

elni

REVIEW

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ship dismantling

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Editorial

The main topics of this issue are the *enforcement of EU law*, and *criminal law and the environment*. Enforcement of EU law is often prescribed by the national legal framework and therefore depends strongly on national definitions of the findings of the facts. When focusing on criminal environmental law one of the main hurdles to the effectiveness results from the different national implementation practices of European Directives. In this respect, the problems also differ between the different EU Member States. This issue of elni Review provides valuable insights into selected national law frameworks:

“Environmental penalties in Italy” by Paola Brambilla focuses on the history and actual issues of criminal environmental law in Italy.

“Enforcing EU environmental law outside Europe? The case of ship dismantling” by Thomas Ormond provides a special view on EU law enforcement from an international perspective.

Armelle Gouritin and Paul De Hert critically discuss the recent developments of European environmental criminal law in their article “Directive 2008/99/EC of 19 November 2008 on the protection of the environment through criminal law: A new start for criminal law in the European Community?”

Topics which focus on actual EU-law issues:

The viewpoint of environmental organisations towards the setting of standards of emissions is provided in “Development of harmonised European standards for measuring emissions from construction products in CEN from the perspective of environmental organisations – Part 1” by Michael Riess and Ralf Lottes.

The article “Regulation of nanomaterials under present and future Chemicals legislation - Analysis and regulative options” by Stefanie Merenyi, Martin Führ and Kathleen Ordnung critically reviews REACH under the perspectives of nanomaterials. It also contains information on recent developments on EU level.

Other topics focus on national laws of non-EU countries:

In his article Eugene A. Wystorobets focuses on the “Principle of public participation in environmental law of the Russian Federation” and provides general insights into Russian law.

“A survey of the Vietnamese environmental legislation on water” by Michael Zschesche and Duong Thanh An focuses on Vietnamese water law and the organisational background of administrative institutions in this context.

The next issue of the *elni review* will focus on the Industrial Emissions Directive (IED). Please send contributions on this topic as well as other interesting articles to the editors by the end of June 2009.

Nicolas Below/Gerhard Roller

March 2009

elni Forum 2009

on 14th May 2009

at FUSL, Facultés universitaires Saint-Louis in
Brussels, Belgium.

***“The Directive on Industrial Emissions
and its implementation in national law -
key issues and practical experiences”***

The elni Forum 2009 will offer the opportunity to discuss implementation issues of the upcoming European Directive on Industrial Emissions (IED). European and national environmental law experts will comment on this issue.

The **Annual Meeting of the elni Association 2009** will take place before the elni Forum.

More information is available at:
www.elni.org

Special Announcement

The representative for interested parties of the ECHA Management Board and co-founder of the *Environmental Law Network International* – Marc Pallemmaerts – is now member of the ECHA Board of Appeal.

The editors wish him all the best and every success in the future!

In his place Martin Führ, also co-founder of *elni* and editor of the *elni Review* was nominated at 18 December 2008 by the Commission as a new member of the Management Board of the ECHA (European Chemicals Agency) to represent interested parties.

Enforcing EU environmental law outside Europe? The case of ship dismantling

Thomas Ormond

EU environmental law has learnt to address the problems that economic activities have produced for environment and health in Europe. An impressive body of such legislation has been developed and amended in recent decades with a growing focus on better implementation and enforcement. The status of that enforcement is still far from perfect, as shown by the air quality in many cities, water pollution in agricultural areas, illegal landfills in southern and eastern Member States, and the steady loss of biodiversity all over the EU. But it has also become obvious that the real challenge today lies in global environmental issues and the contributions that Europeans make to the problems as well as to the solutions on that scale.

The European Union is a big player when it comes to worldwide trade with industrial and agricultural products and services. Consumption patterns, quality requirements, export subsidies, or the behaviour of European investors and tourists have a huge impact on the world economy. It is thus not surprising that the EU and its Member States play an active and often leading role in the development of international law and governance, notably in the field of the environment. Not so generally known is the significance of EU Member States and European owners in the world of shipping: about 23 % of the merchant ships worldwide fly the flags of Member States and approximately 40 % of the world tonnage is owned by companies domiciled in Europe.

What happens to those ships at the end of their lives may be seen as a striking example for the export of an environmental problem from the First to the Third World: More than 80 % of the international merchant ship tonnage is nowadays broken up in South Asia, especially in Bangladesh and India. Today's end-of-life ships do not only consist of steel – which makes recycling profitable – but also contain more or less large quantities of waste oil, asbestos, PCB and other hazardous materials. The recycling countries and particularly Bangladesh rarely have the means and the will to avoid pollution with such hazardous waste and to protect workers' health adequately. This failure, which is evident in many developing countries, is one of the reasons why the EU transposed the so-called Basel Ban Amendment to the Basel Convention on transboundary waste movements into its law and strictly prohibited since 1998 the export of all hazardous waste and waste for disposal to non-OECD countries. But the export ban, as will be explained in more

detail, is virtually ineffective in relation to European ships that go for dismantling to South Asia.¹

The following article focuses on legal aspects of the ship dismantling problem as an example of the difficulties of applying and enforcing EU law especially in a maritime context, before turning to the current initiatives to regulate the recycling of ships at international and European level.

1 Territorial limitations of European law

Art. 299 of the Treaty Establishing the European Community (EC) defines the Treaty's geographical scope of application. The rather lengthy provision lists on the one hand the Member States and their overseas departments in which Community law should fully apply, and on the other hand refers to certain overseas countries and territories for which special arrangements are made and only parts of the EC Treaty should be applicable. Thus, there is a differentiated regime where the territorial outposts of EU Member States are governed to varying degrees by the legislation and policies of the Union. While the inhabitants of, for example, French Guyana are in principle subject to the same rules as those of mainland France, other territories listed in Annex II to the EC Treaty are covered by the special regime of association laid down in Art. 182-188 of the Treaty, and still others – such as the Channel Islands and the Isle of Man – are in principle not part of the EU, and its law does not apply there at all or only to the extent necessary to ensure the implementation of certain arrangements under a former treaty of accession. This differentiated system will not be modified in substance by the Treaty of Lisbon.²

The territory of Member States, and with it the application of EU law, does not end on the shoreline but extends into the territorial sea with a breadth of up to 12 nautical miles (22.2 km), as laid down by Art. 3 of the United Nations Convention on the Law of the Sea (UNCLOS). Partial sovereignty may be exercised in the so-called contiguous zone within 24 nautical miles

¹ Cf. Communication from the Commission „An EU strategy for better ship dismantling“ of 19 November 2008, COM(2008) 767 final, and the preceding Green Paper on better ship dismantling of 22 May 2007, COM(2007) 269 final, with annex SEC(2007) 645. More data are contained in the impact assessment accompanying the EU strategy communication, SEC(2008) 2846. All documents are published on the Commission website at <http://ec.europa.eu/environment/waste/ships/index.htm>.

² Cf. Art. 52 Treaty on European Union and Art. 198-204, 349 and 355 of the Treaty on the Functioning of the European Union.

from the coastal baseline (Art. 33 of UNCLOS). In addition, coastal states have rights of economic exploitation and research, and duties and rights to preserve the marine environment within the exclusive economic zone up to 200 nautical miles from the baseline and on the adjacent continental shelf (Art. 55-75, 76-85 of UNCLOS). Much of these activities are nowadays governed by EU legislation and policies, such as the regulations under the Common Fisheries Policy, the Habitats Directive 92/43/EEC (concerning the establishment of marine protected areas) or the Marine Strategy Framework Directive of 2008.³

Moreover, the European Court of Justice already clarified in the 1970s that Community law may apply beyond EU (then EEC) territory and even on the high seas wherever Member States can exercise rights under public international law and the Community can claim competencies under the Treaty. This principle was exemplified in particular for the fisheries sector but applies to EU law in general.⁴ Extra-territorial effects of the *acquis communautaire* have been acknowledged especially in EU competition law⁵, but there are also many examples to be found in the field of environmental legislation. This is obvious for all product-related rules such as REACH or the RoHS and WEEE Directives which specify quality requirements and/or registration obligations also for imported products.⁶ Less frequent are norms concerning production methods for imported goods, such as Regulation 3254/91 which prohibits pelt imports from countries with inhumane trapping methods⁷, or Regulation 2173/2005 by which a licensing scheme for imported timber was introduced in order to combat illegal logging.⁸

While traditional product-related legislation in the EU is essentially concerned with competition and the protection of European consumers, the body of Community law that focuses on global environmental problems has considerably expanded since the 1980s. This follows the objective in the EC Treaty (since 1987, now in Art. 174(1)) to promote measures at international level to deal with regional or worldwide environmental problems, and the aims outlined subsequently in the 5th and 6th Environmental Action Programmes of the EU. On the basis of Art. 174 and Art. 300, the Community has become a party to more than 40 multilateral environmental agreements on UN, inter-continental or regional level reaching beyond the territory of the EU.⁹ Well-known examples are the Montreal Protocol to the Convention for the Protection of the Ozone Layer, the Kyoto Protocol to the UN Framework Convention on Climate Change, and the Rio Convention on Biological Diversity (CBD).

Some of these international agreements, in so far as they regulate trade matters, also provide for limitations on exports. As a rule, all parties to the agreements are bound in the same way. It is a specific feature of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal – or more precisely its “*Basel Ban*” Amendment III/1 which is not yet in force – that a line is drawn between EC and OECD members on the one hand, and non-EC/non-OECD countries on the other, in order to protect the Third World against hazardous waste dumping from industrialised countries. The Basel Ban has been implemented in the Community by the EC Waste Shipment Regulation and prohibits exports of hazardous waste or waste for disposal to non-OECD countries since 1998.¹⁰

2 The status of ships

One special case of national law reaching beyond the boundaries of the state’s territory is its application on board ships that fly the flag of that state. The flag is seen by custom as a prime indicator of the nationality of a ship which, however, is determined conclusively by the documentation attesting to the grant of nationality.¹¹ That nationality in turn is the main factor in determining what state may exercise executive, legis-

³ Directive 2008/56/EC of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive), OJ L 164, 25 June 2008, p. 19.

⁴ Starting with Cases C-167/73 (Commission v France), C-3, 4 and 6/76 (Kramer) and C-61/77 (Commission v Ireland), cf. M. Ederer, *Die Europäische Wirtschaftsgemeinschaft und die Seerechtskonvention der Vereinten Nationen von 1982*, 1988, pp. 18-20; later confirmed in the so-called Drift-Net case: C-405/92 *Etablissements Armand Mondiet v. Société Arment Islais*, [1993] ECR I-6133.

⁵ P. Orebeck, *The EU competency confusion*, (2003) *Journal of Transnational Law & Policy* 13/1, pp. 119-123.

⁶ Cf. M. Führ, *Transnational Law Making and EC Product Policy: The Example of Waste Electrical and Electronic Equipment (WEEE)*, in: R. Macrory (ed.), *Reflections on 30 Years of EU Environmental Law*, 2006, pp. 273-289.

⁷ Council Regulation (EEC) No 3254/91 of 4 November 1991 prohibiting the use of leghold traps in the Community and the introduction into the Community of pelts and manufactured goods of certain wild animal species originating in countries which catch them by means of leghold traps or trapping methods which do not meet international humane trapping standards, OJ L 308, 9 November 1991, p. 1.

⁸ Council Regulation (EC) No 2173/2005 of 20 December 2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community, OJ L 347, 30 December 2005, p. 1. The Commission recently submitted a proposal for a more extensive regulation on timber marketing and illegal logging; cf. COM(2008) 644 final, and the adjoining Communication on deforestation and forest degradation, COM(2008) 645

final, both of 17 October 2008; for further examples see J. Jans / H. Vedder, *European Environmental Law*, 3rd ed. 2008, pp. 31-35.

⁹ Cf. list on website http://ec.europa.eu/environment/international_issues/pdf/agreements_en.pdf

¹⁰ Originally Council Regulation (EEC) No 259/93 of 1 February 1993 on the supervision and control of shipments of waste within, into and out of the European Community, OJ L 30, 6 February 1993, p. 1; since July 2007 replaced by Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste, OJ L 190, 12 July 2006, p. 1.

¹¹ D.D. Caron, *Flags of vessels*, in: *Encyclopedia of Public International Law (EPIL)*, vol. 11, 1989, p. 127; cf. Caron, *Ships, Nationality and Status*, *ibid.*, p. 289; R. Lagoni, *Merchant Ships*, *ibid.*, at pp. 229-230.

lative and judicial jurisdiction over a vessel. According to Art. 92(1) of UNCLOS, ships shall sail under the flag of one state only and, apart from in exceptional cases expressly provided for in international treaties or UNCLOS, shall be subject to its exclusive jurisdiction on the high seas. Many writers and also the former Permanent International Court of Justice (in the “*Lotus*” case of 1927) have illustrated the idea of exclusive jurisdiction by likening the vessel to a floating piece of the flag state’s territory.¹² This analogy, however, has been more or less given up nowadays in favour of acknowledging a regime sui generis for ships, as laid down in the provisions of UNCLOS and other international conventions.

Under Art. 94(1) and (3) of UNCLOS, every state has the duty to effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag, and shall take the necessary measures for those ships to ensure safety at sea with regard, inter alia, to the construction, equipment and seaworthiness of ships, their manning, labour conditions and the training of crews, as well as the use of signals, maintenance of communications and prevention of collisions. Thus, flag state jurisdiction means, among other things, that its labour law applies to the seafarers on board, and that the flag state’s laws on maritime safety and environmental protection are applicable to the design, construction and operation of the ship, at least in so far as the rights of coastal states to prevent pollution from vessels are not concerned.

As EU law applies wherever Member States can exercise rights under public international law and the Community can claim competencies under the Treaty, EU directives and regulations on the protection of workers’ health and the environment have to be applied as well on all ships that fly the flag of a Member State. The use of any kind of asbestos or of articles containing asbestos fibres, for instance, is generally prohibited in the EU as of 2005 by amendments of Directive 76/769/EEC¹³, and as from 1 June 2009, by Title VIII and Annex XVII of the REACH Regulation¹⁴, and this ban is binding also on European-flagged ships.

The attribution of a flag to a ship nowadays seems almost arbitrary in practice, with “*flags of conven-*

ience” like Panama, Liberia, the Bahamas or the Marshall Islands providing registration for most of the world merchant fleet, although ship-owners and crew are usually not resident in these countries and few ships call at ports there.¹⁵ But under international law the granting of nationality to a ship is not completely free: under Art. 91(1) of UNCLOS there must be a “*genuine link*” between the flag state and the ship. In the past decades when world trade was liberalised and partly deregulated, this requirement was often disregarded but it is still acknowledged as one of the basic principles of maritime law.

Similarly, the change of a ship’s flag does not necessarily depend only on the ship-owner’s discretion. Under international law – Art. 92(1) of UNCLOS – a ship may not change its flag during a voyage or while in a port of call, except in the case of real transfer of ownership or change of registry. National laws may go further, and still in the late 1980s permission from a ministry used to be often required for any change of flag.¹⁶ Nowadays, for instance Canada and Norway have legislation to the effect that governmental permission is needed for reflagging of national-flagged fishing vessels to foreign registries, in order to combat the evasion of fishing quotas and other regulations against overfishing.¹⁷

3 Compliance and enforcement on the seas

“*While the international community has made significant strides in developing agreements, rules and regulations to improve ocean and coastal management, compliance and enforcement of these instruments often lags.*”¹⁸ The dramatic effects of “*illegal, unreported and unregulated*” (IUU) fishing on the marine ecology, the continuing pollution by oil spills and unfiltered air emissions from ships, and the increasing accumulation of floating waste on the oceans show the insufficiency of existing rules and their implementation in practice.¹⁹

¹² Caron, *ibid.*, pp. 289-290; M. Núñez Müller, *Die Staatszugehörigkeit von Handelsschiffen im Völkerrecht*, 1994, pp. 82-84.

¹³ Council Directive 76/769/EEC of 27 July 1976 on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations, OJ L 262, 27 September 1976, p. 201, as amended.

¹⁴ Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, OJ L 396, 30 December 2006, p. 1.

¹⁵ According to data from the European Maritime Safety Agency (EMSA) and Lloyd’s Register, the four countries mentioned above accounted alone for nearly 45% of world merchant tonnage in January 2008; see Commission Staff Working Document SEC(2008) 2846 (Impact Assessment), published at http://ec.europa.eu/environment/waste/ships/pdf/impact_assessment.pdf, on p. 9. For a general perspective cf. J.S. Ignarski, *Flags of Convenience*, in: EPIL, vol. 11, p. 125; N.S. Skourtos, *Die Billig-Flaggen-Praxis und die staatliche Flaggenverleihungsfreiheit*, 1990. The UN Convention on Conditions for Registration of Ships, signed in 1986, has not yet entered into force due to an insufficient number of ratifications.

¹⁶ Cf. D.D. Caron, *Flags of Vessels*, in: EPIL, vol. 11 (1989), at p. 127.

¹⁷ OECD, *Why Fish Piracy Persists. The Economics of Illegal, Unreported and Unregulated Fishing*, 2005, pp. 173, 238.

¹⁸ B. Cicin-Sain, *Foreword, Policy Brief: Compliance and Enforcement*, 4th Global Conference on Oceans, Coasts and Islands (Hanoi, April 2008), at p. iii.

¹⁹ For “IUU” fishing see also R.J. Baird, *Aspects of Illegal, Unreported and Unregulated Fishing in the Southern Ocean*, 2006, for estimates of global inputs of oil to the marine environment (between 500,000 and 8.4 million tons per year) see sources at: <http://oils.gpa.unep.org/facts/sources.htm>; for air emissions e.g.: International Council on Clean Transportation (ICCT), *Air*

This insufficiency is almost universally acknowledged but the reaction of the international community is still slow and far from effective. The International Maritime Organisation (IMO) and other global institutions have few administrative powers of their own with the result that enforcement of multilateral environmental agreements essentially takes place at national level. However, many states have limited technical, financial and personnel capacities, and they frequently also lack the political will to act, prioritise business interests over others and/or point to the pressure of international competition as an excuse for not fully implementing their international obligations.²⁰

Efforts to improve environmental compliance at sea have gone essentially in two directions: on the one hand, the powers of port states and coastal states to control ships within their waters have been somewhat strengthened over the last years. Especially the system to enforce mandatory IMO agreements by way of a regional Memorandum of Understanding (MoU) on port state control has gained more and more importance since its establishment in the early 1980s. The "Paris MoU" in particular, which groups 27 maritime administrations of European states, Russia and Canada, has developed into a quite effective network of co-operation by means of regular or targeted ship inspections, databases on inspection results, detentions and banned ships, as well as "grey" and "black lists" of sub-standard flags.²¹ Nevertheless, it must be borne in mind that this control system only works in ports and coastal waters of MoU members and that it focuses more on ship safety than pollution control.

On the other hand, there have been attempts to enhance the responsibility of flag states and promote their compliance with international law also on the high seas. In the field of fisheries, for instance, an Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas ("*High Seas Compliance Agreement*") was adopted under the auspices of the UN Food and Agriculture Organisation (FAO) in 1993 and entered into force in 2003. It requires flag state authorisations for fishing on the high seas and provides for information exchange and an electronic vessel monitoring system, but its effectiveness is weakened by the absence of major fishing states and the lack of strict rules on reflagging of vessels.²²

The IMO in its sphere tries to promote flag state compliance and enforcement by various guidance documents, a "*Flag State Code*" and a voluntary audit scheme for flag state administrations established in 2003. These instruments, however, are not binding for IMO members and while the most respected flag states and some others have agreed to be audited, many administrations of flags of convenience have not done so.²³

At EU level, the Commission proposed in 2005 a Directive on compliance with flag State requirements as part of its "*Third Maritime Package*", which also included measures to strengthen port state control, the supervision of classification societies and the effectiveness of the EU traffic monitoring system.²⁴ As a response to inadequate implementation by some Member States and notably a considerable number of detentions of ships flying European flags, the original proposal for the EU Flag State Directive contained an obligation for Member States to ratify existing IMO conventions and to apply the IMO Flag State Code.²⁵ The less ambitious compromise version which was ultimately agreed on by the European Parliament and the Council in December 2008 concentrates on requirements to establish a quality management system for maritime administrations, to subject them to the IMO audit (with publication of the results) and to bring ships which have been detained into conformity with relevant IMO rules.²⁶

4 Ships as waste and the application of waste shipment law

The dismantling of end-of-life ships began to be perceived as an environmental and safety problem in the mid-1990s when a large part of the industry had

Pollution and Greenhouse Gas Emissions from Ocean-going Ships, 2007; for waste problems at sea: UNEP and others, *Marine Litter – An analytical overview*, 2005, and other publications on the UNEP website at: <http://www.unep.org/regionalseas/marinelitter/publications/>.

²⁰ Cf. Policy Brief: Ocean Compliance and Enforcement, 4th Global Conference on Oceans, Coasts and Islands, 2008, p. 1.

²¹ Cf. reports on website <http://www.parismou.org/>.

²² C. Hedley, *FAO Compliance Agreement*, in: *International Fisheries Agreements*, vol. 1, section 1.3, 2008.

²³ See the publications on flag state audits until 2007 in: IMO Maritime Knowledge Centre, *Information Resources on the Voluntary IMO Member State Audit Scheme* (Information Sheet No 13), 2009, pp. 11-12. There is as yet no list or register of performed audits and any publication of results is optional for the audited administrations. The Code for the Implementation of Mandatory IMO Instruments (Flag State Code, FSC) was adopted by an IMO Assembly resolution in 2005; text incorporated as Annex I to the draft EU Flag State Directive, see for example <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:027E:0154:0162:EN:PDF>.

²⁴ Communication from the Commission of 23 November 2005 "Third package of legislative measures on maritime safety in the European Union", COM(2005) 585 final, published at: http://eur-lex.europa.eu/LexUriServ/site/en/com/2005/com2005_0585en01.pdf.

²⁵ Proposal of 23 November 2005, COM(2005) 586 final, http://ec.europa.eu/prelex/detail_dossier_real.cfm?CL=en&DoslD=193917. In the last published Paris MoU report for 2005-2007, Slovakia figured on the "black list" and several other Eastern European states on the "grey list" of sub-standard flags: <http://www.parismou.org/upload/anrep/Target%20lists%202005-2007.pdf>

²⁶ Cf. EP TRAN Committee, Draft recommendation for second reading of 19 December 2008, PE 416.650v01-00, <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+COMPARL+PE-416.650+01+DOC+PDF+V0//EN&language=EN>, pp. 7-9.

moved from the port areas of shipping nations to tidal beaches in India, Bangladesh and Pakistan. It became apparent that the advantages of cheap labour and strong local demand for steel went along with heavy pollution and extreme accident rates. These effects were due to the high quantity of hazardous materials on board old ships – from asbestos to oil sludge – and the almost complete lack of safety precautions and facilities for environmental protection on the beaches – deficiencies which mostly continue to the present day.²⁷

Although even the Asian recycling states have some national legislation in place dealing with pollution prevention and workers' safety and health, there is usually no specific law for ship dismantling, and the existing rules are often not applied to it. At international level, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal is potentially applicable, in so far as ships on the way to demolition are to be regarded as hazardous waste. This is sometimes categorically denied by the shipping industry and its lawyers on the ground that a ship, at least as long as it can travel under its own steam and holds the corresponding IMO certificates, still functions as a means of transport and cannot itself be waste.²⁸ However, the Parties of the Basel Convention eventually agreed in 2004 that "*a ship may become waste as defined in Art. 2 of the Basel Convention and that at the same time it may be defined as a ship under other international rules*".²⁹

Art. 2(1) of the Basel Convention defines wastes as substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law. According to Art. 2(4) and Annex IV of the Basel Convention, "*disposal*" in this context has a wide meaning and includes recovery operations, such as the recycling/reclamation of metals and metal compounds (operation R4). Similarly, the EU law implementing the Basel Convention – Regulation (EC) No 1013/2006 on shipments of waste, in conjunction with the Waste Framework Directive³⁰ – identifies waste as any substance or object which the holder

discards or intends or is required to discard. Therefore, on the basis of the Basel Convention and the EC Waste Shipment Regulation it is quite clear that a ship which is intended by its owner to be broken up for metal recycling falls under the definition of waste. This view has also been confirmed by various decisions of the highest administrative courts of France and the Netherlands.³¹

The hazardousness of end-of-life ships is nowadays rarely in doubt. Theoretically, the notification procedure and the ban on exports to non-OECD countries laid down by the EC Waste Shipment Regulation need not apply if the ship can be classified under the "*green list*" code GC030 (vessels and other floating structures for breaking up, properly emptied of any cargo and other materials arising from the operation of the vessel which may have been classified as a dangerous substance or waste). However, the fact that sea-going ships with engines have more or less significant quantities of oil and oil sludge on board until the very end of their journey, and that even towed hulks carry heavy metals in paints and often coatings with toxic organotin compounds or gaskets and other equipment containing PCB, has so far prevented the green list waste code from playing any role in practice.

However, a critical question is at what point in time the intention of the owner to dispose of the ship (or in EU terminology, to discard it) materialises and how this can be verified. In EU law, as interpreted by the European Court of Justice, the distinction between waste and non-waste is drawn on a case-by-case basis but guided by the principles of precaution, prevention and high level of environmental protection, which excludes a narrow delimitation of the notion of waste.³² In the context of a potential waste shipment and in the absence of a notification to that effect, it is typically the existence of a contract between the person who arranges the shipment and the envisaged recovery or disposal facility which is the clearest indication for an intention to discard the object in question.

The demolition contract is also a regular feature of the ship dismantling process, although it is frequently not concluded directly between the long-term owner of the ship and the scrapyards operator in South Asia. Instead, some weeks or months before the actual delivery, the ship is sold to a "*cash buyer*" who then deals with the dismantling facility. This intermediate ownership is often accompanied by a change of flag and certifi-

²⁷ For a general introduction see W. Langewiesche, *The Outlaw Sea: Chaos and Crime on the World's Oceans*, 2005; R. Buerk, *Breaking Ships: How supertankers and cargo ships are dismantled on the shores of Bangladesh*, 2006; cf. Commission impact assessment and background materials at <http://ec.europa.eu/environment/waste/ships/index.htm>.

²⁸ R. Lagoni /J. Albers, *Schiffe als Abfall?*, in: *Natur und Recht* (2008) 30, pp. 220-227; cf. the legal discussion prior to the 6th Conference of the Parties of the Basel Convention recorded in document UNEP/CHW.6/17, at: http://www.basel.int/meetings/cop/cop6/cop6_17e.pdf.

²⁹ Decision VIII/26 (Environmentally sound management of ship dismantling), recital 6 of the preamble.

³⁰ Art. 2(1) of Regulation 1013/2006 refers to Art. 1(1) a) of Directive 2006/12/EC on waste. This directive will be replaced as from 12 December 2010 by Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, OJ L 312, 22 November 2008, p. 3.

³¹ Conseil d'Etat, decision of 15 February 2006 ("*Clemenceau*"), published at: http://www.conseil-etat.fr/ce/jurispd/index_ac_id0607.shtml; Raad van State, decisions of 19 June 2002 ("*Sandrien*") and 21 February 2007 ("*Otapan*"), English translations at: <http://www.basel.int/ships/relevcaselaw.html>.

³² See for example Joined Cases C-418/97 & C-419/97 – ARCO Chemie, [2000] ECR I-4475; N. de Sadeleer, *EC Waste Law or How to Juggle with Legal Concepts*, in: *JEEPL* (2005) 6, p. 458, p. 460, 462.

cates.³³ For insurance reasons it may be financially attractive to have a certificate issued specifically for the final voyage to demolition.

In these cases, and where the final voyage is made without or with only minor cargo, there should not be any doubt that its main purpose is not the maritime transport of goods or passengers but the discarding of the ship. More is not required for the application of international waste shipment rules, provided that the voyage takes place from one country to another.

However, in practice the Asian countries of destination – including China and with the only exception of Turkey – do not apply the rules of the Basel Convention to the import of end-of-life ships and do not ask for a formal prior notification with details on the envisaged waste operation, as required under that convention (the maritime administration is usually informed of any arrival some days in advance, but without waste-related data). This practice is upheld although the countries in question have banned the import of all or most other hazardous wastes and some of them, when asked by the EU Commission about import restrictions for green-listed waste, even made declarations to the effect that the entry for pre-cleaned vessels should fall under an import ban or the requirement of prior notification and consent.³⁴ A justification for this inconsistency is rarely given, apart from the irrelevant argument that ships undergo a full recycling and not disposal at their destination. The reasons after all have to be sought less in legal considerations but in strong economic interests associated with the current ship dismantling industry.

What is more difficult also in a legal sense is the application of the EC Waste Shipment Regulation to end-of-life ships. The three above-mentioned court cases in France and the Netherlands should not hide the fact that occurrences where owners were prevented from sending their ships to South Asian yards are extremely rare. This is mainly due to the fact that ship-owners have become aware of the risk of detention in an EU port and usually avoid it by arranging for their vessels to leave Europe on a cargo trip before the decision to sell for scrapping is made clear. As there is so far no obligation to disclose a demolition contract to the authorities, nor a definite age when a ship becomes waste, the chance to identify a breach of the EU export ban is slim even for authorities which are committed to enforcing the ban with regard to ships. It is obvious that in some Member States with strong

shipping interests this commitment is not very pronounced.

A legal construction based on the idea that the export of the waste ship does not take place with the departure from an EU port but with the “*floating territory*” eventually giving up its European flag, cannot seriously be considered. Even if that theory were acceptable in maritime law – where it is also obsolete nowadays – the specific traits of waste shipment law exclude an application in this context. The EC Waste Shipment Regulation, like the Basel Convention, distinguishes between countries of dispatch, of destination, and of transit. This system, as well as the time-limits for the notification procedure, would be taken ad absurdum if the moving waste or means of transport itself were regarded as “*country of dispatch*”, and the export shipment reduced to the logical second of a reflagging. The terms of waste shipment law require a strict understanding of “*country*” in the sense of land territory and surrounding territorial sea. A waste export from the EU can thus be assumed in the present context only if a ship leaves EU waters with the apparent intention of the owner to send it to a foreign dismantling facility. This case is a rare exception rather than the rule.

5 The draft Ship Recycling Convention

In reaction to several high-profile cases and growing public attention in the 1990s, the problem of dangerous and dirty ship recycling was discussed also at meetings of the Basel Convention, the IMO and the International Labour Organisation (ILO). As a first consequence, non-binding guidelines were developed for the respective purposes of the three organisations: the Basel Convention Technical Guidelines for the Environmentally Sound Management of the Full and Partial Dismantling of Ships (adopted in 2002), the IMO Guidelines on ship recycling (2003) and the ILO Guidelines for Asian countries and Turkey “*Safety and Health in Shipbreaking*” (2004).³⁵

Apart from the problem of gaps and overlaps between the three documents, it was obvious from the beginning that mere guidelines were not sufficient to change bad practices in a highly competitive market. In view of the necessity to gain acceptance from the “*maritime community*”, particularly the major flag states and recycling states, the IMO eventually took the lead in a process to develop a legally-binding instrument on ship recycling and charged its Marine Environment Protection Committee (MEPC) with this task.³⁶ On the basis of a proposal by Norway of late 2005, the MEPC elaborated a draft International Convention for the Safe and Environmentally Sound Re-

³³ Cf. the data on flags of dismantled merchant ships and the merchant fleet in general in the Commission impact assessment of 19 November 2008, <http://ec.europa.eu/environment/waste/ships/index.htm>, pp. 8-9.

³⁴ Cf. provisions for Bangladesh (import ban) and India (notification procedure) in Commission Regulation (EC) No 1418/2007, OJ L 316, p. 6, 11 and 29; the provisions of this regulation are based on the replies of non-OECD countries to a Commission questionnaire.

³⁵ See text of guidelines and further practical information at: <http://www.basel.int/ships/compilation.html#2>.

³⁶ IMO Assembly resolution A.981(24) of 1 December 2005.

cycling of Ships (“*Ship Recycling Convention*”). The version finalised at a session in October 2008 is due to be adopted at a diplomatic conference in Hong Kong on 11-15 May 2009.³⁷

The draft Ship Recycling Convention (SRC) obliges parties to give full and complete effect to its provisions in order to prevent, reduce, minimise, and, to the extent practicable, eliminate accidents, injuries and other adverse effects on human health and the environment caused by ship recycling, and enhance ship safety, protection of human health, and the environment throughout a ship’s operating life (Art. 1(1)). Thus, it addresses not only the final stage of dismantling but is meant to provide a comprehensive regime from “*cradle to grave*”. The regulations in the Annex lay down requirements on the one hand for ships – their design, construction, operation, and maintenance, as well as the preparation for recycling – and on the other hand for ship recycling facilities.³⁸

Important elements with regard to ships include a ban or limitation on the use of certain hazardous materials in shipbuilding, the obligation to carry an Inventory of Hazardous Materials on board a ship, and a system of surveys and certificates to be issued by the flag state administration or on its behalf by a recognised organisation. Before dismantling can start, an “*International Ready for Recycling Certificate*” is necessary which is based on a final survey and a “*ship recycling plan*” developed by the recycling facility.

Ship recycling facilities under the Convention need an authorisation by a competent authority and are obliged to establish management systems, procedures and techniques for the prevention of health risks to workers and the neighbourhood, and for the protection of the environment. A management plan for the facility is required and certain general rules of accident prevention and environmentally sound management of hazardous materials are laid down in the regulations of the SRC, but the details will be specified in guidelines which are under development and scheduled for adoption by the MEPC in July 2009.

The system which essentially provides for certified ships to be recycled only by authorised facilities is accompanied by a number of communication and information duties of states and by certain reporting requirements on ship-owners and recycling facilities, part of which are still controversial. In addition, the control powers of port states are acknowledged. Whether this system of control and enforcement is equivalent to the system established by the Basel Convention for waste shipments – with its prior informed notification and consent procedure, import-

export bans etc. – continues to be an issue of international discussion. In January 2008, the EU and its Member States submitted an assessment to the parties of the Basel Convention which came to a cautiously positive conclusion as result of a compromise between environmental and shipping interests within the EU.³⁹

The draft Ship Recycling Convention is strongly criticised by environmental NGOs on the grounds that it is an “*exercise in greenwashing*” with rather low standards, many loopholes and weak remedies which probably make it incapable of changing the current situation in shipbreaking.⁴⁰ Some weaknesses may indeed be identified in the text of the Convention. For instance, its scope does not cover warships, other government vessels, ships below 500 gross tons and those employed only in domestic transport. Also, nowhere is there an explicit ban on the “*beaching*” method in spite of its inherent liability to cause pollution and accidents because of the difficulty to contain oil spills and to bring cranes and other modern machinery near the ship. The prohibitions and limitations of hazardous substances on board ships are in reality less ambitious than they seem since the materials in question – asbestos, ozone-depleting substances, PCB and organotin compounds – are essentially already banned by other international conventions, while the use of similarly toxic materials like mercury, lead or brominated flame retardants is not restricted. Last, but not least, the transparency and sanctions in cases of non-compliance with the SRC are very limited: apart from the possibilities of port state control against non-complying ships, the Convention basically provides only for duties of investigation and information exchange between the parties and the IMO. An independent audit of ship recycling facilities, a mechanism for dispute settlement or investigation by the IMO itself, or a “*compliance committee*” on the lines of the Basel Convention are not foreseen by the draft Ship Recycling Convention.

On the other hand, these gaps or shortcomings are not uncommon for international agreements and notably those under the auspices of the IMO. The exemption for government vessels, for example, is a standard feature of UNCLOS and other maritime treaties, due to the concept of sovereign immunity, but it would not prevent ships from falling under the Convention once they are decommissioned from public service. The absence of a strong non-compliance regime is an almost inevitable consequence of the diversity of interests among global stakeholders, and of the desire to

³⁷ See the Report of the Marine Environment Protection Committee on its 58th Session, with the draft Convention in Annex 6, doc. MEPC 58/23 of 16 October 2008, available at: http://ec.europa.eu/environment/waste/ships/pdf/report_mepc58.pdf.

³⁸ Cf. reg. 4-14, 15-23 SRC.

³⁹ EU Assessment on ship dismantling with particular reference to the levels of control and enforcement established by the Basel Convention and the expected level of control and enforcement to be provided by the draft Ship Recycling Convention in their entirety, published at: <http://www.basel.int/ships/comments/OEWG6/oewg6.html>

⁴⁰ See for example NGO Shipbreaking Platform, Press statement of 20 November 2008, at: <http://www.shipbreakingplatform.com/>.

gain a wide acceptance for the envisaged Ship Recycling Convention. The Basel Convention, as mentioned above, is not a model for an effective instrument when it comes to end-of-life ships. Its compliance committee in fact exists only on paper, as there is a widespread reluctance among states to make use of such a “strong” mechanism in cases of non-compliance. With regard to “beaching”, the chances to reduce and eventually abolish this practice will depend very much on a combination of economic factors and the extent of public pressure that can be exerted to outweigh the financial attractions of “eco-dumping”. The Ship Recycling Convention, with all its weak spots, at least does provide a number of broad principles and “state of the art” requirements against which primitive practices will have to be measured in future.

6 EU strategy on ship dismantling

European action in maritime affairs is hampered by the fact that the EU as such is not a member of the IMO and – with one limited exception⁴¹ – not a party to the conventions concluded under the auspices of the IMO. The European Commission (not even the EU or the European Community itself) has only observer status in this organisation. By contrast, the European Community has acceded as a “regional economic integration organisation” (REIO) to all multilateral environmental agreements generated in the framework of the United Nations Environment Programme (UNEP). The Basel Convention is one of many such agreements.

As a consequence, the EU/EC contributed to the discussion on ship dismantling since the late 1990s first mainly by participating, together with the Member States, in relevant meetings of the Basel Convention and by commissioning a number of studies on the subject.⁴² The initial studies highlighted the economic drivers for the relocation of the ship recycling industry to South Asia and warned of a coming surge of scrapping activity due to the phasing-out of single-hull oil tankers by international and European legislation that would take full effect in 2010 and 2015. In addition, the European Commission co-funded some research and pilot projects exploring the possibilities of clean

ship dismantling, and cautiously indicated the necessity to act in its documents on Maritime Policy.⁴³

Apart from this, for years every EU Member State chose to follow its own policy on ship dismantling or to refrain from action altogether. The most important shipping nation in the EU – Greece, with 6 % of the world fleet flying its flag and 17 % owned by Greek companies⁴⁴ – saw no necessity to influence the activities of its ship-owners in any way to improve the situation. Others, like Germany and Denmark, provided active contributions to the work at international level. The UK and France went further and also developed national strategies to cope with the problem, especially in view of their sizeable navies.⁴⁵

In retrospect, it was the envisaged dismantling of warships – a relatively minor fraction of the world fleet – that in particular helped to raise awareness in Europe and eventually prompted the European Commission to take action. In 2003-2004, the transfer of vessels from the US naval reserve fleet (“US ghost ships”) to a recycling facility in the UK created a scandal and was blocked for some years because the facility at first did not have full licences for the planned operation.⁴⁶ In 2005-2006, the French former aircraft carrier “Clemenceau” was sent to India for demolition after a partial pre-cleaning in France, but had to be called back following a decision of the Conseil d’Etat which declared the export of the decommissioned ship to be in violation of the EC Waste Shipment Regulation.⁴⁷ This event, apart from forcing France to reconsider its policy, also motivated Environment Commissioner Dimas to announce work towards an EU-wide strategy for dealing with the end-of-life ship problem in April 2006. Subsequently a Green Paper on better ship dismantling was published in May 2007 which set out a range of possible measures by the EU. After a public consultation, further research and an impact assessment, a communication

⁴¹ Art. 19 of the 2002 Protocol to the Athens Convention of 1974 relating to the Carriage of Passengers and their Luggage by Sea (PAL) contains a REIO clause.

⁴² Den Norske Veritas /Appledore International /Commission of the European Communities [DG III = Enterprise], Final Report: “Technological and Economic Feasibility Study of Ship Scrapping in Europe”, 2001; COWI /European Commission – DG Energy and Transport –, “Oil Tanker Phase Out and the Ship Scrapping Industry”, 2004; COWI /DHI /European Commission – DG Environment –, “Ship Dismantling and Pre-Cleaning of Ships”, 2007; all published at: <http://ec.europa.eu/environment/waste/ships/index.htm>.

⁴³ Cf. Green Paper “Towards a future Maritime Policy for the Union” of 7 June 2006, SEC(2006) 275 final, vol. II, at p. 43, and now the “Action Plan”, Commission staff working document SEC(2007) 1278, at p. 16, both published at: http://ec.europa.eu/maritimeaffairs/policy_documents_en.html. For the research projects see list on website *supra* note 42. Apart from this, a feasibility study was funded for a model ship recycling yard in the Netherlands (“Ecodock”) which, however, proved to be not economically viable.

⁴⁴ Data of January 2008; European Commission impact assessment (*supra* note 1), at p. 9; UNCTAD, Review of Maritime Transport 2008, at p. 39.

⁴⁵ UK Ship Recycling Strategy of February 2007, <http://www.defra.gov.uk/environment/waste/strategy/ship.htm>; Report of the French Interdepartmental Committee on the Dismantling of Civilian and Military End-of-Life Ships (MIDN), March 2007, http://www.sgmer.gouv.fr/IMG/pdf/2007-06-18_-_Rapport_MIDN_english_version.pdf.

⁴⁶ Cf. <http://www.hartlepoolmail.co.uk/news/Ghost-ships-get-green-light.4229779.jp>.

⁴⁷ Cf. *supra* note 31. The vessel is now going to be dismantled in the UK at the same site as the “US ghost ships”: <http://www.guardian.co.uk/environment/2009/feb/06/clemenceau-ghost-ship-teesside>.

on “An EU strategy for better ship dismantling” was adopted in November 2008.⁴⁸

In this strategy document, the Commission proposes action essentially on three fields: enhancing the enforcement of current waste shipment rules, immediately starting preparations to make key elements of the IMO Ship Recycling Convention mandatory and fill any gaps identified, and encouraging voluntary industry action. In the longer term, the strategy proposes to look at the feasibility of an EU certification and audit scheme for ship recycling facilities and of creating a “ship dismantling fund” by which clean recycling operations could be financed out of contributions from ship-owners and possibly other stakeholders.

Key elements of the IMO Convention which would be taken up by an EU directive or regulation are in particular the surveys and certificates for an Inventory of Hazardous Materials on board and for making ships “ready for recycling”, the major requirements for ship recycling facilities and the rules on reporting, and communication of information. One major gap of the Convention that could be filled by EU legislation – where the exemption for military purposes (Art. 296 of the EC Treaty) is not as wide as the sovereign immunity clause in IMO instruments – concerns the dismantling of warships and other government vessels. However, strong resistance in this respect also from within the Commission has resulted in a softening of the strategy proposal which now only speaks of “further assessing the option” to lay down rules for the clean dismantling of government ships.

Measures to encourage voluntary industry action would, for instance, include an EU-wide public campaign, an award for exemplary ship recycling activities and guidance to ship-owners with a list of clean dismantling facilities. In the context of better enforcement of current waste shipment law, the strategy also mentions guidance from the Commission, more multilateral cooperation (inside the EU and with third countries) as well as the establishment and maintenance of an EU list of ships that are ready for scrapping. However, this last idea is made dependent on a feasibility check in view of the concerns already voiced by the shipping industry.

Likewise, the proposal to establish an EU-sponsored certification and audit system for ship recycling facilities in order to compensate existing governance problems in some developing countries and the lack of a non-compliance mechanism in the draft IMO Convention, has been toned down in the strategy document towards “further assessing the feasibility” of such a scheme. The assessment has in fact been carried out already in a study commissioned by the European Maritime Safety Agency (EMSA) in 2007, which advocated a system based on the planned ISO standard

3001 for ship recycling facilities but combined with a classification into three quality levels.⁴⁹ However, this idea of reinforcing the authorisation system of the IMO Convention with an independent audit for recycling facilities is currently rejected by a majority also of shipping states inside the EU.

Altogether the new Commission communication on a ship dismantling strategy paves the way for EU-wide early implementation of the IMO Ship Recycling Convention, but it is at present doubtful as to whether the coming EU legislation will go further and aspire to fill gaps and reinforce the control system of the Convention. The degree of ambition of EU legislators is likely to depend on whether the existence of the international agreement and voluntary industry action can produce positive effects on the ground already in the short term, and/or whether a boom in sub-standard scrapping will highlight the inadequacy of the international regime. In any case, a policy which wants to achieve real change in terms of bad practices will require here, as elsewhere in the maritime context, a combination of plausible and clear rules, forceful implementation, incentives for voluntary action, and support by strong public pressure.

7 Conclusion

The title question – Enforcing EU environmental law outside Europe? – has to of course be answered in the negative when the exercise of executive or judicial functions in a foreign country is meant. The principle of territorial sovereignty prevents any European inspector from ordering the closure of an illegal scrapyard on a beach in Asia. But if understood in a wider sense as the question of what consequence should be drawn from the environmental and social impact that European production and consumption patterns have on the rest of the world, the answer is less easy to give. In the case of international waste shipments, the risk of toxic waste from Europe being dumped in Third World countries has led to export bans and strict rules for prior notification and consent. These rules do not work well with regard to the transfer of end-of-life ships to Asia for dismantling, and therefore the establishment of a new specific international regime on ship recycling is an urgent necessity. The role of the EU in this context is to ensure that ships with a strong link to the Union in terms of flag or ownership are dismantled only in safe and environmentally sound facilities worldwide, and to use all suitable legislative and non-legislative means to this end.

⁴⁸ *Supra* note 1.

⁴⁹ COWI/Litehauz, “Study on the Certification of Ship Recycling Facilities”. Final Report, September 2008. The study report is currently not available to the public; cf. EMSA website <http://www.emsa.europa.eu/end185d012d002.html> (27 February 2009).

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 50 02 40
D-79028 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:

Novalisstrasse 10
D-10115 Berlin
Phone +49(0)30-280 486 80
Fax +49(0)30-280 486 88
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.

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- **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
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- Water and energy management
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- VolkswagenStiftung
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- Federal Ministry of Consumer Protection, Food and Agriculture

Contact

Darmstadt Office

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

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. Since then, elni has grown to a network of about 350 individuals and organisations from all over the world.

Since 2005 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

The Coordinating Bureau was originally set up at and financed by Öko-Institut in Darmstadt, Germany, a non-governmental, non-profit research institute.

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. It 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 Coordinating Bureau is currently hosted by the University of Bingen. elni encourages its members to submit articles to the Review in order to support and further the exchange and sharing of experiences with other members.

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.

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- Access to justice in Environmental Matters and the Role of NGOs, de Sadeleer/Roller/Dross, Europa Law Publishing, 2005.
- Environmental Law Principles in Practice, Sheridan/Lavrysen (eds.), Bruylant, 2002.
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- Dynamic International Regimes: Institutions of International Environmental Governance, Thomas Gehring; Peter Lang, 1994.
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- Licensing Procedures for Industrial Plants and the Influence of EC Directives, Gebbers/Robensin (eds.), P. Lang, 1993.
- Civil Liability for Waste, v. Wilimowsky/Roller, P. Lang, 1992.
- Participation and Litigation Rights of Environmental Associations in Europe, Führ/Roller (eds.), P. Lang, 1991.

Elni Website: elni.org

On the elni website www.elni.org one finds news of the network and an index of articles. It also indicates elni activities and informs about new publications. Internship possibilities are also published online.