of the draft Regulation follows closely the Convention in that it excludes warships and other vessels on government service, ships of less than 500 GT and those operating throughout their life only in waters of EU flag states. Likewise, the ship-specific rules on the inventory of hazardous materials, on surveys, certificates and the ship recycling plan, as well as the notification and reporting requirements (only for ship-owners vis-à-vis their flag state administration), are essentially copied from the Convention.

In three areas, however, the Commission’s proposal goes considerably beyond the international legal instrument:

1) As regards the restrictions on the use of hazardous materials, Article 4 SRR prohibits the new installation not only of materials which contain asbestos, PCB or controlled substances as defined in Regulation (EC) No 1005/2009 but also those containing perfluorooctane sulfonic acid (PFOS) and its derivatives, in line with recent EU chemicals legislation (Regulation [EC] No 757/2010).

2) According to Article 12 SRR, ships may only be recycled in ship recycling facilities which have been included in a ‘European List’, as established by an implementing act of the Commission (cf. Art. 16 SRR). Such ship recycling facilities, which may be located in a Member State or outside the EU, must comply with a set of 14 requirements enumerated in Article 12 and provide evidence for this in accordance with Article 13 SRR.

3) Under Article 9 SRR, the ship-owner and the ship recycling facility have to enter into a contract which must include specific obligations and becomes effective at the latest from the time of the request for the final survey that provides the basis for the ‘Ready for Recycling’ certificate. Even though some sort of demolition contract is quite common in practice, it is not mentioned as a prerequisite in the Hong Kong Convention – an omission that has been heavily criticised for obscuring transactions between parties and hampering the resolution of disputes.\textsuperscript{19}

There are also some variations in the field of enforcement and inter-institutional communication. Whereas the Hong Kong Convention does not normally use the term ‘enforcement’ but contains several articles on the inspection of ships (Art. 8) and the detection and sanctioning of ‘violations’ (Art. 9 and 10 HKC), the draft Regulation speaks of “enforcement in the Member States” (Art. 23 SRR) but only in the sense of penalties which should be effective, proportionate and dissuasive. The duty of Member State authorities to inspect ships and ship recycling facilities is not at all mentioned in the draft Regulation. On the other hand, the Commission’s proposal envisages penalties for ship recycling in an un-listed facility to be imposed not only on the last owner, but also on the penultimate one (within six months before departure to the recycling yard), thus recognizing the common practice that ships are sold some months before their end of life to a specialized ‘cashbuyer’ who then deals with the recycling facility. Besides, the draft Regulation tries to improve the enforcement regime by granting environmental NGOs and other persons with sufficient interest a right to in case of a breach of the Regulation, and to claim access to justice against decisions or failure to act (Articles 24 and 25 SRR). Conversely, as regards reporting by governments, the list of items that should be reported by EU Member States to the Commission seems far more limited than the information that should be communicated by Convention Parties to the IMO (cf. Art. 23 SRR and Art. 12 HKC).

6 Strong and weak points and chances of success – Conclusion

Like the Hong Kong Convention, the draft Ship Recycling Regulation offers a mixed picture of ambitious and reluctant – if not over-cautious – legislation. The ‘cradle-to-grave’ approach of both is certainly to be welcomed, and the restriction of hazardous materials on board as well as the requirement for ships to carry an inventory of such materials are important steps forward in the direction of cleaner shipping and ship dismantling. It is in this field that stricter legislation is today generally accepted – also by the shipping industry – and even the additional substance bans based on EU chemicals regulations should not be overly controversial.


\textsuperscript{19} Cf. Puthucherril, op.cit., p. 181.
However, the first weakness of the Commission’s proposal that may be identified already at this point, and which may prove critical also in other respects, is its rigid ‘flag state’ perspective. To require, for instance, an Inventory of Hazardous Materials not only from EU-flagged ships but also from other vessels that enter an EU port would greatly increase the effectiveness of the new rules and could well be justified with the port state and coastal state interest to know about those materials in case of fire and other accidents.

The decision to copy the IMO’s list of exemptions from the scope of legislation is, in the case of government vessels, essentially a disappointing symbol which shows to commercial ship-owners and the public that even EU governments do not want to be bound by the rules that they force others to observe. The practical effect may, however, be limited since warships – which constitute the bulk of those vessels – are normally disarmed and decommissioned before being sent for dismantling, so that they fall at this point again under the regime of the Hong Kong Convention and the draft Regulation. The exemption for ships below 500 gross tons and for domestic shipping can be explained by the fact that the respective vessels do not form part of the ‘problem group’ of ships sent to Asian beaches. The total waiver with regard to the rules on hazardous materials, however, may have to be revisited in the long term, in view of the fact that vessels below 500 GT represent 36% of the world fleet.20

A crucial but quite controversial part of the Commission’s proposal is the ‘European List’ of ship recycling facilities. Here the resistance of maritime lobby groups is probably strongest, using the argument that this ‘unilateral’ action by the EU creates unnecessary bureaucracy and will drive ship-owners to a re-flagging in favour of non-European flags of convenience. Although the requirements for EU-listed ship recycling facilities are not new in substance (they can all be derived from the Hong Kong Convention), it is the envisaged power of the Commission to examine and acknowledge acceptable facilities that is likely to disturb existing business practices. While the continuity of sub-standard shipbreaking and of the underlying governance problems in Southern Asia, notably in Bangladesh, makes it necessary to institute such an additional level of control, the risk of an increased re-flagging of EU ships – beyond what is already common practice now – is real. That risk might, however, be reduced if the ‘European List’ were linked with financial incentives for good ship recycling. In this context, and in order to give the necessary impetus to the desired reformation of the industry, the idea of a ‘ship dismantling fund’ mentioned in the strategy paper of 2008 should be reconsidered.

Although the international community and the EU have made good progress in creating a proper legislative framework for ship recycling, and impressive technical expertise has been invested in the supplementing IMO guidelines and parallel ISO standards21, the impact of these efforts on the reality of ship dismantling remains so far limited. While there are some hopeful signs that the share of environmentally sound recycling facilities worldwide may be growing22, the casualties, health hazards and pollution by the market leaders, particularly in Bangladesh, appear to continue unabated.23 To achieve a real change on the ground will require a quick entry into force of binding legislation, financial incentives for responsible industry, a step-up of sanctions against violations24 and the continuing pressure from NGOs and the public.

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22 See e.g. Lloyd’s List of 19.7.2012, “Shipbreakers cash in prime location” (on Turkey), and of 9.8.2012, “North Europe’s small recycling yards ride growth in demand for scrap” (on Danish and other yards in the EU).

23 Cf. the reports and lists of casualties published by the Bangladeshi NGO YPSA at http://www.shipbreakingbd.info/.

We invite authors to submit manuscripts to the Editors as files by email using an IBM-compatible word processing system.

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The University of Applied Sciences in Bingen was founded in 1897. It is a practice-oriented 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 Institute für angewandte Ökologie - Institute for Applied Ecology

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The Society for Institutional Analysis and Research 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 conversation
- 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

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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.

**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 (sofa), Darmstadt, Germany;
- Jerry Jendroska - Centrum Prawa Ekologicznego (CPE), Wrocław, Poland;
- Isabelle Larmuseau - Stichting Natuur en Milieu, Utrecht, The Netherlands;
- Marga Robesin - Stichting Natuur en Milieu, Utrecht, The Netherlands;
- Gerhard Roller - Institute for Environmental Studies and Applied Research (IESAR), Bingen, Germany.

**ELNI Conferences and Fora**
ELNI conferences and fora are a core element of the network. They provide a platform 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.

**Publications of the ELNI Review**
The ELNI Review is published by 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.

**The ELNI Review**
The ELNI Review is a bi-annual, English language 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).

The ELNI Review is a forum for discussion on selected topics related to environmental law and policy, the environment and society, and the law and society. It publishes articles of interest to researchers, policy makers, and lawyers interested in environmental law.

**Contents of the current issue**

- **Greening the Constitution. The principle of sustainable development anchored in the Belgian Constitution**
  - Peter De Smidt / Hendrik Schoukens / Tania Van Laer

  - Ana Barreir

- **Water services and why a broad definition under the WFD is needed to ensure the polluter pays principle**
  - Sarolta Tripolszky

- **Downsizing our Water Footprint**
  - Marga Robesin

- **The outcome of the UN Conference on Sustainable Development “Rio+20”: Some critical comments**
  - Eckard Reibinder

- **Nanomaterials as priority substances under the Water Framework Directive**
  - Catherine Ganzleben / Steffen Foss Hansen

- **Law and innovation in the context of nanomaterials: Barriers to sustainable development?**
  - Julian Schenten / Martin Führ

And further articles