

TRANSFRONTIER POLLUTION—PREVENTION AND CONTROL—REPORT ON THE FEDERAL REPUBLIC OF GERMANY

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1. In the famous Trail Smelter Arbitration, international legal problems of transfrontier pollution were raised in the context of international responsibility. In that case, the problem to be solved was the compensation for pollution damages which already had arisen. Nowadays, however, it seems far more important to prevent such damages. A harm once done to the environment may be irreversible. In most cases, it will be at least much cheaper to eliminate the causes of pollution than to compensate for damages which are its consequence. Therefore, international measures to prevent and control pollution are required.

The Federal Republic of Germany has taken part in such measures in a numbers of ways, based on international treaties or in the framework of voluntary *ad hoc* cooperation of a more or less informal character. Various levels of government have had to cope with manifold instances of actual or imminent transfrontier pollution. The following report tries to describe this practice as comprehensively as possible, but omissions are inevitable, particularly with regard to administrative practice, where information is not always available.

2. The following major problem areas can be distinguished: water protection, clean air, noise abatement, conservation (including protection of fish and wildlife through hunting and fishing regulations), and some

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special areas, the most important of which is the protection against radiation (reactor-safety).

International treaties dealing with these questions, as a rule, do not include more than one problem area. A significant exception is the agreement between the Federal Republic of Germany and the German Democratic Republic, dated September 20, 1973, concerning principles on fighting hazards along the border.¹ This agreement covers not only damages to the natural environment broadly defined, but goes even beyond this. It covers fires, floods, storms, epidemics, pests, pollution by oil, air pollution, explosions traffic accidents, and radiation. On the other side, the duties stipulated by this agreement are not very far-reaching.

2.1. Water protection^{1 a} may include very different aspects of protecting the aquatic environment. One of these, water quality, is a rather recent concern. Older regulations in relation to transnational waters are rather indifferent to it. They dealt with the maintenance or establishment of a sufficient water flow to facilitate the use for navigation, irrigation or drinking water purposes. Sometimes, but not necessarily interrelated with these, the problem of flood control is also included. These preoccupations have led, already in the last century,² to international undertakings concerning river corrections and other works related to the maintenance of rivers.³ The use of rivers for power generation also comes into play.⁴

¹ Bull, 1973, p. 1141.

^{1 a} For a general survey on the problem of Central European cooperation for water protection, see Grabmayr, *Österreichische Wasserwirtschaft* 21 (1969), p. 129 et seq.

² The following treaties concluded during the last century may be mentioned: Vertrag zwischen Bayern und Österreich betreffend die Richtung der nassen Grenze an den Flüssen Saale und Salzach, December 24, 1820 (Harting, *Internationale Wasserwirtschaft und internationales Recht*, p. 40); Schiffahrtsvertrag zwischen Österreich und Bayern, December 2, 1851 (text *ibidem*, p. 46); Vortrag zwischen Österreich und Bayern über die Regulierung und Behandlung des Innflusses, August 19/31, 1858 (text *ibidem* p. 51); Staatsvertrag zwischen Österreich und Bayern über die Regulierung des Grenzzuges und sonstiger Territorialverhältnisse zwischen Böhmen und Bayern, June 24, 1862 (Art. 58, text *ibidem* p. 57). The same kind of questions are regulated in border agreements after World War I: Abkommen zur Regelung der Wasser- und Deichverhältnisse an der deutsch-dänischen Grenze, LNTS 10, p. 87.

³ After World War II, The Federal Republic has concluded treaties with her western neighbours concerning dams and related works (treaties with France concerning the Rhine: Vertrag über den Ausbau des Oberrheins zwischen Basel und Straßburg, October 27, 1956; BCBl. 1956 II, p. 1863; Vertrag über den Ausbau des Rheines zwischen Kehl/Straßburg und Neuburgweier/Lauterburg, July 4, 1969, BGBl. 1970 II, p. 727), navigability of a transfrontier stream (Vertrag zwischen der Bundesrepublik Deutschland, der Französischen Republik und dem Großherzogtum Luxemburg über die Schiffbarmachung der Mosel, December 22, 1956, BGBl. 1956

All this may have an effect on water quality, but it is not a regulation of water pollution *stricto sensu*. It comes, however, into the purview of environmental protection, as we have become accustomed to use the term, for it constitutes a regulation of the use of a specific natural resource. Therefore, treaties concerning these problems have been included in this report.

The Treaty on the application of uniform rules concerning fisheries in the Lake of Constance of 1893 already contained some rudimentary rules forbidding water pollution.⁵ In the twenties of this century, but also after the 2nd World War, water quality has been dealt with in treaties concerning border waters between Germany and her neighbours.⁶

International agreements establishing an organisational framework for the protection of the more important European transnational waters against pollution are, however, only of recent origin: There are now such agreements with regard to the Lake Constance, the Rhine, Moselle, and Saar.⁷ The draft: European Convention for the Protection of Inter-

II, p. 1836), navigation in frontier waters (so-called Ems-Dollart-Vertrag, April 8, 1960, BGBl. 1963 II, p. 602), and the water regime in frontier waters (Dutch-German Border Treaty, April 8, 1960, BGBl. 1963 II, p. 463; Vereinbarung zwischen der Bundesrepublik Deutschland und der Regierung des Königreichs Belgiens über die Regulierung und Reinigung der Grenzgewässer Breitenbach und Schwarzbach, December 24, 1969, BCBl. 1970 II, p. 1205). There may further be mentioned: Übereinkommen über Wasserentnahmen aus dem Bodensee, April 30, 1966, Berber, Völkerrecht, Dokumentensammlung, vol. I, p. 1637); Vereinbarung zwischen der Regierung der Bundesrepublik Deutschland und der Regierung der Deutschen Demokratischen Republik über Grundsätze zur Instandhaltung und zum Ausbau der Grenzgewässer sowie der dazu gehörigen wasserwirtschaftlichen Anlagen, September 30, 1973 (Bull. 1973, p. 1144). Flood control for Lake Constance has been a subject of common concern and negotiations between the riparian states since the middle of the last century, *cf.* Wasserwirtschaft in Baden-Württemberg, Munich, 1969, p. 23 et seq.

⁴ The two treaties between the Federal Republic and France concerning the development of the Rhine (see preceding note) provide for power stations. See further: Vertrag über die österreichisch-Bayerischen Kraftwerke AG, October 16, 1950 (Hartig, *loc. cit.*, p. 58). For a provision prohibiting any pollution that interferes with the functioning of a power plant, see art. 2 of the State Treaty between Rheinland-Pfalz and Luxemburg, concerning the construction of hydroelectric power installations on the Our, July 10, 1950, GVBl., Rheinland-Pfalz, 1959, p. 13.

⁵ Agreement between Switzerland, Baden and Alsace-Lorraine, dated July 5, 1893, BS, 14, p. 218.

⁶ Border treaty with Denmark, Agreement for the regulation of questions concerning watercourses and dikes, LNTS 10, p. 87 (Arts. 29, 45); Border treaty with Belgium, LNTS 121, p. 327. Treaty concerning the rectification of the Belgian-German Border, September 24, 1956; BGBl, 1958, II, p. 262 (Art. 7).

⁷ Übereinkommen über den Schutz des Bodensees gegen Verunreinigung, October 27, 1960, Bay GVBl., 1961, p. 237 (Bavaria, Baden-Württemberg, Austria, Switzerland); Vereinbarung über die Internationale Kommission zum Schutz des Rheins gegen Verunreinigung, April 29, 1963, BGBl., 1965 II, p. 1432 (Federal Republic

national Watercourses against Pollution, which has been elaborated in the Council of Europe, will provide a framework and useful guidelines for such treaties regarding specific watercourses in the future.⁸

But it will also contain some minimum standards of water quality for all international watercourses to which the Parties to the Convention are riparian (draft article 4).

Furthermore, the Federal Republic of Germany is, or is likely to become a party to treaties concerning the pollution of her bordering seas.⁹

It must be stressed that the various existing treaties with respect to international watercourses and sea areas to which the Federal Republic is a riparian, concern only more or less specific problems. There is no comprehensive agreement covering *all* uses of these resources. Many questions are thus still open. This is even true for Lake Constance, where navigation, fishing, and pollution have been dealt with by international agreements, but the regulation of the water level is still a matter of negotiation.

A special kind of water pollution has been tackled by the European Agreement on the Restriction of the use of certain detergents in washing and cleaning products, which was elaborated within the Council of Europe.¹⁰ Sewage treatment is another crucial problem for clean water. While this problem has been taken up in the framework of the agreements on the Rhine and Lake Constance, it is also a matter of interlocal cross-frontier co-operation. There are a number of agreements between municipi-

of Germany, France, Luxembourg, Netherlands, Switzerland); Protokoll über die Errichtung einer Internationalen Kommission zum Schutz der Mosel gegen Verunreinigung, December 20, 1961, BGBl., 1962 II, p. 1103 (Federal Republic of Germany, France, Luxembourg); Protokoll über die Errichtung einer Internationalen Kommission zum Schutz der Saar gegen Verunreinigung December 20, 1961, BGBl., 1962 II, p. 1106 (Federal Republic of Germany, France).

⁸ Council of Europe, Consultative Assembly, Doc. 3417 (April 4, 1974).

⁹ Agreement for Cooperation in Dealing with Pollution of the North Sea by Oil, June 9, 1969, BGBl., 1969 II, p. 2067 (Belgium, Denmark, France, Federal Republic of Germany, Netherlands, Norway, Sweden, United Kingdom); Convention on Fishing and Conservation of the Living Resources in the Baltic Sea and the Belts, September 13, 1973, 7 ILM, 1291 (1973); Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft, February 15, 1972, 11 ILM, 262 (1972) (Belgium, Denmark, Finland, France, Federal Republic of Germany, Iceland, the Netherlands, Norway, Portugal, Spain, Sweden, United Kingdom); Convention for the Prevention of Marine Pollution from Land Based Sources, February 21, 1974, 13 ILM, 352 (1974) (Austria, Belgium, Denmark, France, Federal Republic of Germany, Iceland, Luxembourg; the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom).

¹⁰ Agreement dated September 16, 1968, BR Drs., 202/71.

palities or corporation formed by such municipalities on the on the establishment of common sewe systems or the use of each other's systems.¹¹

2.2. The agreement concerning hazards in the border area between the Federal Republic and the German Democratic Republic is, at least as far as this author is aware, the only written agreement which contains some general rules regarding air pollution.¹² Problems of air pollution have usually been dealt with by *ad hoc* cooperation between the competent authorities on both sides of the border. The Committee of Ministers of the Council of Europe, however, has adopted a resolution concerning air pollution in border areas, and consultations are being held within the Council to fill the framework provided by this resolution with more precise legal obligations.¹³

There is also a treaty between the Federal Republic and Austria on the Salzburg Airport, which has a significant bearing on the regulation of aircraft noise in the border area.¹⁴

2.3. There are several agreements on conservation, hunting and fishing in the border area.¹⁵ Reactor safety has been regulated by an European convention.¹⁶ An important conservation measure is the establishment of a common natural park crossing the border between Rheinland-Pfalz

¹¹ Agreement between Konstanz (Germany) and Kreuzlingen (Switzerland), September 1971 (*cfr.*, *Neue Zürcher Zeitung*, October 1st, 1971, p. 30); Weil a.Rh. (Germany) and Basel (Switzerland, dated April 24/July 21, 1970); Dörfliingen (Switzerland) and Büsingen (Germany), December 21, 1970; Wieseverband (special sewage district, Germany) and Basel-Urban, December 5, 1963/March 16, 1964; Inzlingen (Germany) and Basel Urban, December 18, 1961/April 26, 1962; Lörrach (Germany) and Basel Urban, November 22/December 15, 1911. Certain municipalities in the Constance area along the Swiss-German border have created a common sewage treatment system, *cfr.*, *Wasserwirtschaft in Baden-Württemberg*, Munich 1969, p. 26 and Baschung, *Schweizerisches Zentralblatt für Staats-und Gemeindevverwaltung*, 71 (1970), p. 287 et seq.

¹² *Supra* note 1.

¹³ Resolution (71) 5, March 26, 1971, Council of Europe Doc. 2934, Appendix VIII, also published BGBl., 1971, II, p. 975. See further Council of Europe Document EXP/Air (73) 2.

¹⁴ Treaty dated December 19, 1967, BGBl., 1974, II, p. 15.

¹⁵ Übereinkunft zwischen dem Land Baden-Württemberg und der Schweiz über die Fischerei in den Stauhaltungen des Rheins beim Kraftwerk Rheinau, dated November 1st, 1957, GBl., Baden-Württemberg, 1959, p. 39; Vogeljagdordnung für das Gebiet der Gemeinschaftlichen Wasserjagd auf dem Untersee und dem Rhein, as agreed by Baden-Württemberg and Switzerland on May 23, 1953, and June 5, 1954, GBl., Baden-Württemberg, 1954, p. 99. For the Lake Constance see already *supra* note 5.

¹⁶ Convention on the Establishment of a Security Control in the Field of Nuclear Energy, December 20, 1957, BGBl., 1959, II, p. 586.

(Federal Republic of Germany) and Luxemburg.¹⁷ Another natural park has been established in the border area between the German Lander Nordrhein-Westfalen and Rheinland-Pfalz on one side and Belgium on the other.¹⁸

2.4. Questions of planning have become crucial for the protection of the environment; both the planning of certain uses of the land (town and country planning, infrastructure planning) and the planning of the socio-economic development. Especially in town and country planning, there has been a notable effort toward transfrontier co-operation along the German borders during the last few years. Mixed town and country planning commissions have been set up between the Federal Republic and Belgium under a formal executive agreement,¹⁹ and between the Federal Republic and Switzerland, apparently based only upon an informal understanding.²⁰ The Swiss-German commission began its work in August 1973. Negotiations with a view of establishing similar commissions with France and Austria are being pursued. Austria wants this to be based on a formal agreement as well.

It is, of course, premature to judge the work of these commissions. They are to elaborate common planning concepts and to coordinate specific plans on both sides of the border. This work has only just begun.²¹

Apparently more developed is the cooperation for planning in two economically important regions, namely the Upper Rhine-Basel area (France, Switzerland, Germany) and the so-called Saar-Lor-Lux-area between Saarbrücken and Metz (Germany [the Länder Saarland and parts of Rheinland-Pfalz], France [Region Lorraine], Luxembourg). For both regions regional commissions were established in 1971.²² They have dealt not merely with planning questions, although the emphasis of their work is development planning *largo sensu*. The "Tripartite Conference for Regional Cooperation" for the Upper Rhine area has also a cooperative secretarial scheme. The Basel part of this secretariate has established a comparative analysis of the existing planning instruments in the three

¹⁷ Staatsvertrag zwischen dem Land Rheinland-Pfalz und dem Grossherzogtum Luxemburg über die Errichtung eines gemeinsamen Naturparks, dated April 17, 1964, GVBl., Rheinland-Pfalz, 1965, p. 15.

¹⁸ *Raumordnungsbericht der Landesregierung Rheinland-Pfalz*, 1973, p. 64.

¹⁹ Agreement dated February 2, 1971, *cfr.*, *Raumordnungsbericht der Landesregierung Rheinland-Pfalz*, 1973, p. 64.

²⁰ See *Sweiter Raumordnungsbericht der Bayerischen Staatsregierung* (Jan. 1974).

²¹ *Raumordnungsbericht der Landesregierung Rheinland-Pfalz*, 1973, p. 64; *Zweiter Raumordnungsbericht der Bayerischen Staatsregierung*.

²² *Raumordnungsbericht der Landesregierung Rheinland-Pfalz*, 1973, p. 64. *Neue Zürcher Zeitung*, July 19, 1971, p. 15; February 24, 1972, p. 36; July 27, 1973, p. 27. See also *Landtag von Baden von Baden-Württemberg*, Drucksache 6/3009 and 6/3894.

countries concerned, which may be of great value for future planning coordination. Other subjects in the Basel area which have been dealt with by the Conference are energy supply, nuclear power plants, airport development. The Conference has also successfully served as a negotiating frame-work for specific air pollution incidents. The German-Lorrain-Luxembourg Commission has dealt with questions of traffic communications (roads and railways) and water management.

2.5 Conflicts arising out of transfrontier pollution are being complicated by the fact that the applicable standards may be different on both sides of the border. Consequently, there is an often-felt need for harmonization in this field. This is being undertaken in Europe on various levels. The European Reactor Safety Convention and the work done by the Council of Europe have already been mentioned. But probably much more important will be the action of the European Communities in the field of environmental protection.²³ The program adopted by the Council of the Communities covers a wide range of environmental problems to be solved by the Communities themselves or by the member States in a coordinated way. It includes studies and research in various fields, exchange of information, technical standards for specific products and industries, health standards, marine pollution, waste disposal, preservation of scarce natural resources, and regional planning. An important goal envisaged is the adoption of unified technical standards throughout the member States of the Communities. The execution of this program will be a significant step forward in coping with problems of transfrontier pollution between Germany and many of her neighbours, although considerable time will still have to pass until this goal is achieved. A detailed study of this European action program can, of course, not be undertaken within the framework of this report.

3. The regulations of transfrontier environmental problems may be classified also according to the number of parties involved. Many problems are dealt with bilaterally between the neighbouring countries concerned. There may also be trilateral regulation,²⁴ if such is warranged by specific geographic circumstances. This is the framework in which problems of clean air and noise abatement are, as a rule, treated.²⁵ Other problems

²³ For the text of the proposal submitted by the Commission of the European Communities to the Council, see BT Drs. 7/560, dated May 14, 1973.

²⁴ E.g. the Lake Constance area involving Germany, Switzerland and Austria, the Basel metropolitan area involving Switzerland, France and Germany, the heavily industrialized region between Metz, Saarbrücken and Luxemburg, involving France, Germany and Luxemburg.

²⁵ For examples see *infra* note 90.

are being tackled in a larger framework. This is particularly the case in the area of water protection, where the riparian states to a watercourse, or all states situated in a given hydrographic basin, participate in the legal regulation. Thus, the riparian states on various international rivers (Rhine, Moselle, Saar)²⁶ and on Lake Constance²⁷ as well as the bordering states of the North²⁸ and Baltic Seas²⁹ cooperate with each other. There are also, however, bilateral regulations in the area of water protection, particularly with respect to border waters.³⁰

The harmonization of legislation and technical standards in Europe is, of course, a multilateral question.

4. Cooperative devices may also be distinguished according to the levels of government involved. Many questions of environmental protection come within the powers of levels of government below the national level. This is so in the Federal Republic and some of her neighbouring states, but in differing degrees. Furthermore, external and internal powers are not necessarily the same. Two neighbouring countries of the Federal Republic, Austria and Switzerland, are federal states like the Federal Republic; there are, however, differences concerning the distribution of internal powers as well as of external powers. Thus, there are treaties where on the German side the *Länder* are parties whereas the Austrian or Swiss counterpart is the respective federal government.³¹

In the mixed town and country planning commissions established or being established between Germany and her neighbours, the respective delegations are composed not only of representatives of the federal governments, but also of delegates from the member states (*Länder*, Cantons) concerned. Thus, for instance, the Swiss-German commission consists of two commissioners from the Swiss Federal Government, one from the Cantons of Zürich, Basel Urban, Basel Rural, Schaffhausen, St. Gallen, Aargau and Thurgau respectively, three from the German Federal Government and three from the *Länder* Bavaria and Baden-Württemberg respectively.

²⁶ *Supra* note 7.

²⁷ *Supra* notes 3, 5 and 7.

²⁸ *Supra* note 9.

²⁹ *Supra* note 9.

³⁰ *Supra* notes 2, 3 and 6.

³¹ E.g. the agreement quoted *supra* note 7 between Bavaria, Baden-Württemberg, Austria and Switzerland. See also Agreement between Rheinland-Pfalz and Luxemburg, *supra* note 7. The agreements concluded between Bavaria and Austria quoted *supra* note 2 are not strictly speaking agreements concluded by a member state of a federal state, because Bavaria, at the time of their conclusion, was an independent sovereign state.

Other political subdivisions may also be involved in the solution of transfrontier environmental problems: *régions* and *départements* in France, *Regierungsbezirke* (districts), *Kreise* (counties) and *Planungsverbände* (special planning districts) in Germany, and last but not least, municipalities. Private groups and organizations, such as the *Regio Basiliensis* in the Upper Rhine-Basel area, may also play an important role by taking the initiative and doing research work.³²

The Tripartite Conference for Regional Cooperation in the Upper Rhine area³³ is, for instance, composed of — on the French side — the *Préfet* of the *Département du Haut-Rhin* and the Chairman of the *Conseil Général* of this *département*, — on the Swiss side — one member of the governments of Basel Urban and Basel Rural respectively, and — on the German side — the *Regierungspräsident* (head of district administration) Sudbaden and one *Landrat* (head of county administration) from the area. The Saar-Lor-Lux commission has a similar composition.³⁴

As to transfrontier cooperation between municipalities, the common use or pooling of certain municipal services, notably sewage collection and treatment, is, for instance, an often used device along the Swiss-German border.³⁵

Such local cross-frontier cooperation may, in many cases, be preferable to negotiations at higher levels. It probably involves less questions of national prestige, and local negotiators know better what are the needs of those concerned. The Committee of Ministers of the Council of Europe, in its Resolution (74) 8, adopted February 27, 1974, has recommended that the member states promote such cooperation between local authorities and remove existing legal and administrative obstacles.³⁶ It has drawn up a list of examples of subject matters suitable for such interlocal cooperation which include many items in the field of environmental protection.³⁷

³² Gr. on the work of the *Regio Basiliensis*, *Neue Zürcher Zeitung*, April 23, 1965; April 7, 1973, p. 87. It has undertaken important studies on the settlement structure, traffic problems, and other problems of the area and provides services for planning cooperation.

³³ *Supra* note 22.

³⁴ *Supra* note 22.

³⁵ See the agreements mentioned *supra* note 11.

³⁶ An example of what could be done in this field is sec. 15 para. 6 of the Rheinland-Pfalz Planning Act (GVBl., 1966, p. 177), which expressly authorizes special planning districts and some other local government agencies to cooperate with their respective counterparts outside Rheinland-Pfalz.

³⁷ The list includes air and water anti-pollution measures, preservation of open spaces and creation of recreation areas and natural parks, purification of waste water, water supply and drainage system, collection of household garbage and industrial refuse, natural park, regional airport, control of adjacent, and frontier waters, nature conservation.

It may be noted, however, that the legal status of such interlocal trans-frontier agreements is far from clear. Are these international agreements to which international law applies? Are they agreements according to the national law of one of the partners? This question becomes particularly acute if new legal entities are to be created by such agreements, for instance, special districts. In one case,³⁸ this latter problem has been solved by creating two special districts, one for each side of the border. But the question remains as to the status of their legal duties to co-operate. The fact that the parties to the agreement in question intended to create legal duties becomes clear from the fact that they provided for a settlement of disputes by arbitration.

5. If one tries to establish a certain systematic classification within the mass of provisions dealing with transfrontier questions of prevention and control of environmental damages, one has to distinguish between provisions establishing a procedure or a procedural framework for dealing with such questions, and provisions substantively dealing with the prevention and control of such damages.

5.1. Procedural provisions for the prevention and control of environmental damages.

5.1.1. Co-operation generally. The treaties concerning the protection of Lake Constance against pollution,³⁹ and concerning the establishment of commissions for the protection of the Rhine, Moselle and Saar rivers against pollution,⁴⁰ as well as the agreement for co-operation in dealing with pollution of the North Sea by oil⁴¹ create co-operation duties in very general terms. Thus Art. 1 § 1 of the Lake Constance agreement provides:

The riparian states of the Lake Constance . . . undertake to cooperate in the field of the protection of the waters of the Lake Constance.

Cooperation duties of a similarly comprehensive character do not yet exist in other fields. There are, however, attempts to establish a general framework of environmental co-operation. Thus, a communique date June 1st. 1971 on talks held between the environment ministers of the Federal Republic and France says that a mixed German-French commission will be established, which should examine the possibilities of co-operation in

³⁸ *Cfr.* Baschung, Schweizerisches Zentralblatt für Staats-und Gemeindeverwaltung, 71 (1970), p. 287 et seq.

³⁹ *Supra* note 7.

⁴⁰ *Supra* note 7.

⁴¹ *Supra* note 9.

the field of environmental protection.⁴² Art. 3 of the draft European Convention for the Protection of International Watercourses⁴³ might also become an important step forward. It provides:

The contracting parties undertake to co-operate with each other with a view to achieving the aims of this Convention.

5.1.2. Permanent co-operative bodies. The organization of a framework for co-operation is an essential point. For this purpose various permanent bodies have been created. In the area of water protection, the just mentioned treaties have set up multilateral bodies, namely the International Commission for the protection of the Lake Constance against pollution and the international commissions for the protection of the Rhine, the Moselle and the Saar against pollution. It should be noted that the protocol on the signature of the agreement concerning the Rhine mentions the possibility of setting up a secretariate for the commission. The Federal Republic of Germany has offered to furnish such a secretariate and it has indeed been established. The agreement on the taking of water out of the Lake Constance⁴⁴ also creates a common consultative committee (Art. 8). Permanent commissions are also instituted by the two (Western European) Conventions for the prevention of marine pollution.⁴⁵

There are also permanent co-operative bodies based on bilateral agreements, namely the mixed technical committee pursuant to Art. 5 of the treaty on the development of the Upper-Rhine between Basel and Strassburg⁴⁶ and the permanent commission pursuant to Art. 14 of the treaty on the development of the Rhine between Kehl/Strassburg and Neuburgweier/Lauterburg.⁴⁷ A number of treaties concerning border watercourses provide also for mixed commissions, such as the agreement between Denmark and Germany relating to watercourses and dikes on the German-Danish frontier⁴⁸ (Art. 2 and 3, Frontier Water Commission and Supreme Water Commission), the German-Dutch Border Treaty of 1960⁴⁹ (Art. 64, permanent German-Dutch Water Commission), and the Ems-Dollart Treaty of 1960⁵⁰ (Art. 29 and seq., Ems-Commission. As already mentioned, there have been or are being established several mixed

⁴² Documents officiels 1971, no. 34-35, p. 460.

⁴³ *Supra* note 8.

⁴⁴ *Supra* note 3.

⁴⁵ *Supra* note 9.

⁴⁶ *Supra* note 3.

⁴⁷ *Supra* note 3.

⁴⁸ *Supra* note 6.

⁴⁹ *Supra* note 3.

⁵⁰ *Supra* note 3.

town and country planning commissions between the Federal Republic and her neighbour States,⁵¹ and also commissions for regional co-operation in the Upper Rhine-Basel and the so-called Saar-Lor-Lux areas.⁵² The agreement between Rheinland-Pfalz and Luxemburg on the establishment of a common natural park⁵³ also sets up a Mixed Commission.

The powers of these commissions vary. As a rule, they can only be a framework of consultation; they may make recommendations but no binding decisions.

As an example of a permanent body for co-operation between municipalities in a given area, one may mention a supervisory commission, the functions of which relate to the operation of the common sewage collection and purification system for certain municipalities in the Land Baden-Württemberg (Germany) and the Swiss Canton Schaffhausen.⁵⁴

5.1.3. Channels of communication. Various agreements also contain provisions regarding the channels of communication. Thus, the Agreement on the taking of water out to Lake Constance⁵⁵ (Art. 6) empowers the competent water authorities of the contracting parties to communicate directly with each other. This is an important means to facilitate the regulation of environmental problems in a frontier area. It avoids the often cumbersome detour via those government agencies which are competent for the external affairs generally.

Furthermore, it only involves those bodies directly concerned with the problems to be solved. Due to these advantages this local level approach is quite often used between the Federal Republic and her western and southern neighbours.

Such a practical solution presupposes, however, a good state of neighbourly relations, unembarrassed by political strains. It is quite significant that the Agreement between the Federal Republic and the German Democratic Republic on the fighting of hazards along the border,⁵⁶ chooses another solution, namely communications through the other side's representation in the respective capital, and only in urgent cases through the border security agencies (Art. 3).

5.1.4. Particular forms and duties of cooperation. Besides the general co-operation duties described above, there are a number of duties relating to specific forms of co-operation.

⁵¹ *Supra* note 22.

⁵² *Supra* note 22.

⁵³ *Supra* note 17.

⁵⁴ Baschung, Schweizerisches Zentralblatt für Staats-und Gemeindeverwaltung, 71 (1970), p. 49.

⁵⁵ *Supra* note 3.

⁵⁶ *Supra* note 1.

5.1.4.1. Ascertainment of data and facts which are relevant to the environment. A series of provisions envisage co-operative investigation and research in the field of environmental protection as well as an exchange of information on results and experiences gained in this field. As to water protection, this has been organized on a multilateral basis in the treaties establishing water commissions. Thus, the Commission for the protection of Lake Constance has, *inter alia*, the duty to ascertain the state of Lake Constance and the causes of its pollution and to continuously observe its water quality.⁵⁷ The commissions established for the protection of the Rhine, the Moselle and the Saar have similar functions. They have established monitoring procedures for particular pollutants and undertake regular monitoring at agreed locations. The Convention for the Prevention of Marine Pollution from Land-Based Sources provides for joint programs of scientific and technical research, for the transmission of the information so obtained (Art. 10) and for a permanent monitoring system (Art. 11). The German-Dutch Border Treaty provides for an exchange⁵⁸ of information, the Ems-Dollart-Treaty (Art. 28),⁵⁹ for the exchange of collected data. Regular joint pollution monitoring in the Ems estuary has been agreed upon by the two countries. They are also engaged in co-operation for basic scientific research concerning water protection. In the field of air pollution, there exists similar bilateral co-operation between the Federal Republic and the Netherlands, France, and Great Britain.⁶⁰

5.1.4.2. Information relating to environmentally relevant projects. It is essential that a state, in order to be able to assert its interests to an unharmed environment, receive timely knowledge about those projects being carried on in a neighbourstate which may have effects on its own environment. Therefore, a number of treaties create duties to provide information relating to environmentally relevant projects. Thus, Art. 1 paragraph 3 of the Lake Constance Water Quality Agreement⁶¹ provides that the riparian states have to communicate to the other parties, in due course, those projected water uses which could affect the interests of another riparian state in the water quality of the Lake.

Under the agreement on the taking of water from Lake Constance,⁶² the parties have to inform each other of each taking beyond a specified level. Certain information duties are also contained in Art. 4 of the

⁵⁷ Art. 4 of the Agreement quoted *supra* note 7.

⁵⁸ *Supra* note 3.

⁵⁹ *Supra* note 3.

⁶⁰ Umweltschutz, August 11, 1971 (ed. Federal Ministry of the Interior).

⁶¹ *Supra* note 7.

⁶² *Supra* note 3, Arts. 6 et seq.

agreement on cooperation for the protection of the North Sea against oil pollution.⁶³

Bilateral agreements on border waters also provide for information duties relating to particular projects or actions which may have an effect on these waters, e.g. the Bavarian-Austrian treaties on the Saale and Salzach (Art. 9 and 11)⁶⁴ and the Inn⁶⁵ (Art. 5), the treaty between the Federal Republic and France on the development of the Rhine between Kehl and Neubrugweier⁶⁶ (Art. 5), the German-Dutch Border Treaty (Art. 60), and the Ems-Dollart-Treaty⁶⁷ (Art. 22). In the treaty on the development of the Rhine and the Dutch-German Border Treaty, the corresponding communications have to be addressed to the commissions established by these treaties, which have already been mentioned.

In the field of air pollution, a resolution of the Committee of Ministers of the Council of Europe, dated March 26, 1971, relating to air pollution in border areas⁶⁸ (which, however, is not binding) request that information be provided on a timely basis to the competent authorities beyond the border on each project which could cause air pollution.⁶⁹ Such an exchange of information, for instance, takes place regularly along the border between the Saarland (Germany) and France, be it on a local level, be it within the framework of the above mentioned working party on pollution control.⁷⁰ The Council of Europe is pursuing its work in this field.⁷¹

5.1.4.3. Information concerning environmental dangers. Duties to provide information concerning environmental dangers are established by Art. 3 of the agreement between the Federal Republic of Germany and the German Democratic Republic on hazards in the frontier area⁷² and Art. 5 of the agreement for co-operation in dealing with pollution by oil of the North Sea. A German-Dutch agreement of 1959⁷³ requires the other side to be informed of cases of certain epizootics. Art. 11 of the draft European Convention for the protection of international watercourses provides:

⁶³ *Supra* note 9.

⁶⁴ *Supra* note 2.

⁶⁵ *Supra* note 2.

⁶⁶ *Supra* note 3.

⁶⁷ *Supra* note 3.

⁶⁸ Resolution 71 (5), March 26, 1971, Council of Europe, Document 2934, Appendix VIII.

⁶⁹ The Resolution has been published, however, in the Federal Statutes, see *supra*, note 13.

⁷⁰ *Supra*, text accompanying note 22.

⁷¹ See Document EXP/Air (73) 2.

⁷² *Supra* note 1.

⁷³ Banz., 11 (1959), núm. 244, p. 1.

As soon as a sudden increase in pollution is recorded, the Contracting Parties riparian to the same watercourse shall immediately warn each other . . .

5.1.4.4. Duties to consult and negotiate. A number of agreements provide for bilateral consultation and negotiations. Thus, the protocol concerning certain border watercourses in the German-Belgian border are says that planning and development concerning these waters has to be performed "in close concertation between the technical agencies of both sides".⁷⁴ In Art. 12 of the German-French treaty on the development of the Rhine between Kehl/Strassburg and Neubrugweier/Lauterburg,⁷⁵ the parties agree to authorize takings of water only after mutual concertation. According to Art. 13 of the same treaty, they have to concert with each other with respect to plants and execution of construction works.

A comprehensive duty to consult is provided in Art. 57 of the Dutch-German Border Treaty,⁷⁶ where the parties undertake to consult with each other on all questions relating to water management which are of importance for the border waters, with a view to resolving them in a manner satisfactory for both sides. Older examples for such cooperation duties may be found in the navigation treaty between Austria and Bavaria of 1851,⁷⁷ Art. 13 of which provides for an agreement on further works for facilitating and maintaining regular navigation.

The provision of the German-Dutch Border Treaty which has just been mentioned, goes, however, somewhat further than a duty to consult or negotiate; it is quite close to a *pactum de contrahendo*. Such a *pactum de contrahendo* is also provided for in Art. 9 of the German-French treaty on the development of the Rhine between Kehl/Strassburg and Neuburgweier/Lauterburg, according to which the parties shall conclude, as soon as possible, an agreement on flood control measures to be taken and on the division of the corresponding costs, based on the result of a study commission on flood control. An important case of a *pactum de contrahendo* will be created by Art. 12 para. 1 of the draft European Convention for the protection of international watercourses.⁷⁸ It provides:

The Contracting Parties whose territories the same international watercourse separates or passes through . . . undertake to enter into negotiations with each other, if one of them so requests, with a view to

⁷⁴ *Supra* note 3.

⁷⁵ *Supra* note 3.

⁷⁶ *Supra* note 3.

⁷⁷ *Supra* note 2.

⁷⁸ *Supra* note 8.

concluding a co-operation agreement or to adapting existing co-operation agreements to the provisions of this Convention.

If no agreement is reached within a reasonable time, any interested Party may call upon the Committee of Ministers of the Council of Europe with a view of achieving a satisfactory solution (Art. 13). This makes it quite clear that what is meant in Art. 12 is not merely a *pactum de negotiando*, but a promise to contract; a *pactum de contrahendo*.⁷⁹ The following articles further specify the possible content of such co-operation agreements.

The “marine corollary” of these provisions is Art. 9 of the Convention for the Prevention of Marine Pollution from Land-Based Sources,⁸⁰ which, by comparison with the aforementioned convention, uses a more cautious phraseology and can only be considered as a *pactum de negotiando*.

It goes without saying that consultation on transfrontier problems of environmental protection often takes place without any contractual obligation to do so. Thus, problems of air pollution in the French-German frontier area have time and again been solved by mutual consultation, be it on a local, be it on a higher level.⁸¹ There are also trilateral consultations between Swiss, French, and German agencies in the Basel area.⁸² A common element of the German-French consultations which have taken place thus far on questions of air pollution, is that the French side, who because of geographical conditions (western winds are prevailing) was more often than not in the position of being the polluter, has never agreed to discuss the location of an air-pollution causing plant, but rather has always insisted that only the technical measures for the reduction of immissions were negotiable.⁸³

5.1.4.5. Duties to consult enforced by standstill obligations. The position of a state which could suffer damage as a result of pollution or other environmental danger originating from another state, is considerably enhanced if the state where the pollution originates is under a duty not to change the existing state or not to take new, possibly dangerous measures, while negotiations or consultations are taking place. This is, for instance, envisaged in Art. 1 § 3 of the Agreement for the Protection of Lake Constance Against Pollution, where the Parties agree that projected water uses, which may affect the interests of other riparian states

⁷⁹ See also the draft explanatory report on the Convention, Council of Europe Doc. 3417 Addendum, p. 23.

⁸⁰ *Supra* note 9.

⁸¹ For examples see *supra*, text accompanying note 70.

⁸² *Supra*, text accompanying note 22.

⁸³ *Cfr.* Grawe, ZaöRV 34 (1974), p. 314 et seq.

and the cleanliness of the Lake, may only be executed after a common discussion, except in cases of great and imminent danger or express consent. Such standstill duties may also be found in Art. 61 of the Dutch-German Border Treaty and Art. 26 of the Ems-Dollart-Treaty. The author is not aware of any corresponding duty in the field of air pollution.

5.1.4.6. Procedural rights of the neighbour state and its political subdivisions or inhabitants. Quite often a state or its inhabitants affected by pollution originating in a neighbour-state have a vital interest in being involved in the relevant decision making process in the early stages. This leads to the demand that a hearing be granted in the relevant planning procedures and that judicial review be obtainable in the courts of the state where the pollution originates. Therefore, resolution (71) 5 of the Committee of Ministers of the Council of Europe, dated March 26th, 1971,⁸⁴ recommend "that governments of member states of the Council of Europe ensure for the inhabitants of regions beyond their frontiers the same protection against air-pollution in frontier areas as is provided for their own inhabitants". The resolution continues:

to this end, they should in particular ensure that the competent authorities should inform each other in good time about any project for installations liable to pollute the atmosphere beyond the frontier.

The competent authorities beyond the frontier should be able to make their comments on such projects. The comments should be given the same consideration and treatment as if they had been made by the inhabitants of the country where the plant is situated or proposed.

As already mentioned, this resolution is not binding, but it seems to be applied to a large extent in practice. In several instances, municipalities and private individuals from the other side of the border have been given an opportunity to express their views on pollution-causing plants which were going to be established.

Whether the grant of national treatment to those foreign individuals or entities who are affected by pollution originating in the state of the *forum* is a sufficient remedy in these cases of cross-frontier pollution, may be doubted. There may be psychological or linguistic barriers against defending one's claims before foreign administrative bodies or courts. It is no help if the relevant national standards are inadequate. But it is certainly better than no remedy at all. It may even be more effective than higher level negotiations because it allows those who are immediately concerned to take their right in their own hands.

⁸⁴ *Supra* note 13.

All this is, however, mere speculation, and not the result of experiences which might have already been made in the German frontier area.

There are possible legal obstacles against this grant of national treatment to foreign interests. In a case concerning an airport development near the Austro-German border (Salzburg Airport), the Austrian Administrative High Court has not admitted suits filed by affected German municipalities and their inhabitants.⁸⁵ The crucial element in the Court's reasoning was that the relevant Austrian legislation was valid only in Austria so that it could not confer any rights upon persons or entities outside Austria. Those persons or entities could, therefore, not possess any right for which Austrian courts had jurisdiction. After this decision, the treaty on the Salzburg Airport⁸⁶ was ratified, which greatly improved the procedural position of those affected. Individual claims have to be presented against the Federal Republic and will be adjudicated according to German Law, whereas the two States handle their ensuing claims between themselves on the international level.

If an inhabitant of a neighbour-state of the Federal Republic were to file a suit in German Courts, his position would probably be better than that of the just mentioned Germans before the Austrian Administrative High Court. The doctrine that rules of public law are valid only with regard to events taking place "at home" does not hold true for the Federal Republic of Germany.⁸⁷ Norms protecting the general public against all kinds of disturbances (in particular, general police laws) are, as a rule at least, to be interpreted as protecting also the public beyond the frontier.⁸⁸ Statutes protecting the neighbours of industrial or other undertakings against environmental hazards such as the Federal Nuclear Energy Act (Atomgesetz), the Federal Water Act (Wasserhaushaltsgesetz), the Federal Anti-Pollution Act (Bundesimmissionsschutzgesetz) will probably be construed as also protecting persons or property from beyond an international border.^{88 a} If foreigners have the same substantive rights as Germans, their procedural situations before administrative bodies and courts will, for all practical purposes, be similar to that of a Ger-

⁸⁵ Erk. Slg. 1969, p. 264.

⁸⁶ BGBI. 1974, II, p. 15.

⁸⁷ Vogel, *Der räumliche Anwendungsbereich der Verwaltungsrechtsnorm*, pp. 142 et seq., 408 et seq. (1965).

⁸⁸ Vogel, *loc. cit.*, pp. 408, 419, for an interesting case, see p. 4 et seq. See also Weitnauer, *Zeitschrift für Wasserrecht* 4 (1965), p. 12 (responsibility for damages to persons or property beyond the border).

^{88 a} The author is, however, not aware of any jurisprudence confirming this submission.

man.⁸⁹ But even where the enactments simply provide a right to be heard, interests situated on the other side of the border, but susceptible to being affected, should not be excluded.⁹⁰

5.1.4.7. Requirements for consent. The position of those affected by an environmental hazard is still better if certain decisions disadvantages for the environment may only be taken with the consent of the other side concerned. Such provisions may be found in older agreements concerning border-waters, namely in the Austrian-Bavarian treaties on the Saale and Salzach (1820) and the Inn (1858) regarding water-works (Art. 7, 10 and 15 of the Saale-Salzach-Treaty, Art. 5 and 10 of the Inn-Treaty), in Art. 58 of the Austrian-Bavarian Treaty of 1862 concerning the regulation of the border-line⁹¹ with regard to the taking of water out of border water courses, also in the German-Belgian Border Treaty of 1929 (Art. 61).⁹²

5.1.4.8. Execution of governmental functions beyond the national border. A state may have a certain interest in executing certain acts for the protection of its environment beyond its national border. The following examples are taken from areas at the margin of environmental protection, but they may serve as a guide for what can be done in areas more central to the environment. In Art. 19 of the Ems-Dollart-Treaty,⁹³ the division of river police jurisdictions in the Ems-Dollart area between the Netherlands and the Federal Republic of Germany is effected without regard to the situation of the border-line, as both sides have been unable to agree on the location of that line. Also on Lake Constance, the jurisdiction of the various navigation and fishing-police agencies is determined without regard and without prejudice to the disputed territorial questions.⁹⁴

Art. 17 of the German-French Treaty on the development of the Upper Rhine between Basel and Strassbourg, provides for acts of the French administration to be executed on German territory for the purpose of maintenance and technical supervision of a dam erected by France. In this case it is simply a question of practicability that the operation of this one technical plant is subject to only one legal order. There may also be

⁸⁹ *Cfr.* Friederichsen, Die Stellung des Fremden in deutschen Gesetzen und völkerrechtlichen Verträgen seit dem Zeitalter der französischen Revolution, p. 294.

⁹⁰ For examples see Council of Europe, Doc. EXP/air (73) 2, pp. 29, 33 and 50 et seq.

⁹¹ *Supra* note 2.

⁹² *Supra* note 6.

⁹³ *Supra* note 3.

⁹⁴ Navigation and fishing on Lake Constance is regulated by treaties concluded during the last century. With respect to navigation police, a new agreement was signed June 1st, 1973.

mentioned a German-French Agreement concluded in 1970, which grants to the respective competent German and French authorities the power to control, on the territory of the other state, certain plants and plant-products destined for import into the other state.⁹⁵

5.1.4.9. Common planning and normative regulation, harmonization of the law. Several treaties create procedures for the development of common or uniform norms in the field of water protection. Thus, the International Commission for the Protection of Lake Constance is empowered, according to Art. 4 (e) of the relevant agreement, to examine the possibility and possible content of an anti-pollution regulation for Lake Constance. It may also recommend to the riparian states certain measures for the protection of the lake. Using these powers, the Commission, in 1967, established guidelines for the protection of Lake Constance against pollution.⁹⁶ These have been adopted formally as a recommendation to the member-states. It has not been possible to make them binding by an international agreement; but in practice they are being applied by the riparian states.

The commissions for the protection of the Rhine, the Moselle and the Saar are also authorized to recommend measures against the pollution of the rivers. The agreement on the Rhine-Commission also expressly mentions, among the functions of the Commission, the preparation of further agreements (Art. 2 of the respective agreements). For the Moselle, water quality standards have been elaborated;⁹⁷ for the Rhine the negotiations have been more difficult. The German-Dutch Border Water Commission is also in a position to recommend new agreements (Art. 66 of the German-Dutch Border Treaty).⁹⁸

There are no corresponding rules for the elaboration of common or uniform norms concerning air pollution. In the German-Dutch border area, however, the development of such uniform standards has been initiated.⁹⁹ This field will probably have to be covered by the efforts of the European Communities to create uniform standards throughout Europe.

Besides these powers of the European Communities, there is, so far, no international body empowered to create norms having a binding character for the member states or individuals. The norms elaborated by the international bodies described are only recommendations which may be accepted

⁹⁵ BGBI. 1972, II, p. 25.

⁹⁶ Internationale Gewässerschutzkommission für den Bodensee, Richtlinien für die Reinhaltung des Bodensees, dated June 1st, 1967, as amended May 9, 1972.

⁹⁷ *Cfr.* Roth, *Umweltschutz*, November 17, 1972, p. 12 (ed. Federal Ministry of the Interior).

⁹⁸ *Supra* note 3.

⁹⁹ *Umweltschutz*, August 11, 1971, p. 1 (ed. Federal Ministry of the Interior).

by the states concerned or not. The freedom not to accept such norms has been somewhat restricted only for Lake Constance. According to Art. 6 of the agreement, the riparian states undertake to "carefully consider and, to the extent of their powers and subject to their internal law, to enforce" measures recommended by the Commission. Paragraph 2 of the same article creates the possibility that specific measures may be accepted as binding by a state in a particular case and that the delegation of that state may make a corresponding declaration within the commission.

At this occasion, it must again be noted that the action of the European Communities will be of great relevance for the creation of uniform environmental standards throughout the member-states of the Communities.

Common planning and normative regulation may also be effected by lower levels of government, particularly by local government. Thus, several municipalities of the Swiss Canton Schaffhausen and of the German Land Baden-Württemberg have planned and erected together a system of sewage collection and treatment.¹⁰⁰ The two sides have also jointly drafted the rules for their operation.

5.1.4.10. Common enforcement and coordinated administrative action. The commission for the protection of certain water courses may also recommend particular measures which cannot be styled normative regulation, but which constitute administrative measures for a particular case. The above mentioned obligation to conclude an agreement concerning flood control measures regarding the Upper Rhine (Art. 9 of the German-French Treaty),¹⁰¹ comprises a duty to take concertment for cooperation in dealing with pollution by oil of the North Sea¹⁰² creates zones of common responsibility, where protective measures are taken on the basis of specific technical agreements.

The Austrian-Bavarian treaties relating to certain border rivers¹⁰³ which have already been mentioned several times, provide also for concerted administrative action with respect to the maintenance of these rivers, particularly (Art. 8) common inspection trips with a view to ascertain the state of these water courses. Cooperative monitoring of air-pollution in the Upper Rhine area has been agreed upon between Germany and France in some individual cases.

A special international administrative body was created by the German-Danish frontier water agreement of 1922.¹⁰⁴ According to Art. 29, the establishment of new, or the essential alteration of existing, plants and

¹⁰⁰ Baschung, *loc. cit.* (note 11).

¹⁰¹ *Supra*, p. 26.

¹⁰² *Supra* note 9.

¹⁰³ *Supra* note 2.

¹⁰⁴ *Supra* note 6.

facilities, on or in a border water require a license by a Border Water Commission. This is also the case for the right to divert water, to discharge material into the water, or to lift or lower the water level.

5.1.4.11. Assistance duties. An important form of cooperation is also the duty to render assistance to another state in cases of emergency which have created environmental damages or similar situations. Thus, Art. 7 of the Agreement for Cooperation in dealing with pollution by oil of the North Sea provide that one party can ask for the assistance of another contracting party in fighting an oil casualty. The contracting parties "shall use their best endeavour to bring such assistance as within their power". The possibility of calling upon the help of the other side is also provided for in Art. 57 of the German-Belgian Frontier-Agreement of 1929.¹⁰⁵ This may be the case if disturbances or other circumstances relating to a certain spring threaten the water supply of a certain municipality which needs this water. The possibility of mutual aid is also envisaged in the agreement between the Federal Republic of Germany and the German Democratic Republic on the fighting of hazards along the border.¹⁰⁶

A far reaching duty to prevent damages and grant assistance will be created by Art. 11 of the draft European Convention for the protection of international watercourses:¹⁰⁷

As soon as a sudden increase in pollution is recorded, the Contracting Parties riparian to the same watercourse shall immediately warn each other, and shall take unilaterally or jointly all measures in their power to avert injurious consequences or to limit the extent thereof, having recourse to the early warning system envisaged in Article 15, paragraph 1 (c), if any.

5.2. Substantive provisions. International treaties which substantively regulate questions on environmental protection by prescribing or prohibiting certain actions are much rarer than those covering only procedural aspects. The bulk of international regulation of the former kind may be found in the area of water law. But here the provisions have only a very special, narrowly limited, field of application. A comprehensive international regulation of the rights and duties of the various states riparian to watercourses is still wanting. The division of rights and duties between

¹⁰⁵ *Supra* note 6.

¹⁰⁶ *Supra* note 1. As a rule, each Party should take the necessary measures to prevent damages on its own side of the border. Only if an effective prevention of damages by the Party on whose territory the damage has taken place is not possible, may assistance be granted by the other side on the basis of mutual agreement (Art. 4 of the Agreement).

¹⁰⁷ *Supra* note 8.

upstream and downstream states was and still is a matter of dispute, where Germany as a rute was in the position of downstream state. While the upstream states, especially Austria, have maintained the view that the upstream state could treat and use a watercourse as it pleased, Germany defended the contrary point of view. Today, these contradicting positions are more and more reconciled by the recognition of the fact that watercourses are a common resource of the riparian states. The concrete results of this recognition are, however, only slowly achieved.

An important step in this direction will be the draft European Convention for the Protection of International Watercourses. It sets out in technical detail certain minimum standards of water quality which have to be complied with where the watercourse crosses a border (Art. 4 and Appendix I). A kind of natural prolongation of this convention is the Convention for the Prevention of Marine Pollution from Land-Based Sources, adopted in Paris on February 21, 1974.¹⁰⁸ It contains also lists of pollutants which the contracting parties undertake to eliminate or to restrict in the sea area to which the Convention applies. Applicable to the same sea area is the Convention, adopted at Oslo February 15, 1972,¹⁰⁹ for the Prevention of Marine Pollution by dumping from ships and aircraft, which also prohibits or restricts the dumping of specific pollutants. Quite regrettably, these three important conventions are not yet in force, but it can be hoped that this situation will change in the not-too-distant future. As to the existing treaty obligations, there are, first of all, duties regarding water-works which serve, however, mainly the interests of navigation; these duties were already established in older treaties. There may be mentioned the Austrian-Bavarian treaties on the correction of the Saale and Salzach (Art. 1 and 7) and the Inn (Art. 1 and 5),¹¹⁰ the German-French treaties on the development of the Rhine between Kehl/Strassburg and Neuburgweier/Lauterburg (Art. 1 and 5) and on the development of the Upper Rhine between Basel and Strassburg (Art. 1 and seq.),¹¹¹ and, furthermore, the German-Belgian treaty relating to the development and maintenance of the frontier creeks Breitenbach and Schwarzbach.¹¹²

Other treaties limit the possibilities of water diversion (e.g. Art. 58 of the Austrian-Bavarian border treaty of (1862));¹¹³ others contain rules for the maintenance of a certain water level (German-French treaty on

¹⁰⁸ *Supra* note 9.

¹⁰⁹ *Supra* note 9.

¹¹⁰ *Supra* note 2.

¹¹¹ *Supra* note 3.

¹¹² *Supra* note 3.

¹¹³ *Supra* note 2.

the development of the Upper Rhine, Art. 8 and 9; German-Belgian border treaty of 1929, ¹¹⁴ Art. 63 and 55).

Art. 58 of the German-Dutch Border Treaty contains a very general duty to take into account the interests of the other party with respect to border waters:

1. The contracting parties undertake to give due regard, in the performance of their tasks in the field of water management, to the neighbouring states interests in the boundary waters. To that end, they agree to take or to support all measures required to establish and to maintain within the section of the boundary waters situated in their respective territories such orderly conditions as will mutually safeguard their interests, and they shall neither take nor tolerate any measures causing substantial prejudice to the neighbouring state.

2. In performing the obligations undertaken in paragraph 1, the contracting parties shall in particular take or support, within an appropriate period of time, all measures required:

...

e) to prevent the excessive pollution of the boundary waters as may substantially impair the customary use of the water by the neighbouring state.

A special prohibition of pollution is also contained in Art. 56 and 60 of the German-Belgian border agreement of 1929. ¹¹⁵ As regards the German-Danish border area, it has already been mentioned that certain water uses require a license by an international commission. ¹¹⁶ This agreement also sets the standards for the decisions of the commission. Art. 29 of the border water agreement provides:

The use may not:

1. Change the existing water flow not pollute the water to the disadvantage of others;

2. change the water level in a way that others are adversely affected in the exercise of their rights regarding the watercourse or that real property of others is prejudiced;

3. hinder the maintenance of watercourses or their banks incumbent upon others, unless the advantages to be obtained by a plant are con-

¹¹⁴ *Supra* note 6.

¹¹⁵ See also Art. 7 of the Belgian-German treaty on the rectification of the border (*supra* note 6) and Art. 55 of the treaty on the canalization of the Moselle (*supra* note 3).

¹¹⁶ *Supra* text accompanying note 104.

siderably higher than the prejudices and disadvantages to be expected. If prevailing considerations of public interests militate against the intended use of the watercourse, the license has to be denied or can only be granted under conditions, which duly take account of these considerations.

The commissions for the protection of Lake Constance and of the Rhine, the Moselle and the Saar have made progress in the development of norms for the protection of these watercourses. As already mentioned, guidelines for the protection of Lake Constance have been established.¹¹⁷ They contain detailed provisions on sewage treatment and prohibit the dumping of any materials and liquids which may adversely affect the water quality of the Lake. Common water quality standards have also been adopted for the Moselle. As for the Rhine, these problems have proved rather intractable, despite the efforts made by the International Commission for the Rhine. The Rhine is highly endangered by pollution, but there is also a heavy economic pressure for using it for the disposal of many kinds of industrial and municipal wastes and for cooling purposes in nuclear power plants.¹¹⁸ Thus, the work of the Commission and negotiations by governments are only making slow progress. One of the most crucial problems is that of the Rhine's salinity, which is mainly due to chloride wastes from French potash mines. An agreement was reached in 1972 to store most of the wastes and not to pour them into the Rhine.¹¹⁹ The other riparian states will share the storage costs with France, but agreement on the location of the storage has not yet been reached.

Thermal pollution caused by nuclear power plants is another delicate area where negotiations have been undertaken, but no comprehensive agreement has been reached. As an intermediate measure, it has been agreed that no new plants shall be allowed which depend exclusively on the Rhine for cooling purposes; that is to say, which do not use cooling towers or devices having a similar effect. As plants already under construction are not affected, this compromise practically conceded to France a large plant without cooling towers which was being built at Fessenheim.¹²⁰ If thermal pollution is to be abated effectively, the cooling capacity of the river has to be divided among the riparian states, a problem which is far from being solved.

¹¹⁷ *Supra* note 96.

¹¹⁸ A good overview of the problems is given by the *Neue Zürcher Zeitung*, October 15, 1972, p. 19. A detailed analysis of the current developments is also given by Grawe, *ZaöRV* (1974), pp. 305 et seq.

¹¹⁹ *Neue Zürcher Zeitung*, April 27, 1974, p. 25; November 1st, 1972, p. 4.

¹²⁰ *Neue Zürcher Zeitung*, November 1st, 1972, p. 4.

The harmonization of standards on a European basis is important also with regard to water pollution. The European agreement on detergents, which provides that washing and cleaning products have to be at least 80% susceptible to biological degradation, has been drafted in the Council of Europe.¹²¹

In the area of air pollution, there are no corresponding treaties containing substantive norms relating to specific pollutants or protective devices against immissions.

There are several agreements on conservation, one of which is the German-Swiss regulation of 1959 concerning fisheries in certain border waters.¹²²

6. Conclusions. The emphasis of this report has been on legal techniques used in dealing with environmental questions transcending national borders. It has not tried to assess to any major degree what has been achieved in this field. This is probably not a lawyer's task, but some remarks in this direction may not be out of place.

A number of legal details have been reported. The legal tools for prevention and control of transfrontier environmental damages are at hand, but their use is a question of political will. It is, therefore, significant that the bulk of positive developments reported has taken place between Germany and her western neighbours. These developments, especially as far as multilateral solutions have been sought or achieved, are situated within the larger framework of Western European political cooperation, in the Council of Europe, in the European Communities, or otherwise. It may be noted that the cooperation in water management respecting Lake Constance, between Germany, Austria and Switzerland, which can indeed be viewed as a positive achievement,¹²³ is based on a tradition of good neighbourly relations which has existed for centuries. Nonetheless, the question of maintaining satisfactory water quality in the Rhine, which involves a more complicated conflict of economic interests, has so far only found partial solutions, the problems remaining certainly being the larger ones. Air pollution in border areas and transfrontier regional planning are other fields where much more progress is needed. Environmental cooperation between Eastern and Western Europe has not gone beyond some very cautious first steps. The agreements between the Federal Republic of Germany and the Democratic Republic contain regulations which should be a matter of course between any two neighbouring countries, not more.¹²⁴

¹²¹ BR Drs., 202/71.

¹²² *Supra* note 15.

¹²³ See *Landtag von Baden-Württemberg, Drucksache*, 6/3933, p. 3.

¹²⁴ See Pagel, Bull. 1973, pp. 1146 et seq.

Abbreviations

Bull.	Bulletin des Presse-und Informationsamtes der Bundesregierung
BayGVB1.	Bayrisches Gesetz-und Verordnungsblatt (Bavarian Statutes and Orders)
BGB1.	Bundesgesetzblatt (Federal Statutes)
BR Drs.	Deutscher Bundesrat, Drucksache (Federal Parliament, Upper House, Official Document)
BS	Bereinigte Sammlung (Revised Compilation of Swiss Statutes, 1948)
BT Drs.	Deutscher Bundestag, Drucksache (Federal Parliament, Lower House, Official Document)
GVB1.	Gesetz-und Verordnungsblatt (Statutes and Orders)
ILM	International Legal Materials
ZaöRV	Zeitschrift für ausländisches öffentliches Recht und Völkerrecht