

GOOD RIVER BASIN MANAGEMENT IN EUROPE: DISTRIBUTION AND PROTECTION

J.J.H. van Kempen*

■ An example of cross border pollution - In the Belgian municipality of Overpelt, some five kilometres south of the Dutch border, a rather sizeable industrial facility melts down raw zinc ore into manageable pieces that can then be sold on to other companies. During this process, traces of zinc and cadmium are discharged into the surface water of the adjacent canal. At times, the concentration of these harmful substances in the surface water has approached the applicable environmental quality standards. As long as these concentrations remain below the applicable thresholds, however, surface water quality is deemed to be sufficient and there is no violation of the law. 'No problem', Belgian authorities would say.

■ The canal in which these substances are discharged, however, flows into the river Dommel, a tributary to the Meuse river. With the flowing water, part of the present substances travel northward into the territory of Belgium's neighbouring EU Member State: the Netherlands. The competent authority on site, regional water board De Dommel, is bound by EU law to uphold the same environmental quality standards as its neighbours. Contrary to their Flemish counterparts however, they say this *is* a problem. After all, for the Belgians, the Dommel is the end of their 'pipeline', whereas for the Dutch, the Dommel is only the beginning of their usage of surface water. Like every other country with a somewhat developed society, the Netherlands has a certain need to pollute the surface waters within its territory. If its citizens want to live their lives in a way that is by and large considered to be normal, it is a fact that doing so *will* pollute the water. People will use their lavatories, take a shower, wash their cars, cutlery and clothes, they will produce goods in factories and on farms and they *will* discharge cadmium and zinc. But how can they legally do so, if the concentration of these substances is already near or over the allowed threshold before they

can even begin polluting? This is indeed a problem. This paper explains how European law deals with this.

Cross border pollution and its challenges

The above example of the Dommel river is a clear case of cross border water pollution. Water is polluted in one country and the negative consequences of this appear in another country. The fact that there are legal norms that put a limit to the maximum amount of pollution makes that the possibility to pollute water is finite. The amount of pollution allowed is the difference between the factual quality of the water and the quality prescribed by the applicable standards. This scarcity exists within countries and – because of the accumulation of this pollution, like we saw in the Dommel case – this is also the case for river basins as a whole. As a result, the problem of cross border water pollution is a question of *distribution*;² it is a question of which actor gets to pollute the river basin to what extent, where – for the purpose of this paper – the focus is on riparian states being the actors we look at. The above mentioned case of the Dommel river is not only a classical example of cross border water

* **Jasper van Kempen** LL.M. M.Sc. Ph.D. is a legal advisor at the Centre for Corporate Services of the Directorate-General for Public Works and Water Management (*Rijkswaterstaat*) of the Dutch Ministry of Infrastructure and the Environment. He is also a research fellow of the Utrecht Centre for Water, Oceans and Sustainability Law of Utrecht University. This paper builds upon the results of his doctoral dissertation,¹ which he defended in 2012 at that university.

pollution, it also is a classical example of what is called an ‘externality’ in economic sciences.³ It is a side effect of an economic activity that can affect others, without these effects being considered in the cost-benefit analysis that is performed by the actor in order to decide whether or not to engage in the economic activity. As far as economic theory is concerned, these externalities (as long as they are negative, which they usually are) should be avoided in order to prevent market failure and thus to maximize overall societal welfare. In the words of the economists: they should be ‘internalized’. Some mechanism should exist to persuade the actor causing the external costs to include these costs into the prior cost-benefit analysis; there should be an incentive for the one causing pollution to solve its resulting problems. After all, environmental problems are best tackled at source because that is the most efficient solution (see, for instance, Article 2.3 of the Helsinki Convention (see below) and Article 191.2 of the Treaty on the Functioning of the European Union).

The question now is: how should this internalization take place and what should be the desired outcome? To what extent should the external costs influence the outcome of the prior cost-benefit analysis? What is the ‘weight’ of these costs on the balancing scales of the actor? These questions will be addressed in the next two sections.

Principles of good river basin management

European water law is in part an implementation of the Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes⁴ (see consideration 21 of the Preamble to the European Water Framework Directive⁵ (WFD)). Furthermore, other sources of international law also apply.

According to the UN Watercourses Convention⁶ – which has not yet entered into force but is an expression of international customary law and therefore valid as a source of international law – riparian states of an international watercourse shall protect and preserve the water quality and the ecosystems of the watercourse (see Articles 20 and 21.2 of the Convention). For the parties to the Helsinki Convention, this also follows from its Articles 2.6 and 2.7 and from nearly every paragraph of its Preamble. Therefore, it follows from international law that the protection of water quality is one of the desired outcomes of the internalization process mentioned in the previous section.

Moreover, Article 5 of the UN Convention obliges

riparian states to utilize an international watercourse in an equitable and reasonable manner. The same is demanded by Article 2.2.c of the Helsinki Convention. In international law, this means, among other things, that each basin state is entitled to a reasonable and equitable share in the beneficial uses of the international river basin. For the example of cross border water pollution, it means more specifically that each riparian state is entitled to a reasonable and equitable share of the possibility to pollute the international watercourse. So it follows that a second desired outcome of the internalization process is that each actor gets a reasonable and equitable share of the possibility to pollute.

It can thus be said that (at least) two principles of ‘good river basin management’ can be derived from international law when it comes to cross border water pollution: (1) sufficient protection of water quality and (2) a reasonable and equitable distribution of the remaining possibility to pollute the water when the first principle is complied with. These principles should also apply to European water law.

Procedural fairness

The above-mentioned principles might sound clear-cut, but what does it actually mean if a distribution is reasonable and equitable? This is a very difficult question to answer, for *any* distribution. Surely, what might seem reasonable for one of the parties involved, might easily be seen as *un*reasonable by another party. Take the river Nile, for example. For decades, Egypt has been the biggest consumer of Nile water at the cost of other countries such as Ethiopia, Burundi, Congo, Kenya, Rwanda, Tanzania and Uganda, and it has solidified this favourable position in several treaties. Now that Egypt is in political turmoil and its position weakened, upstream countries want to renegotiate these treaties and Ethiopia recently started building its Grand Renaissance Dam in order to increase its electricity production fivefold. Of course, this dam would prevent a lot of water from flowing downstream to Egypt. To the Ethiopians it would seem very reasonable to have this sustainable source of electricity for its population. To the Egyptians, however, it would seem very unreasonable to lose such a large portion of the water they use to irrigate their lands with. For an objective outsider, it would be very difficult to judge to what side the balance needs to tip. How should such a case be decided? As it turns out, there is no objective standard known in international law, in European law, in case law, nor in any other source, that can be used to validate whether or not a given distribution is

reasonable and equitable. It is a flexible principle that can differ on a case-by-case basis.⁷

Instead, however, international law does provide for a *procedure* to be followed in order to determine a distribution of beneficial uses. Article 6 of the UN Convention states that riparian states shall enter into consultations in order to determine what is reasonable and equitable and that in doing so, they shall take into account all relevant factors and circumstances together and reach a conclusion on the basis of the whole. The starting point in this procedure is the acknowledgement that all riparian states have equal rights to the beneficial uses of a watercourse, unless it is otherwise agreed in a treaty or by custom (Article 10 of the UN Convention). *A priori*, the rights of upstream states do not take priority over those of downstream states. The relevant factors and circumstances the states are required to take into account when determining a specific distribution include:

- geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character;
- the social and economic needs of the states concerned;
- the population dependent on the watercourse in each state;
- the effects of the use or uses of the watercourses in one state on other states;
- existing and potential uses of the watercourse;
- conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect;
- the availability of alternatives, of comparable value, to a particular planned or existing use.

Empirical research shows that these are the actual factors that determine the distribution of water uses in existing water treaties.⁸

This is an example of what Rawls calls ‘pure procedural justice’.⁹ This concept entails using a fair procedure to arrive at a satisfactory outcome in cases where there is no other clear, determinate, noncontroversial and independent standard of what is just. The idea is that the fairness of the procedure is sufficient to establish the justice of the results; in other words: by following a fair procedure, like the

one described in the UN Convention, one can arrive at an equitable and reasonable distribution. If the procedure is followed as it was supposed to be followed, the outcome of the negotiations on a distribution of the beneficial uses of a watercourse is supposed to be a reasonable and equitable distribution.

Framework for evaluation

We can now answer the questions posed at the end of section 2. The desired outcome of the internalization process should be that the two discussed principles of good river basin management are complied with. This internalization process should take place by negotiations between the riparian states and the factors mentioned in Article 6 of the UN Convention are the ones that should determine the outcome of the cost-benefit analysis, with the parties involved agreeing on their specific weight.

Moreover, one could ask how the outcome of this internalization process should be implemented. According to Van Rijswijk, the best way to limit the possibility to pollute is to establish legal norms maximizing the amount of pollution allowed.¹⁰ This best serves legal certainty, follows from the rule of law and enables the enforcement by courts. We shall therefore also assume that the outcome of the internalization process should be solidified by establishing legal norms that reflect the agreed distribution.

Does European law meet these challenges?

Now that we have seen how externalities can best be internalized in international river basins, we can evaluate if and how European law meets these criteria. The first and foremost source of European water law is the Water Framework Directive. Being a directive, it needs to be implemented into the national legislation of the Member States. As a result, European water law is present at two levels: the European and the national level. The notoriously complex Article 4 of the directive contains its environmental objectives. Among other things, this Article obliges Member States to achieve good surface water chemical status by 2015 (see Article 4.1.a.ii in conjunction with Article 2.18). Good surface water chemical status means that concentrations of pollutants present in a body of surface water do not exceed (among others) the environmental quality standards specified in the Priority Substances Directive¹¹ (Article 2.24 WFD). Cadmium, for instance, one of the substances involved

in the introductory example of the Dommel, has a maximum allowable concentration established in Annex I to this directive. As it turns out, these chemical environmental quality standards are the same for all Member States.

Next to protecting chemical water quality, Article 4 WFD also obliges Member States to achieve good ecological status of its surface waters by 2015 (see Article 4.1.a.ii in conjunction with Article 2.18 WFD). According to Articles 2.21 and 2.22, a body of surface water is in good ecological status if it meets the demands set in accordance with Annex V concerning the structure and functioning of aquatic ecosystems associated with surface waters. Annex V is an exceptionally large, technical and complicated annex. Moreover, it is not determined in Annex V itself what exactly good ecological status is. Instead, this is determined later on, based on criteria set by the Member States themselves.¹² Hence, these ecological environmental quality standards are generally not the same for all Member States.

The main aim of Article 4 WFD is to protect and improve water quality. According to the most recent evaluations of its implementation,¹³ the goals set in the Article appear quite ambitious: many Member States have great difficulty in achieving these goals within the allowed time frame and have to resort to exemptions. One could therefore say that European law, as far as the contents of the law goes, meets the first pillar of good river basin management: sufficient protection of water quality. The second pillar however – a reasonable and equitable distribution – seems to be ‘forgotten’. Although it is one of the aims of the WFD to contribute to equitable water use (see Article 1.e WFD), the norms for good chemical status are the same for all Member States. In general, using the same norms for all riparian states cannot be said to lead to a reasonable and equitable distribution. On the contrary, this will often be quite the opposite: when an upstream country pollutes its water to the maximum, it is in compliance with the law but there will be no more room left for downstream countries (as we saw, for example, in the case of the Dommel).

In addition to the requirement of achieving good water status, European water law also contains specific exemptions that Member States can invoke as an excuse for not achieving that requirement. The Priority Substances Directive provides one such exemption in its Article 6.1.a: a Member State shall not be in breach of its obligations under this Directive as a result of the exceedance of an environmental quality standard, if it can demonstrate that the exceedance was due to a

source of pollution outside its national jurisdiction. Hence, in cases such as the Dommel, a downstream Member State can be excused for not achieving good water status. This could enable downstream Member States to use their reasonable and equitable share of the available pollution of a river, despite the upstream pollution. In this scenario, European law could be said to comply with the second principle of good river basin management. But this ‘solution’ is queering one’s own pitch: after all, now the first principle of good river basin management immediately goes down the drain. The norm is simply moved upwards to allow all riparian states to pollute to their heart’s content (as long as they remain within what is considered reasonable and equitable with regards to their social and economic needs etc., see Article 6 of the UN Convention). In this scenario, water quality is not protected sufficiently anymore. It can thus be concluded that, as far as good surface water chemical status is concerned, European law does not seem to comply with the two principles of good river basin management, but at most with only one of these principles.

The other norms following from Article 4 WFD are (partly) up for the Member States to decide, however. Moreover, one could point to the fact that nothing in European water law *forbids* Member States to employ stricter quality standards than those provided in the Priority Substances Directive and thus for upstream countries to restrict themselves in their pollution to allow downstream Member States to comply with European law without using the exemption of cross border pollution. In that case, European law might still allow for good river basin management. If European law would actually *stimulate* such a process, one could even say that achieving good river basin management then is a virtue of European law and that it is in compliance with international law after all. This possibility will be explored in the next section.

Does European law enable the parties involved to meet the criteria of good river basin management?

As we have seen above, European law does not directly enforce an internalization process that meets the goals of good river basin management. This is not uncommon: although internalizing externalities typically requires some higher authority that can enforce the internalization, in cross border cases such an authority is often lacking. In those cases, cooperation between the parties involved is the way to go. After all, the idea that cooperation is crucial in international

watercourses is a well-established basic assumption in water management (see, for instance, considerations 14 and 35 of the Preamble to the European Water Framework Directive). Moreover, riparian states are the ones that should actually follow the procedure provided for in Article 6 of the UN Convention. So far, European law seems to have made the logical choice in leaving the question of distribution up to the Member States.

According to Article 3.4 WFD, Member States shall ensure that the achievement of the environmental objectives established under Article 4 is coordinated. For international river basins, the Member States concerned shall together ensure this coordination and may, for this purpose, use existing structures stemming from international agreements. In addition, Article 13.2 WFD urges Member States to ensure coordination with the aim of producing a single international river basin management plan. Article 13, however, explicitly leaves open the option that no joint plan is produced and that each riparian Member State produces a river basin management plan covering only those parts of the river basin falling within its territory to achieve the applicable objectives. The obligation to produce a joint plan, therefore, is merely an obligation of best efforts. Moreover, the *outcome* of this recommended cooperation is to make plans. It is *not* recommended or required by European law that these plans actually contain a distribution of obligations.

Then how does this cooperation turn out in practice? As an example, we look at the case of the Netherlands. All four of the river basins in the Netherlands allow for cooperation in commissions specially set up for this purpose. This is cooperation on the level of the Member States. Of these commissions, the Rhine river basin commission is the only one that can give its Member States binding instructions to take certain measures. The other three commissions only have the authority to advise or recommend certain measures. Since the lack of binding competence is considered to be one of the reasons for policy having been less successful there than in the Rhine basin, it will be more difficult for them to bring about effective cooperation. The local and regional authorities also have a wide range of cooperation instruments at their disposal. Based on Dutch national law, Dutch water management bodies can conclude private-law agreements with their counterparts across the border. While it is impossible to conclude cross-border joint regulations under the Dutch Joint Regulations Act (*Wet gemeenschappelijke regelingen*), it is possible to conclude other types of agreements with other government

authorities abroad. In addition to national law, cross-border public-law cooperation can also be based on a number of bilateral and multilateral treaties that the Netherlands has concluded with its neighbouring countries. Some of these treaties allow the conclusion of powers agreements and the establishment of public authorities and of joint bodies serving as cooperative frameworks.

It can hence be said that a large number of instruments is available for cooperation. At the Member State level, this cooperation has also resulted in actual joint river basin management plans. However, these international management plans governing the Dutch river basins include no arrangements regarding the distribution of pollution or regarding the restriction of cross border pollution, which for the Netherlands remains a significant problem. Although one of the causes of this patchy cooperation seems to be the difference in the organisational structure of water management on either side of the border,¹⁴ it remains a fact that European legislation does not actually require cooperation to result in distribution arrangements regarding pollution allowances. In my opinion, this is the main cause of this failure to cooperate more substantively.

Does European law then offer a solution, when Member States encounter problems in achieving this substantive cooperation? According to Article 12 WFD, Member States that identify issues that have an impact on the management of its water but cannot be resolved by themselves, may report the issue to the Commission and any other Member State concerned and may make recommendations for the resolution of it. The Commission shall then respond within a period of six months. This 'response' is not specified any further. Article 3.4 WFD does add that in coordinating the achievement of the environmental objectives for the whole of an international river basin, the Commission shall act to facilitate the establishment of the programmes of measures at the request of the Member States involved. Although these might be admirable provisions to facilitate substantive cooperation, they do not provide the European Commission with any real powers to enforce the achievement of a reasonable and equitable distribution.

It can thus be concluded that European law does not contain any real incentive for riparian states to come up with a reasonable and equitable distribution within the process of setting self-binding norms. Hence, European water law cannot be said to stimulate achieving good river basin management as required by international law.

Conclusions

Although European water law is supposed to be an implementation of the international law on water courses, it is a striking fact that the issue of distributing the allowed pollution seems to have been ‘forgotten’ in European legislation: directives fail to differentiate between Member States by not including which quality requirements apply where, and they fail to obligate the Member States to include a distribution in their own standards. That Member States should solve this by cooperating within the river basins is not such a bad idea in itself, but European legislation lacks the mechanisms to ensure that this actually takes place. In practice, cooperation proves unsuccessful in establishing the distribution of pollution allowance, in spite of the broad range of instruments available. In principle, therefore, the restriction of upstream Member States in their pollution is currently insufficient, which will result in a higher than optimal volume of cross border pollution. Downstream Member States are therefore forced to either accept a pollution allowance that is smaller than what would be fair, or to let water quality go down the drain by invoking exemptions for exceeding the water quality standards. ■

- 1 J.J.H. van Kempen, *Europees waterbeheer: eerlijk zullen we alles delen?* (diss. Utrecht), Den Haag: Boom Juridische uitgevers 2012.
- 2 Also see H.F.M.W. van Rijswijk, *Moving Water and the Law. On the Distribution of Water Rights and Water Duties Within River Basins in European and Dutch Water Law* (inaugural address Utrecht), Groningen: Europa Law Publishing 2008, p. 8.
- 3 R.D. Cooter & T. Ulen, *Law & Economics*, Boston: Pearson 2012, pp. 39 & 167.
- 4 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Helsinki, 17 March 1992.
- 5 Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, OJ 2000, L 327, pp. 1-73.
- 6 Convention on the Law of the Non-Navigational Uses of International Watercourses, New York, 21 May 1997.
- 7 S.C. McCaffrey, *The Law of International Watercourses. Non-Navigational Uses*, Oxford: Oxford University Press 2001, p. 341.
- 8 See the commentary with Article 13 of the Berlin Rules on Water Resources. Fourth Report of the Berlin Conference on Water Resources Law of the International Law Association.
- 9 John Rawls, *A Theory of Justice. Revised Edition*, Cambridge: Harvard University Press 1999, pp. 74-75.

- 10 Van Rijswijk 2008 (*supra* note 2), p. 29.
- 11 Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council, OJ 2008, L 348, pp. 84-97.
- 12 For more information see J.J.H. van Kempen, ‘Countering the Obscurity of Obligations in European Environmental Law: An Analysis of Article 4 of the European Water Framework Directive’, in: *Journal of Environmental Law* (2012), pp. 26-27.
- 13 See, for instance, the Report from the Commission to the European Parliament and the Council on the implementation of the Water Framework Directive (2000/60/EC) River Basin Management Plans, COM(2012) 670 final, section 5.1.
- 14 See, for more information, Van Kempen 2012 (*supra* note 1), chapter 5.

SAMENVATTING

Het Europese waterrecht bevordert de samenwerking tussen lidstaten binnen stroomgebieden om zo te komen tot een goede status van het oppervlaktewater in de gehele Unie. Hoewel het hiermee een implementatie beoogt te zijn van het relevante internationale recht, slaagt het er niet in vorm te geven aan het in dat internationale recht beoogde ‘goede stroomgebiedbeheer’. Hoewel de bescherming van de waterkwaliteit (het eerste vereiste van goed stroomgebiedbeheer) voorop staat in de Europese richtlijnen, is de verdeling van de beschikbare vervuilingruimte een vergeten kindje. Dat niet afgedwongen wordt dat oeverstaten komen tot een redelijke en billijke verdeling van deze vervuilingruimte (het tweede beginsel van goed stroomgebiedbeheer) leidt ertoe dat er een onevenredige druk bestaat op de waterkwaliteit in de benedenstroomse oeverstaten van internationale stroomgebieden. Dit wordt toegelicht aan de hand van een voorbeeld. Hoewel het onder het Europese recht wel mogelijk is dat ook benedenstroomse lidstaten hun redelijk en billijk deel opeisen, leidt dit er automatisch toe dat de bescherming van de waterkwaliteit de dupe is. Zo wordt nooit tegelijk voldaan aan de beide vereisten van goed stroomgebiedbeheer. Het Europese recht laat dit probleem volledig over aan de lidstaten in de hoop dat die er onderling wel uitkomen. De praktijk laat echter zien dat dit niet het geval is. De Kaderrichtlijn Water biedt niet het juiste instrumentarium om de lidstaten in staat te stellen onderlinge meningsverschillen te overbruggen en dwingt het beoogde resultaat van een afgesproken verdeling onvoldoende af. Zo kan geconcludeerd worden dat het huidige Europese recht weliswaar een stap in de goede richting is, maar nog lang niet de eindhalte in de ontwikkeling van dit rechtsgebied.