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BETWEEN THE LIMITS OF ENVIRONMENTAL DAMAGE

Comparative study on national damage definitions and severity thresholds for biodiversity, water and land damages in selected EU Member States

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CONTENT

1. Introduction

With the Environmental Liability Directive[1] (ELD) the EU tried to establish a common liability framework for the prevention and remediation of damage to animals, plants, natural habitats water resources and soil damages. The liability scheme basically is narrowed to certain specified occupational activities. Public authorities are responsible implementing the necessary (financial, preventive, remedial) measures on responsible operators.

ELD entered into force on 30 April 2004. Although the EU Member States had three years to transpose the Directive in domestic law, the transposition of ELD was completed by the last member state not before July 2010. Practical experience in the implementation and application of the ELD system varies broadly across the member states and it is to be highlighted that one of the Directives' dedicated aims – to have a level-playing field in the prevention and remediation of environmental damage across Europe – is quite far from being realized at the moment. To assess the implementation of the ELD the European Commission (EC) has launched various studies on the implementation and application of the ELD in EU member states to have more information and a basis for the forthcoming revision of the Directive in the next years. One of the red threads through the evaluation was that the notion of damage (the damage concept according to the ELD and its severity thresholds) might be one of the key aspects for an effective environmental liability system across Europe. Major difficulties when assessing and applying severity thresholds in member states' practice have been detected[2]. This becomes especially confusing when having to deal with different notions of damage in different systems (ELD notion and pre-existing liability systems). In order to establish a level-playing field and an effective liability system we are of the opinion, that it is highly important to integrate the ELD system into internationally and nationally existing liability systems (or the other way around) and to have a clear notion of environmental damage in place which does not inhibit by its narrow scope any application of the ELD in practice, but foster the application of the ELD throughout the national practice (in all kind of damages to biodiversity, water or soil).

Consequently with the current study we will try to highlight how thresholds are perceived differently (ELD thresholds, in different countries, ELD vs, national liability system thresholds) in theory and practice and how this might hinder/foster ELD implementation, and detect possible solutions to the existing threshold problems.

2. Scope of the analysis/Research framework

The objective of the current study was to provide information on the notion of environmental damage in EU member states

[1] DIRECTIVE 2004/35/CE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage

[2] Cp. Meeting Minutes - ELD Implementation Workshop, January 2013, BIO Intelligence Service (2013),Implementation challenges and obstacles of the Environmental Liability Directive,Final report prepared for European Commission – DG Environment. In collaboration with ASStevens & Bolton LLP

Therefore a survey on the notion of environmental damage **(J&E ELD Threshold Surveys)** in seven member states was carried out assessing the damage definition of the legislation transposing ELD on protected species and natural habitats (=biodiversity damages), water and land, analysing if it is more or less stringent than ELD prescribes and in which respect, how the damage definitions are transposed and interpreted, the notion of damage in still existing national liability regimes similar to ELD, and how these systems are meant to interact especially with respect to eventual severity thresholds.

J&E members in following countries have handed in respective analyses:

- **Austria**
- **Estonia**
- **Germany**
- **Hungary**
- **Romania**
- **Slovenia**
- **Spain**

The analytical comparison of these reports aims to:

- ❖ Highlight the difference in the notion of environmental damage in a cross-country approach
- ❖ Assess the notions of damage under ELD and still existing national regimes
- ❖ Outline academic discussion on the notion of damage if existent
- ❖ Identify weaknesses in the ELD damage definition hindering the achievement of the ELDs aim to establish an European environmental liability system based on the "polluter pays" principle.

3. Executive Summary

Regarding **biodiversity damages** the ELD was transposed into national legislation without mentionable adaption of its damage definitions and severity thresholds. The broad notion of damage and the unclear concepts make an interpretation and practical application quite difficult. There seems to be no clear notion of which national liability regimes (if existent) are in competition or to be complementarily applied when it comes to biodiversity damages. The situation seems slightly easier in countries where the ELD was transposed by amending the existing national liability systems (i.e. Hungary). Major opinion of the legal experts is that in order to be effective and to create somehow a level-playing field the ELD system shall not derogate other liability provisions (cp. contrary method in the German system: subsidiarity clause), it shall be applied complementarily and as a strengthening element to all existing liability regimes. The option to include national biodiversity damages was broadly applied by the assessed countries – only Austria (except Vienna) and Germany did not opt for an inclusion of nationally protected species and habitats. Here and there national liability systems somehow similar to nature of the ELD are existent and mainly embedded in the national Nature Protection Acts. Most of them do establish a much broader notion and indeed a rather different understanding of biodiversity damage than ELD does. At the same

time these national systems lack valuable components provided for by the ELD: e.g. no accidents covered, concept of compensatory and complementary remediation missing, no public participation and access to justice.

The notion of and the threshold for **water damages** is seen very differently in the analyzed systems: Although the definition of "waters" in the ELD transposing legislation is quite uniform – the wording is basically lend from the Water Framework Directive and the perception of water damage seem to be equal – the analyzed systems apply to damages to "all waters" and not only "water bodies".[3] As most of the assessed countries made references to their Water Acts with respect to the definition of "waters" both the ELD transposing legislation and the national liability regimes for water damages emanate from the same concept of "waters". Due to a lack of adequate case law and respective case databases the *"significance threshold"* for water damages and its application seems very unclear. We are not able to depart from a harmonized approach how to interpret the significance threshold for water damages across the EU – in Estonia they would say only a change in the classification of waters fulfills the significance threshold, whereas in Austria the threshold would be interpreted to be quite lower. It is clear that the decision, if the threshold is reached, is to be made on case-by-case basis, but it is not coherent that the discussion in some countries departs from the change of water category, whereas somewhere else the criteria is a measurable adverse change (under the premise that the Directive draws the line at natural fluctuation and self-regeneration) meaning that the threshold is interpreted very low. It is neither justifiable, that slow and gradual deteriorations shall not fulfill the criteria for environmental damage – that would not be in conformity with the ELD if at some point *("the jug goes to the well until it breaks")* the threshold is reached or even exceeded.[4] The Hungarian legislation establishes criteria for the evaluation of a "significant adverse effect" on surface waters and separately for groundwater – similarly it would be advisable to have a set of clear criteria for the assessment of the significance threshold of water damages on European level embedded in the ELD.

The national liability regimes for water damages – those which by its nature are very similar to the ELD system - are predominantly stricter. They provide for no or very low thresholds. It would be a real step forwards in the achievement of a high standard of environmental protection and a uniform environmental liability system all over Europe if the mentioned systems (ELD and national) could melt and incorporate – having low threshold criteria in the ELD in place and appealing for an integrative approach on national level.

As can be seen in the assessment below the significance threshold for **land damage** provided for by the ELD is mostly undercut – be it by the ELD transposing legislation itself (Germany, Hungary, Croatia, Carinthia) or by some national liability system for soil damages (Austria, Estonia, Spain). Nevertheless the national systems on soil protection are not quite elaborated and the missing EU legal framework on soil protection does not improve this situation. The concept of "land" and "soil" is generally confusing – clear regulations about

[3] By restricting the definition to "water bodies" only very few incidents would be sufficiently severe to trigger environmental liability because, among other things, some water bodies may cover a very large area. And the purpose of the ELD promoting environmental protection would be deeply undermined – as huge incidents polluting considerable water paths wouldn't even fall under the scope of ELD water damages.

[4] Imminent threat of an environmental damage is often produced by an excessive use of certain substances (fertilizers, plant protection products etc.) which are constantly used and over time leading to an imminent threat of environmental damage.

what their meaning and necessary protection are missing. This might be an indication that the concept of the environmental media itself ("land" or "soil") is to be adapted and clarified. By now the central element of land damages is not - as in the case of water damages - the deterioration of a natural resource but the health risk. I.e. land damage can be caused only by direct ingestion, inhalation absorption, indirect uptake via food, including drinking water derived from ground water. These criteria do not comply with the environmental damage concept, as it requires an additional element to be fulfilled → risk of human health being adversely affected - an element predominantly deriving from civil liability which should not apply to environmental damage. Preferably an integrated approach for land damages – either on EU level or deduced from national liability regimes on soil damages and their practice and integrated into the ELD regime – could lead to high protection standards and a unified perception of land damages all over the EU – the establishment of clear criteria or limit values would be rather useful. In Poland a high number of land damage cases have been handled under the ELD regime so far. And the reasons for this are to be found in

- the lower threshold on land damages (no risk of human health being adversely affected necessary), and the fact that
- pre-existing legislation connected to the protection of surface of land was repealed when the Environmental Damage Act - EDA (transposing ELD legislation)came into force. Every incident is examined as ELD case because EDA is lex specialis in relation to other framework acts (ex. Water Act and Environmental Protection Act which have special relation provisions; in accordance with them EDA has to be used in taking prevention and remedial action. Only when the incident cannot be qualified as a ELD case the other law is used.[5]

This example may show us, that an effective ELD system may well function if it is successfully integrated into the national system and equipped with clear rules and a straight forward system how and when to apply it.

This leads us to the interaction of different liability systems currently in place – The assessed states perceive the interaction of liability systems quite differently. Germany added a subsidiarity clause into its Environmental Damage Act whereas in Estonia the Environmental Liability Act is seen as *lex specialis* in relation to national liability regimes. The Austrian Federal Environmental Liability Act merely states that further obligations due to directly applicable Union legislation and on the basis of laws and regulations enacted governing the prevention or remediation of environmental damages remains unaffected. This means that the ELA shall not derogate further liability provisions. Additionally parliamentary materials evaluate the ELD system as complementary and strengthening element to the already existing national liability systems. It should not be applied in an isolated way – which leads us to the conclusion that a complementary application of both national and ELD systems is intended in Austria.[6] In Hungary the integration of the ELD regime into the national liability regime led to a clear legal framework which is to be seen in a positive way. Nevertheless it has to be mentioned that the integration of the ELD thresholds on land, water and biodiversity damages – although now providing for clear criteria – led to higher thresholds for the mentioned types of damages. In general the legal experts having carried out the current

[5] Cp. ELD Implementation Workshop 16th January 2013 - Presentation from Anna Kozińska, Polish Ministry of Environment: http://eldimplement.biois.com/meetings

[6] IA 464/A BlgNR 24. GP.

assessments would wish to have a complementary application of both regimes in place. The ELD itself states, that "*the Directive shall not prevent Member States from maintaining or adopting more stringent provisions in relation to the prevention and remedying of environmental damage […]" (cp. Art 16).* It does not state how administrative liability regimes could/should interact – preferably this could be clarified to have legal certainty and respective guidelines not only for the application but also the transposition of the ELD for the member states.

4. Biodiversity Damages

Depending on the legislative competences in the analyzed states the liability regime on biodiversity damages is fixed in a different way. In Austria legislative and executive competence in nature protection issues lies with the Laender. Consequently all Laender have transposed the liability system on biodiversity damages into their legislation, meaning nine pieces of legislation have evolved in Austria: Some Laender have enacted a separate Environmental Liability Act whereas others have integrated the obligations arising from the ELD in their sectorial environmental laws. In Hungary different environmental protection acts have been amended in transposition of the ELD – The new system of biodiversity damages is established in the Environmental Protection Act (EPA) and by Government Decree 91/2007 on establishing the extent of damage caused to the natural environment and on the rules of compensation for damage. The other five states (Croatia, Estonia, Germany, Romania and Spain) transposed the liability system on biodiversity damages in one single act.

4.1. Biodiversity Damages according to ELD

The ELD defines damage to protected species and habitats (hereinafter: biodiversity damage) as **"***any damage that has <u>significant adverse effects on reaching or maintaining the favourable conservation status of such habitats or species.</u> The significance of such effects is to be assessed with reference to the baseline condition, taking account of the criteria set out in Annex I; Damage to protected species and natural habitats does not include previously identified adverse effects which result from an act by an operator which was expressly authorized by the relevant authorities in accordance with provisions implementing Article 6(3) and (4) or Article 16 of Directive 92/43/EEC*[7] *or Article 9 of Directive 79/409/EEC*[8] *or, in the case of habitats and species not covered by Community law, in accordance with equivalent provisions of national law on nature conservation."*[9]

In the following we assessed how the national legislations transposing ELD define damages to protected species and natural habitats and if it is more or less stringent than ELD prescribes and in which respect is it more or less stringent (e.g. does it include a broader range of species and habitats – such as species and habitats protected by national law)

[7] Fauna-Flora-Habitats Directive (FFH-Directive).
[8] Birds Directive.
[9] ELD Definition (cp. Art 2 par 1 lit a. Directive 2004/35/CE).

Most systems copied the damage definition from the ELD itself (cp. Austria, Estonia, Romania, Germany). Only the Croatian system provides for a damage definition which is broader than the ELD prescribes. The Croatian Environmental Protection Act (wherein the ELD was transposed) defines damage to the environment as:*"Damage in terms of liability for damage caused to the environment means a measurable adverse effect or change on natural resources, or direct or indirect measurable disturbance in the functioning of natural resources"*. Not only protected species and habitats are covered by this damage definition, but any damage to the ecosystem which makes a considerable difference in the notion of damage as prescribed by the ELD. The assessed states mainly included national biodiversity damages into the new environmental liability system **(**Vienna - AT, Croatia, Estonia, Hungary, Romania, Spain). According to the survey results there seems to be dispute on the interpretation of biodiversity damages on the one hand and no discussion at all on the other hand. This might be an indicator for the lack of practical application.

According to Art 2 (4) (a) of the ELD the conservation status of a natural habitat will be taken as *'favourable'* when:

- its natural range and areas it covers within that range are stable or increasing,
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the forseeable future, and
- The conservation status of its typical species is favorable…

The definition of the favourable conservation status has been adopted without further in-depth discussion, and respective cases are missing to provide for content and scope of interpretation of this definition. In Estonia only discussions about the favourable status of certain kind of habitats (e.g. forest habitats) relating to their protection measures have been visible. In Germany the definition of biodiversity damage was transposed by amending the Nature Conservation Act and is defined equally as in the ELD and the FFH Directive. The German Federal Agency for Nature Conservation *(BfN)* in cooperation with the authorities elaborated a catalogue in which the favorable conservation status of habitats is described.[10]

According to Art 2 (4) (b) of the ELD the conservation status of a species will be taken as 'favourable' when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats,
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis;

The favourable conservation status of a species is defined in conformity with the ELD and the FFH-Definition in Austria, Germany (see also BfN catalogue), Spain, Croatia, Estonia, Hungary and Romania.

[10] http://www.bfn.de/0316_grundsaetze.html

Interpreting the legal concepts the ELD prescribes a legal approach interpreting the text, its origins and purpose is to be taken as there is hardly any case law for taking further indications. Main opinion of the legal experts who elaborated the survey is that the geographical measure for a deterioration of the favorable conservation status of species is beyond the Natura 2000 network and to be measured on national level. This argument is supported by the ELD itself as the conservation status is defined in relation to the dissemination of the population throughout the territory of the Member State or in relation to the natural range of the species and not restricted to Natura 2000 sites. Furthermore the history of origin of the ELD initially envisaged a broader concept of biodiversity damages as the rather limited scope on "protected species and habitats" which found its way into the current Directive.[11] In Germany following activities and disturbances have led to an evaluation of application of the German USchaG (ELD transposing legislation):

- A construction company filled in rubble into caves in the Eifel. The place was known for its habitats for bats although not protected as a FFH site. After the filling the climate in the caves became warmer – which led to a decrease of the bats.
- Reconstruction of the Rhein dike - meadows are destroyed which are important for butterfly populations.[12] (no court proceeding so far)
- An investor intents to clear a forest, for the construction of wind turbines – Causes danger to a FFH protected bat *("Bechsteinfledermaus").*

4.2. Biodiversity Damages according to pre-existing national liability systems

The **Austrian** Nature Conservation legislation provides for so called "obligations to restoration" *("Wiederherstellungsverpflichtungen").* In the case of illegal activities (= beyond permission or not allowed) in protected areas, the authority is competent to require natural restitution (according to ELD – primary remediation) and the Nature Protection Acts provide for administrative penalties. The procedural rules are different in each Land.[13] Most of these provisions do not require an environmental damage to occur but tie in with an illegal activity. So we could say that there is no threshold set comparable to the thresholds of the ELD framework. Any damage to the habitat or species caused by an illegal activity may be remediated. This pre-existing system does not cover accidents and does not know the concept of compensatory and complementary remediation. Furthermore the public does not have the right to submit comments as under the ELA.

The **German** Federal Nature Conservation Act defines a liability regime for the impairment of ecosystems based on the polluter pays principle (*Eingriffsregelung – in Sec. 14ff leg cit*). Most of the scheme relates to compensation for planned and authorized activities that significantly impair the environment. Such activities are predominantly the construction of buildings and infrastructure. The compensation scheme also applies, to unauthorized

[11] See also: Umsetzung der EU-Umwelthaftungsrichtlinie in Österreich, Tagungsband - 2007, Informationen zur Umweltpolitik 174.

[12] Www.gnor.de/pdf/GNOR_Info_115_Oktober_2012.pdf

[13] Bußjäger, Österr. Naturschutzrecht (2001), 203.

significant impairments.[14] This regime provides for primary and complementary remediation. Its damage definition is broader than the scope of damage in the ELD: *"Changes in form or use of surface areas or related to the active soil layer, or to groundwater levels, which may considerably affect the performance and function of the ecosystem or the landscape." (cp. Sec. 14 Nature Conservation Act).* Furthermore the Federal Environmental Liability Act *("Umwelthaftungsgesetz")* establishes a civil liability regime for damages to property, health, life etc. caused by certain activities. Biodiversity damage is not defined in this regime.

The **Estonian law provides for a national liability regime** on biodiversity damages, even after enforcement of ELA. In case causing certain damage to the nature, the polluter has to pay certain amounts of money to "compensate" the damage. The criteria for compensation are defined in the Nature Protection Act. According to this system there is no obligation **for in rem restitution** if an illegal/not permitted activity has been carried out in a protected area. In terms of the obligation for compensation, the Estonian national regime has a different interpretation of the term "damage": whereas under ELD regime, the harmful consequence is regarded to be damage (eg "significant adverse effect" to the elements), the obligation to compensate environmental damage under national regime may in addition arise simply from certain kind of activity (eg causing fire in protected area etc). In case the damage (including biodiversity damage) has been remedied on basis of ELA, the monetary compensation under the national liability regime is no longer obligatory. These provisions of ELA are thereby constituting a lex specialis regarding to the national regime.

The **Croatian** Nature Protection Act defines damage to nature as: *"Any Intervention or action in nature conducted without a legal basis which suppresses , damages or destroys the value, structure, quality, variety and/or uniqueness of a part of nature is considered as ecological damage"* There are two parallel systems when it comes to severity thresholds of **biodiversity damage, one is the transposed ELD ("***that has significant adverse effects")* and the other one is a more stringent national severity threshold in which *every illegal damage to environment is considered damage*. The national more stringent system should be applied in case the ELD threshold is not reached. As that there was not any ELD case until now, the practical application and interaction of both systems have not been proven yet.

4.3. Conclusions

In general the ELD was transposed into national legislation without mentionable adaption of its damage definitions and severity thresholds with respect to biodiversity damages. The broad notion of damage and the unclear concepts make an interpretation and practical application quite difficult. There seems to be no clear notion of which national liability regimes (if existent) are in competition or to be complementarily applied when it comes to biodiversity damages. The situation seems slightly easier in countries where the ELD was transposed by amending the existing national liability systems (i.e. Hungary). A major opinion states, that the ELD system shall not derogate other liability provisions, it shall be applied complementarily and as a strengthening element to all existing liability regimes. The inclusion of national biodiversity damages was broadly taken by the assessed countries – only Austria

[14] See also: BIO Intelligence Service (2013), Implementation challenges and obstacles of the Environmental Liability Directive, Annex – Part A: Legal analysis of the national transposing legislation prepared for European Commission – DG Environment. In collaboration with Stevens & Bolton LLP.

(except Vienna) and Germany did not opt for an inclusion of nationally protected species and habitats. In consideration of the ELDs origin and purpose such an opting out provision shouldn't be applicable as it leads to further confusion with respect to the scope and notion of damage neither would it comply with the ELDs goals.

Here and then we could find national liability systems somehow similar to nature of the ELD. They are mainly embedded in the national nature conservation acts. Most of them do establish a much broader notion and indeed a rather different understanding of biodiversity damage than ELD does. On the other hand these systems miss valuable components provided for by the ELD: e.g. no accidents covered, concept of compensatory and complementary remediation missing, no public participation and access to justice.

In assessment of the latest ECJ Case Law on the FFH-Directive and significant effects adversely affecting the favourable conservation status of a natural habitat, it is to be highlighted that also a small (approximately 1.47 hectares of a 270 hectar limestone pavement threatened by a road development) interventions in a protected habitat my lead to a significant effect hindering the realization of the project.[15] The FFH-case law might be equally taken into account in assessing the notion of damage pursuant to the ELD.

The ELD system shall not derogate other liability provisions, It shall be applied complementarily and as a strengthening element to all existing liability regimes. This necessarily shall be interpreted as a complementary application of the ELA to damages that do not fall under the scope of the ELA – so it is to be questioned if also in liability cases according to the Nature Protection Acts the Laender Environmental Liability Acts may be applied complementarily.

5. Water Damages

As mentioned above with biodiversity damages, the transposition of water damages was fulfilled differently from a technical perspective by the analyzed countries. Hungary has transposed the ELD by amending the existing national legislation on water protection.

5.1. Water Damages according to ELD

The ELD defines water damage as *"[…] any damage that significantly adversely affects the ecological, chemical and/or quantitative status and/or ecological potential, as defined in Directive 2000/60/EC[16], of the waters concerned, with the exception of adverse effects where Article 4(7) of that Directive applies;"*[17] The ELD defines 'waters' as all waters covered by the Water Framework Directive (Directive 2000/60/EC). The definition *"all waters concerned*" according to the WFD does not seem very clear in the interpretation of the ELD transposing national legislation and practice. Furthermore neither the ELD nor the Water Framework Directive defines the concept of *"significantly adversely affects*". In the following we will

[15] Cp. C-258/11.
[16] Water Framework Directive (WFD)
[17] ELD Definition (cp. Art 2 (1) (b) Directive 2004/35/CE)

assess how the analyzed EU member states define water damages and how this definition is interpreted in practice.

5.1.1. Scope of damage

The Austrian Environmental Liability Act defines water damage as *"any significant water damage, which is any damage that significantly adversely affects the ecological, chemical and quantitative status or ecological potential of waters as defined by the Water Management Act 1959 (WRG 1959), Federal Law Gazette No. 215, and is not covered by an authorization pursuant to the WRG 1959"* (cp. Sec. 4 1. lit. a. ELA). Commonly the term "waters" subsume natural surface waters (streams, rivers, lakes). However, the WRG additionally adds artificial waters and groundwater to the definition of "waters" (cp Sec. 3 para 1 lit a and c WRG). Surface waters are constituted by the whole water-river bed, the water wave including side arms and intersections. Permanent water flow is not required, water-riverbed can be only partly and not permanently covered by water. Ground waters are defined equally as in the Water Framework Directive (WFD) as all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil (cp. Art 2 para 2 WFD).[18] As in the Austrian transposing legislation also in Croatia, Estonia, Hungary, Romania and Spain the ELD definition of water damages has been adopted – whereas for the definition of "waters" the transposing legislations refer to the definition established by the respective national Water Acts.[19]

The German definition on water damages is rooted in the German Federal Water Act ("Wasserhaushaltsgesetz" – WHG) and the definition covers surface waters, artificial waters, groundwater and coastal waters – so equal to the before mentioned liability systems. An interesting aspect is, that in case of surface, artificial and coastal waters only the ecological and chemical status – and not their quantitative status - is protected under the ELD transposing legislation, whereas in the case of groundwater – not the ecological – but the chemical and quantitative status is protected under the ELD regime (cp. Sec. 90 WHG).

It seems that the definition of "waters" refers to the protection of all "waters" and not only to the protection of *"water bodies*" in all assessed liability regimes.

5.1.2. Significance threshold

In general the interpretation of the threshold shall be carried out using Annex I and II of the ELD (2004/35/EC). Consequently damages affecting human health are in any case to be considered as "significant adverse effect" whereas impacts lower than natural fluctuation or expecting a self-regeneration shall be considered as non-significant adverse effect. If the self-regeneration of the water quality and quantity cannot be awaited/expected within a reasonable timeframe (several weeks, several months) the adverse effect on the water quality may be significant.

In the Austrian discourse a *"significant adverse effect"* is not necessarily a change of a water category (cp. Parliamentary materials and the wording of the ELD). Main opinion is that the change of water category (pursuant to 2000/60/EC) is not necessary to categorize a deterioration of the water quality as an environmental damage according to ELA. The

[18] Oberleitner/Berger, WRG[3] (2011), para 2-4.
[19] Croatian Water Act, Spanish Water Act, Rumanian Law of the Water no 107/1996, Austrian Water Management Act, Hungarian Gov. Decree 219/2004 on groundwater protection and Gov. Decree No 220/2004 on protection of surface waters.

significant adverse effect shall be defined independently (but not contrary to WFD). Also waters of the lowest category are covered by ELD protection. The quality of Austrian waters differing from the environmental objectives established by the WFD (Directive 2000/60/EC) is not to be assessed as an environmental damage. According to the parliamentary materials the ELD slow and gradual deterioration shall not fulfill the criteria for environmental damage. The parliamentary materials indicate that a case by case decision has to be taken in order to assess the significance of damage – the duration, intensity and extension shall be considered by experts *("prognosis decision").*[20] Also **in the Croatian system** there is no formal definition provided by law but the "significance threshold" has to be defined rather by judiciary bodies in case by case decisions and according to information provided by the Ministry of Environment and Nature Protection. Whereas in Austria a change in the water category is not seen to be necessary, **in Estonia**[21] it seems quite clear that the ELD significance threshold for water damages means that a change of the water class has to be existent – probably also to have a more concrete basis for determining water damages. **In Spain** the situation appears to be differentiated – whereas basically a change in the water class would be necessary, an excessive reduction of water quantity can be water damage, even though this would not lead to a change in classification. [22] I**n Rumania** the academic sources are considering that *"significantly adversely affects the…"* means that the water is unfit or dangerous for public health, the industrial fishing and tourism. Another author considers that the water is polluted when the water can't be used for the purposes for which it was possible to use before the giving intervene alteration (*Negulescu M)* – a change of classification does not seem necessary even in the Romanian regime. **In Hungary** the meaning of a "significant adverse effect" is fixed by the above mentioned Gov. Decrees (Decree 219/2004 on groundwater protection and Gov. Decree No 220/2004 on protection of surface waters) they establish an alteration in qualitative status of the groundwater as significant when the pollution limit laid down in the permit under Art 14 par (1) point b[23] has been exceeded or certain criterions are not fulfilled (there is a detailed catalogue of criteria). Similarly, the status of the surface water is presumably significant and adverse[24] in case of:

- adverse change in the conditions necessary for the survival of habitats and species directly depending on surface water;
- restrictions and barriers in proper water use;
- the existence of environmental health risks;
- exceeding of environmental quality limit set out in the separated piece of legislation;
- infiltration of materials listed in the Annex of the Gov. Decree into the surface water;
- adverse change in the baseline condition specified in a decision of the competent authority.

[20] IA 464/A BlgNR 24. GP.

[21] From 11 cases, reported in relation to environmental liability in Estonia this far (2007-2013), in two cases a threat to ground water and surface water was detected. These cases were solved according to environmental liability rules (ELA).

[22] For Spain see: BIO Intelligence Service (2013), Implementation challenges and obstacles of the Environmental Liability Directive, Annex – Part A: Legal analysis of the national transposing legislation prepared for European Commission – DG Environment. In collaboration with Stevens & Bolton LLP

[23] According to Art 14 par (1) point b, the permitting authority provides the conditions – inter alia, pollution and emission limits – in the permit.

[24] The wording of this paragraph can be hardly interpreted as it is listing the circumstances when the "status of the surface water" – instead of "the change in the status of the surface water" - is presumably significant and adverse.

5.2. Water Damages according to pre-existing national liability systems

Basically national liability regimes for water damages showing certain similarities to the ELD system (strict liability for purely environmental damages) rooted in the national water legislations do exist.[25] In Croatia a special Ordinance on requirements for conducting prevention and removing pollution consequences of accidental and accidental water and water resources pollution (OG 1/2011, 118/12) and also State plan measures in case of extraordinary and accidental water pollution (OG 153/09) do exist. A special case is the Hungarian system where the existing liability regime has been amended by the ELD transposing legislation - as a consequence the national liability system still exists complemented with further criteria the ELD requires for.

5.2.1. Scope of damage and significance thresholds

It is a fact that the analyzed national liability systems do miss one or more important fragments the ELD system is constituted of – e.g. in some systems no remediation obligation, only financial penalties, no obligations for the operator but the competent authorities to prevent and remediate damages, do not focus on the preventive principle etc. – they cannot be compared to the smallest detail with the ELD system. The scope of damage may be the same in the national regimes as in the ELD regime (see above: most ELD transposing legislation refer to the definitions in the national water legislations). In the current analysis the focus lies on the question if mentioned systems establish significance thresholds and how: Outcome is that the national liability systems do establish a lower or no significance threshold for water damages. In Estonia the term “damage” is not defined at all. The main difference in the scope of the national liability regime to the ELD regime is that there is no threshold whatsoever. There isn’t even great discussion on the damage definition or eventual thresholds in some countries.[26] In Austria there is some academic discussion on the significance threshold according to the national liability regime (Sec. 31 Water Management Act – WRG**)** and the ELD transposing legislation (ELA). Sec. 31 WRG protects any adverse effect on the water quality. Action has to be taken already with the imminent danger of water pollution. According to Sec. 31 WRG an adverse effect on the water quality is to be understood as following: any deterioration of water quality and any reduction of its self-purifying capacity (Sec. 30/3 WRG). The wording of this provision suggests a broader notion of damage than the Austrian ELA does. On the other hand there are water damages not covered by the WRG regime as the quantitative deterioration of water sources[27], which have to be handled under the Federal ELA-regime. Academic discussion raised the compatibility of the ELD threshold with the threshold in the Austrian WRG (Sec. 31) and *B. Raschauer* indicated that as the Federal Environmental Liability Act speaks from a measurable adverse change and the Directive draws the line at natural fluctuation and self-regeneration, the national ELD damage definition might be concurrent with the definition of the WRG[28]: At this point it has to be highlighted, that the national WRG regime does know a significance threshold as stated by the Higher Administrative Court: only minor effects to waters (common use, common agricultural use) do not justify measures according to Sec 31/3 WRG. It is to be seen very critical if damages resulting from common agricultural use or common use can

[25] Water Acts in the German Laender, Austrian Water Management Act, Art 39/1 Estonian Water Act, Spanish Water Act, Romanian Water Management Law and GEO 195/2005,
[26] Cp. Estonian ELD Threshold Survey.
27 Köhler in: Raschauer/Wessely Handbuch Umweltrecht 20112, 203. Et al.
[28] B. Raschauer, Die Gewässerschädigung im B-UHG in: RdU 2009/02, 52.

be generally excluded from any liability as the assessment criteria should focus on the adverse effect and not on the type of use.

The Hungarian Art 18 of the Water Management Act (WMA) refers to the liability system of the EPA; this provision states that a person who carries out an activity or omission involving hazards or damage to water shall be liable for any hazard or damage caused thereby under the regulation of the EPA and shall be obliged to implement measures set out by the water authority. Nor the EPA neither the WMA include definitions of damages on waters, however, theoretically these are included in the term of "environmental damage". So it seems that there is a rather low significance threshold for water damages according to the national liability regime - But as the damage to groundwater as well as to surface waters are defined in the Gov. Decrees transposing the ELD and the EPA refers to this Decrees which provide the detailed criteria for also the assessment of environmental damage – in accordance with ELD and the Water Framework Directive – the threshold in the new Hungarian environmental liability case is the same as prescribed by the ELD and thus presumably higher than it has been before.

5.3. Conclusions

To conclude – the definition of "waters" in the ELD transposing legislation is quite uniform – the wording is basically lend from the Water Framework Directive. In all analyzed countries it seems that the perception of water damage is encompassing "all waters" and not only "water bodies", an important indication in approximation to an effective ELD system in the future. By restricting the definition to "water bodies" only very few incidents would be sufficiently severe to trigger environmental liability because, among other things, some water bodies may cover a very large area. And the purpose of the ELD promoting environmental protection would be deeply undermined – as huge incidents polluting considerable water paths wouldn't even fall under the scope of ELD water damages. As most of the assessed countries made references to their Water Acts with respect to the definition of "waters" both the ELD transposing legislation and the national liability regimes for water damages emanate from the same concept of "waters".

Due to a lack of adequate case law and respective case databases the "significance threshold" for water damages and its application seems very unclear. We cannot start from a harmonized approach how to interpret the significance threshold for water damages across the EU – as already said in Estonia they would say only a change in the classification of waters fulfills the significance threshold, whereas in Austria the threshold would be interpreted to be lower. It is clear that the decision, if the threshold is reached, is to be made on case-by-case basis, but it is not coherent that the discussion in some countries departs from the change of water category, whereas somewhere else the criteria is a measurable adverse change (under the premise that the Directive draws the line at natural fluctuation and self-regeneration) meaning that the threshold is interpreted very low. It is neither justifiable, that slow and gradual deteriorations shall not fulfill the criteria for environmental damage –that would not be in conformity with the ELD if at some point *("the jug goes to the well until it breaks")* the threshold is reached or even exceeded. Imminent threat of an

environmental damage is often produced by an excessive use of certain substances (fertilizers, plant protection products etc.) which are constantly used and over time leading to an imminent threat of environmental damage. The Hungarian legislation establishes criteria for the evaluation of a "significant adverse effect" on surface waters and separately for groundwater – similarly it would be advisable to have a set of clear criteria for the assessment of the significance threshold of water damages on European level embedded in the ELD.

At this point we can highlight that national liability regimes for water damages – those which by its nature are very similar to the ELD system - are predominantly stricter. They provide for no or very low thresholds. It would be a real step forwards in the achievement of a high standard of environmental protection and a uniform environmental liability system all over Europe if the mentioned systems (ELD and national) could melt and incorporate – having low threshold criteria in the ELD in place and appealing for an integrative approach on national level.

6. Land Damages

6.1. Land Damages according to ELD

The ELD defines land damage as, *"[…] any land contamination that creates a significant risk of human health being adversely affected as a result of the direct or indirect introduction, in, on or under land, of substances, preparations, organisms or micro-organisms;"*[29] In the following we will detect how the analyzed systems define the scope of damage and if they are more or less stringent – esp. if the require for significant risk of human health being adversely affected.

About half of the assessed systems have adopted the **same damage definition as the ELD** prescribes.[30] I.E. **in Estonia, Romania, Spain and main parts of Austria** the land damage needs to have a "significant risk of human health being adversely affected" to be evaluated as such under the national ELD regime. In Estonia even "the purpose of the use of the area where land damage has occurred shall be taken into account" when evaluating the risk of land damages (initially this is a criteria to be taken into account when assessing remediation measures for land damage – cp. Annex II/2 of the ELD). Indeed the intended land use is of importance for the determination of remedial measures, but should not be the main criteria for the determination of environmental damage – risk of human health being adversely affected should be measured on the pollution levels threatening human health and not on the intended land use, otherwise liability could be easily undermined although there is a imminent threat to human beings emanating from polluted soils Similarly, it should not relevant if there were not significant initial pollution levels.

[29] ELD Definition (cp. Art 2 (1) c. Directive 2004/35/CE)
[30] art 2 para 13 letter c Romanian Emergency Governmental Ordinance no 68/2007, Art 2(1) 4) Estonian ELA, Sec. 4/1 lit b Austrian ELA,

We analyzed four systems having decided for **a lower significance threshold for land damages**. **In Germany** the EDA applies if there is a danger to human health but a significant risk of human health being adversely affected is not necessary. Sec 2 para 3 of the Federal Soil Protection Act defines this standard which is lower than the threshold under the ELD.[31] Equally the **Croatian** thresholds are lower than ELD because they do not require "a *significant risk" to* human health, only regular risk to human health is sufficient.[32] Even lower thresholds are created **in Hungary and in the Austrian region Carinthia** with respect to land damages. In Hungary the damage in geological media – according to the Art 3 point 46 of the Gov. Decree – includes any land contamination that creates a significant risk of human health being adversely affected or the pollution limit values set out by the separated piece of legislation exceeded as a result of the direct or indirect introduction, in, on or under land, of substances, preparations, organisms or micro-organisms. The scope of the definition of land damage is wider as the exceeding of the pollution limit values set out by the separated piece of legislation alone is sufficient for the pollution being evaluated as land damages. It's quite considerable, that the Hungarian national transposing legislation provides for pollution limit values as regards land damages.[33]

The Austrian Federal transposing legislation did not introduce a stricter threshold for land damages, but apparently the Carinthian transposing legislation did (whether by accident or not) Neither the Carinthian IPPC-Act nor the Plant Protection Chemicals Act define land damages. These acts only refer to the relevant provisions of the Federal ELA with respect to the measures taken in prevention and remediation of land damages. The Carinthian IPPC-Act only defines environmental pollution as "by human activities directly or indirectly caused release of substances, vibrations, heat or noise into the air, water or land which may be harmful to human health or the quality of the environment […]" (cp. Sec. 2 Ktn. IPPC-Act). According to this definition and taken into account that the Carinthian transposing legislation only refers to the ELA with respect to the measures to be taken once environmental damage occurs or an imminent threat occurs, the lowest threshold for land damages in Carinthia would be "a land contamination being harmful to the quality of environment" which does not even require to be harmful to human health and thus the threshold might be considerably lower than foreseen in the ELD and all other transposing acts in Austria.

6.2. Land Damages according to pre-existing national liability systems

In general it can be stated that national liability systems on land (soil) damages do exist and these systems seem even very scattered on a domestic level. **In Austria** soil protection is a cross-cutting issue and there is a range of legislative acts in some or the other way aiming

[31] See German ELD Threshold Survey 2013.

[32] Land damage is determined by the EPA Art 4 para 1 subpara 67: "Environmental damage is any damage to:

- soil, whose contamination or damage results in a risk to its ecological functions and to human health, in accordance with special regulations. (point 4) - Earth's rocky crust whose contamination or damage resulted with risk to their ecological functions and to human health, in accordance with special regulations (point 5)."

[33] KvVM-EüM-FVM Decree No. 6/2009 on the pollution limit values and measures for the protection of groundwater and geological substances sets out values which, if exceeded may be considered, based on a risk assessment, to result in harm to human health or the environment.

towards the protection of soils: Industry Act (Gewerbeordung – GewO), the Laws on Chemicals (e.g. Chemicals Act, Fertiliser Act, Plant Protection Chemicals Act), the *"Mineralrohstoffgesetz"* (on mining operations) et al. Most of these acts have some-kind of liability for damages/illegal activities affecting the soil in place. Thresholds can be found only very rarely and if they do not refer to human health being affected but to the damage produced to the ecological media.[34] According to **the Romanian** national regime the competent authority for environmental protection is deciding if the pollution has a significant impact over the human health and the environment – so the respective threshold might be close to what ELD envisions. Art 74 (1) 6) of the **Estonian** Earth's Crust Act, the environment is considered to be damaged when the earth's crust is contaminated. In this case, the environmental damage has to be compensated. **In Germany** the Federal Soil Protection Act establishes a proper national liability system, but as the German EDA refers to the Soil Protection Act for the damage definition there is not difference in thresholds in these two regimes.[35] **The Spanish** national soil protection regime bases the threshold for contaminated land on soil quality criteria and not harm to human health.[36] **In Hungary** the ELD regime has been incorporated, thus no existing national liability regime anymore.

6.3. Conclusions

From the foregoing discussion we have seen, that the significance threshold of land damage provided for by the ELD is mostly undercut – be it by the ELD transposing legislation itself (Germany, Hungary, Croatia, Carinthia) or by some national liability system for soil damages (Austria, Estonia, Spain). Nevertheless the national systems on soil protection are not quite elaborated and the missing EU legal framework on soil protection (Soil Directive) does not improve this situation. The concept of "land" and "soil" is generally confusing – clear regulations about what it means and how it shall be protected are missing. This might be an indication that firstly the concept of land in the ELD and national systems should be adapted. At the same time the threshold set by the ELD (risk of human health being adversely affected) seems to high and should be lowered in order to create a bit more uniformity – rather logically the negative effects on the soil quality should be the measure.

By now the central element of land damages is not as with water damages the deterioration of a natural resource but the health risk. So the land damage might be basically caused by adverse effects on human health by direct ingestion, inhalation absorption, indirect uptake

[34] The Lower Austrian Soil Protection Act states that illegally applied substances etc. have to be removed by the owner or beneficiary – the illegality of the activity and not the amount of damage is important in this regime. The Forestry Act provides a liability regime for forestry harmful air pollutants, which are air pollutants that cause measurable damage to forest soil or vegetation (endangering the forest culture) (cp. Sec. 47 ForstG). Also the Austrian waste management regime provides for liability for land damages – the thresholds are to be interpreted quite low here.

[35] Sec. 2 para 3 Federal Soil Protection Act: "*Adverse soil alterations pursuant to this Act are impairments of soil functions, which are likely to induce hazards, considerable disadvantages or considerable nuisances for individuals or the public."*

[36] See also: BIO Intelligence Service (2013), Implementation challenges and obstacles of the Environmental Liability Directive, Annex – Part A: Legal analysis of the national transposing legislation prepared for European Commission – DG Environment. In collaboration with Stevens & Bolton LLP

via food, including drinking water derived from ground water. These criteria do not comply with the environmental damage system, as it requires an additional element to be fulfilled → risk of human health being adversely affected. This element can be considered as more of a civil liability nature and should not apply to environmental damage.

There has to be found an integrated approach for land damages – either on EU level or deduced from national liability regimes on soil damages and their practice and integrated into the ELD regime –clear criteria or limit values would be rather useful.

In Poland a high number of land damage cases have been handled under the ELD regime so far. And the reasons for this are to be found in

- the lower threshold on land damages (no risk of human health being adversely affected necessary), and the fact that
- pre-existing legislation connected to the protection of surface of land was repealed when the Environmental Damage Act - EDA (transposing ELD legislation)came into force. Every incident is examined as ELD case because EDA is lex specialis in relation to other framework acts (ex. Water Act and Environmental Protection Act which have special relation provisions; in accordance with them EDA has to be used in taking prevention and remedial action. Only when the incident can not be qualified as a ELD case the other law is used.[37]

This example may show us, that an effective ELD system may well function if it is successfully integrated into the national system and equipped with clear rules and a straight forward system how and when to apply it.

7. Interaction of national liability regimes with the ELD regime

The interaction of the different damage regimes is quite different in the analyzed states and may well be a reason for a good/bad functioning of the ELD system in the respective states. Thus this issue shall be examined in the following and as a last chapter to the current study.

Germany added a subsidiarity clause to their Environmental Damage Act (EDA). EDA applies only when other legislation is not more specific regarding the prevention and remediation of environmental damage or when the other legislation is in conflict with the EDA (cp. Sec. 1 EDA)[38] In the case Peninsula Eiderstedt an agricultural drainage in a bird protection area endangers the occurance of *Chlidonias niger*, since the intensive agricultural use of the peninsula the level of the water was drastically lowered. The occurance of the bird (formerly up to 1600 pairs) had decreased to a small number of pairs. The NABU Schleswig Holstein complained at the VG Schleswig about dredging activities in breeding time and the lasting drainage activities. (VG Schleswig, Judgement of 12th September 2012: 6A 186/11) Concerning the dredging the BG Schleswig didn´t agree with the plaintiffs, because of the subsidarity clause in Sec. 1 para 1 of the German EDA – The Nature protection act is lex

[37] Cp. ELD Implementation Workshop 16th January 2013 - Presentation from Anna Kozińska, Polish Ministry of Environment: http://eldimplement.biois.com/meetings

[38] See also: BIO Intelligence Service (2013), Implementation challenges and obstacles of the Environmental Liability Directive, Annex – Part A: Legal analysis of the national transposing legislation prepared for European Commission – DG Environment. In collaboration with Stevens & Bolton LLP

specialis. (About the judgement there is disagreement). For the drainage activities the applicability of the EDA was acknowledged. So in this case to parallel regimes were used to identify and remediate the environmental damage – apparently there has not been chosen an integrated approach to this case – being an complementary application of the EDA to the whole incident. **In Estonia** the interaction between two regimes is expressed in Art 40 of the Environmental Liability Act (ELA), which establishes special provisions for cases where the polluter should have paid compensation according to the national liability regime. In case the damage (including biodiversity damage) has been remedied on basis of ELA, the monetary compensation under the national liability regime is no longer obligatory. These provisions of ELA are thereby constituting a *lex specialis* regarding to the national regime. The Spanish ELA applies without prejudice to civil protection legislation for emergency situations; regulations in Articles 24, 26 and 28 of the General Health Act 14/1986 of 25 April; provisions concerning health emergencies in the Public Health (Special Measures) Act Organic Law 3/1986 of 14 April; and regional legislation applicable to civil protection measures and health emergencies.**The Austrian** ELA does not state how its provisions interrelate with other sectorial laws. Sec. 2/3 leg cit states that further obligations due to directly applicable Union legislation and on the basis of laws and regulations enacted governing the prevention or remediation of environmental damages remain unaffected. This merely means that the ELA shall not derogate further liability provisions. As "further obligations" is meant everything that exceeds the subject matter of the ELA: be it sectorial administrative orders *("verwaltungspolizeiliche Aufträge"),* due diligence obligations, permit conditions, other administrative orders *("Auflagen").* "Further obligations" might be equally evaluated not by the order or obligation itself but also by the legal consequences and effects (e.g. Sec 101a Gene Technology Act - GTG). Basically the legal foundation of the taken measures can be unsecure till the end of an ELA-procedure. Sec. 5/6 and Sec 7/6 ELA stipulate that if measures according to other environmental regulations have been taken before these measures shall be considered in the sense of this provision – meaning as ELA measures.[39] The parliamentary materials evaluate the ELD system as complementary and strengthening element to the already existing national liability systems. It should not be applied in an isolated way.[40] Existing terminology should be used also in the future – so that common criteria are set and uniform application is secured. The **WRG regime (Sec. 31)** might be seen as lex generalis in relation to the liability for water damages according to the ELA: due to its personal scope of application (certain operators) and the material scope of application (occupational activities) the ELA is to apply to the threat of and the actual significant water damage. In **Romania** the liability for water pollution is imposed both by GEO 195/2005 and the WML. Whoever causes water pollution is liable for the cost of remediating the damage, removing its negative consequences, and restoring the water or body of water to its condition before the damage. There seems to be no interaction between the ELD Law and the Water Law provisions. For land damages the ELD regime and the national legislation seem to be complementary because in the national legislation there are no contradictions between the two regimes. The **Hungarian** EPA defines generally environmental damage as any measurable adverse and significant change in the environment or any environmental media which may occur directly or indirectly, or any measurable impairment of a natural resource

39 Köhler in: Raschauer/Wessely Handbuch Umweltrecht 20112, 204.

40 IA 464/A BlgNR 24. GP.

service which may occur directly or indirectly. This definition is to apply to the environment - defined as the system, processes, and structure of environmental elements that include land, air, water, the biosphere as well as the built (artificial) environment created by humans, furthermore, the constituents thereof - in case of any kind of liability, namely regarding administrative, civil and criminal law as well. The transposition of ELD resulted in the renewed and detailed regulation of administrative liability system in the EPA and in the adoption of the Gov. Decrees listed above. Basically, the Gov. Decrees cover the damages to biodiversity, to protected areas and species, to waters and land (as geological media) - in accordance with ELD but having in few cases different thresholds. As the separated pieces of legislation contain the provisions, criteria and thresholds on the identification of biodiversity, water and land (geological media) damage, those adverse changes in the environment that do not meet the criteria set out by these Gov. Decrees, cannot be handled under the newly incorporated administrative liability regime of ELD. Thus, if the damage to the environmental media covered by the ELD transposing legislation doesn't meet the criteria set out therein, the transposing ELD regulation is not to apply. Deducing from the definitions of "environmental element", "environment" and "environmental damage" in our opinion, EPA's general administrative liability rules apply for damages to the environment not covered by the ELD (air and noise pollution, damage to artificial environment, damage caused by vibration, etc.) because these can be interpreted as environmental damages.

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