



Convention on the Protection and Use of Transboundary Watercourses and International Lakes

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Working paper 1

MODEL PROVISIONS ON TRANSBOUNDARY FLOOD PROTECTION, PREVENTION AND MITIGATION

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The text below is based on the draft presented at the third meeting of the Legal Board (Geneva, 13-14 June 2005). The highlighted changes reflect the comments received during and after the meeting.

The following model provisions on flood protection, prevention and mitigation are ~~conceived as no-binding model provisions to be included in part of~~ meant to be eventually used as part of a general ~~conventional~~ instrument among riparian States on the protection and use of transboundary watercourses and international lakes. They ~~deal with the core obligations~~ address the main concerns of States ~~in order to cope with~~ with regard to transboundary effects of floods. This, of course, cannot exclude the possibility of States adapting these provisions according to their specific needs. On the other hand, they might adopt further provisions dealing with more detailed matters or more stringent measures, such as those contained in Part III of the UN Convention on the Law of the Non-Navigational Uses of International Watercourses (hereinafter UN 1997 Watercourses Convention) and in the UNECE 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (hereinafter UNECE 1992 Water Convention). ~~In certain points, reference is made to institutions, which should have been created in the context of the overall instrument, i.e. the Commission referred to in Article 2 of the UN 1997 Convention.~~ General principles such as the obligation of States to take all appropriate measures not to cause any significant harm to another Riparian State are only exceptionally included as such in the model provisions, since they are usually not specific to flood issues. ~~The following arrangements clearly define these general duties.~~

¹ This working paper was not formally edited. The titles of agreements were taken from the database of the UNECE 1992 Water Convention.

Article 1

The Riparian Parties shall take all appropriate measures to prevent, control and mitigate flood risks. Flood risks are the probability of flood occurrence combined with its possible adverse impact.

Each Party shall refrain from adopting measures, which may directly or indirectly result in a transfer of flood risks or generate flood risks

Par. 1 of dDraft article 1 is an enunciatory provision of for the whole model articles, reflecting a general obligation of States- the most fundamental principle thereof and also defining the term of flood risks.

As far as par. 2 is concerned, national flood protection measures should always take into account their possible impact on the other Riparian States. Paragraph 3.2 (bullet 4) of the 2004 Action program for sustainable flood protection in the Danube states that “rivers do not recognize national borders. Experience has shown that local flood protection measures can have negative effects both downstream and directly upstream. Therefore these effects need to be assessed.....” The term “generate flood risks”intends to cover man-made floods.

Article 2

1. The ~~Riparian~~ Parties shall without delay inform each other about any critical situation that may have transboundary impact, especially about situation of flood risk. The Riparian Parties shall set up, where appropriate, and operate coordinated or joint communication, warning and alarm systems with the aim of obtaining and transmitting information. These systems shall operate on the basis of compatible data transmission and treatment procedures and facilities to be agreed upon by the Riparian Parties. The Riparian Parties shall inform each other about competent authorities or points of contact designated for this purpose.

2. Whenever one Party ascertains the existence of a situation liable to cause flooding in the other Party's territory or in the process of flooding the other Party's territory, it shall:

(a) Immediately convey this information to the competent authority of the other Party following the procedure agreed upon. Such information shall contain, inter alia, the available data on precipitation, run-off of floods and water level;

(b) Adopt, to the extent possible, all appropriate measures ~~likely~~ to prevent or mitigate the effects of the flood in the other Party's territory;

(c) Consult the other Party without delay in order to envisage common remedial action.

The first paragraph of this draft article is a repetition of article 14 of the UNECE 1992 Water Convention. Article 14 of this Convention puts upon the Riparian States the obligation to inform each other about any critical situation that may have transboundary impact and also to set up, where appropriate, coordinated or joint communication, warning and alarm systems. Some bilateral agreements also provide for such a communication procedure or for a common warning model.²

The second paragraph draws inspiration from article 28 of the UN 1997 Watercourses Convention. The first such obligation, i.e. the obligation to inform, is contained in paragraph 2 of article 28 as well as in many bilateral agreements dealing with floods.³ The usefulness of the information provided is contingent upon the prior establishment of a bilateral warning arrangement, ensuring that the information gets as early as possible to the right people. Therefore, mention is made in sub-paragraph (a) of the need for an agreed procedure for the communication of the relevant data.

The obligation to prevent or mitigate, to the extent possible, the effects of a flood in the other Party's territory can be considered as an expression of solidarity among States and peoples in cases of national disasters. Article 28, paragraph 3, of the 1997 UN Watercourses Convention provides that: "A watercourse State within whose territory an emergency originates shall, in cooperation with potentially affected States and, where appropriate, competent international organizations, immediately take all practicable measures necessitated by the circumstances to prevent, mitigate and eliminate harmful effects of the emergency."⁴ Provisions similar to the rule of sub-paragraph (b) are contained in article 18, paragraph 5, of the 1998 Convention between Portugal and Spain and article 3 of the 2001 Agreement between the Government of the Republic of Kazakhstan and the Government of the People's Republic of China on cooperation regarding the protection and use of transboundary rivers.

The duty to consult the other riparian Party is provided in express terms only in article 10 of the 1995 Agreement on the Mekong River. However, it can be argued that the silence of the other bilateral agreements is due to the fact that such an obligation in case of emergency is inherent to the rules of *bona fides* between riparian States which, moreover, have concluded a bilateral agreement on their transboundary waters.

² Article 16, paragraph 1, of the 1994 Convention on cooperation for the protection and sustainable use of the Danube River (Danube River Protection Convention); article 8, paragraph 1 (c), of the 1999 Convention for the protection of the Rhine; article 11, paragraph 1, of the 1998 Convention on cooperation for the protection and sustainable use of the waters of the Hispano-Portuguese catchment areas. See also paragraph 25 of the UNECE Guidelines.

³ See article 3, paragraph 6, of the 1999 Convention for the protection of the Rhine; article 18, paragraph 3, of the 1998 Convention on co-operation for the protection and sustainable use of the waters of the Hispano-Portuguese catchment areas (1998 Convention between Portugal and Spain); article 16, paragraph 2, of the 1994 Danube Convention; article 8 of the 2000 Agreement between the Government of the Republic Kazakhstan and the Government of Kyrgyz Republic on the use of interstate water management's installations on the rivers Chu and Talas; article 3 of the 1999 Agreement between the Government of the Republic of Kazakhstan, the Government of the Kyrgyz Republic, the Government of the Republic of Tajikistan and the Government of the Republic of Uzbekistan on cooperation on hydrometeorology. See also paragraph 24 (a) of the UNECE Guidelines.

⁴ See also article 27 of the same Convention.

Article 3

[Where there is a flood risk] The Parties will develop a common long-term flood prevention and protection strategy and measures covering the entire transboundary river basin area. Their cooperation shall focus mainly on the following matters:

(a) **Exchange of hydrological and meteorological data, cooperation in their collection and, [at a later stage to be agreed upon by the Parties], development [of a forecasting model covering the whole river basin area] or [of a linkage between their respective forecasting models];**

(b) **Preparation of surveys, studies, flood plain maps and flood risk maps and their mutual exchange;**

(c) ~~(e)~~—Development, through the arrangements established under article.... of this Agreement, of a comprehensive flood action plan, providing for joint action, contingency plans, flood plain management and, where appropriate, flood control works.

(d) Raising the awareness of people living in the flood risk area

This draft article lays the principle of long-term cooperation between Riparian States on flood issues for the whole river basin area, preferably as part of ~~the concept~~ of an integrated river basin management ~~should also encompass flood prevention~~. Paragraph 2.1 of the communication of the European Commission on flood risk management (doc. COM (2004) 472) rightly states that "...if one area implements engineering solutions to evacuate the water from its stretch of the river as quickly as possible, this simply means that the water arrives faster to their downstream neighbors. Therefore it is imperative that flood protection is dealt with in a concerted and coordinated manner along the whole length of the river."⁵ In this context, flood risk management may also be linked with other policy fields, such as urban planning, rural and industrial development, agriculture, transport and recreation.

The fields of cooperation mentioned in points (a) – (c) are of a rather illustrative character and no hierarchy is established among them, as it is for the ~~Contracting States Parties~~ to fix the priorities of their common action, in accordance with the specific needs of each river basin. The matters suggested in points (a) – (c) are often mentioned in bilateral conventions, the UNECE Guidelines on sustainable flood prevention and also the New York Rules (1972) on flood control of the International Law Association (ILA), as updated and incorporated in article 34, paragraph 4, of the 2004 Berlin Rules on water resources of the ILA.

⁵ See also para. 3.2 of the 2004 Action program for sustainable flood protection in the Danube river basin and paragraphs 13(c) and 22(a) of the UNECE Guidelines.

As far as exchange of data and joint development of a forecasting model are concerned, similar provisions are contained in article 9 of the 1997 UN Watercourses Convention, in articles 3 and 6 of the 1999 Agreement between the Government of the Republic of Kazakhstan, the Government of the Kyrgyz Republic, the Government of the Republic of Tajikistan and the Government of the Republic of Uzbekistan on cooperation on hydrometeorology, and also in paragraphs 24 and 28 of appendix I to the UNECE Guidelines. [Note should also be taken of par. 1 of Resolution 25\(Cg-XII\) of the WMO \(1999\) on the exchange of hydrological data, according to which Members should provide on a free and unrestricted basis those hydrological data and products which are necessary for the provision of services in support of the protection of life and property and for the well-being of peoples.](#)

The wording of point (b) is reproduced *verbatim* from point (b), paragraph 4, of article 34 of the ILA Berlin Rules on water resources (see also paragraph 23 of the UNECE Guidelines).

Concerning point (c), mention should be made of article 13, paragraph 1, of the 2002 Framework Agreement on the Sava River Basin and of articles 7 and 8 of the 2000 Agreement between the Government of the Republic Kazakhstan and the Government of Kyrgyz Republic on the use of interstate water management's installations on the rivers Chu and Talas.

These articles provide for joint action and measures of the Contracting Parties in the field of flood protection. The adoption of joint action plans by the Riparian States is also suggested in paragraph 22 (d) of the UNECE Guidelines and in annex A, paragraph 1 (a), of the communication of the European Commission on flood risk management (doc. COM (2004) 472).

[Point \(d\) draws inspiration from article 3, par. 3 of the Aarhus Convention.](#)

Article 4

The Parties shall [strive to incorporate](#) ~~take into account~~ ecological requirements in the context of their flood prevention and protection strategy. In particular, they shall ~~maintain~~ [take, to the extent possible, all appropriate measures to](#) improve and restore the natural function of the waterway, ensure that flow management takes into account the natural flow of solid matter and promotes interactions between river, groundwater and alluvial areas and, conserve, protect and reactivate alluvial areas as natural floodplains. [They shall also promote, to the extent possible, the retention capacity of small water, wetlands and forests throughout the river basin. To this end, they shall pursue an active policy against deforestation.](#)

The storage effect of soil (including the natural bed of the river), ground and wetlands should not be underestimated by States when forming their strategy for flood protection and mitigation. The water retention capacity of nature should not be set aside in favor of purely technical works. Besides flood mitigation, the preservation and restoration, to the extent possible, of the river's flood zones leads also to ecological benefits in the form of preserving landscape and biodiversity, thus contributing to the fulfillment by the Riparian States of their obligation to protect and preserve the ecosystems of

international watercourses, proclaimed in article 20 of the 1997 UN Watercourses Convention and also in article 2, paragraph 2 (d), of the UNECE 1992 Water Convention.

The ecological dimension of flood protection strategies has not been taken into account in the older bilateral treaties reported in the commentary to the New York flood control Rules (1972) of the International Law Association⁶. Nowadays, there is a widespread common feeling that a purely technical consideration of flood protection is outdated. The ecological dimension of flood strategy has already been taken into account in article 3, paragraphs 1 (c) and 1 (f), of the 1999 Convention on the Protection of the Rhine and also in paragraphs 3.2 and 3.4.1 of the 2004 Action program for sustainable flood protection in the Danube river basin, where clear emphasis is placed upon the flood mitigation impact that elements of nature have. [The wording of the first paragraph of this article draws inspiration from the above-mentioned pars.1\(c \) and 1\(f\) of article 3 of the Rhine Convention.](#)

To this end, it is appropriate to link flood action plans with general river basin management plans where feasible, as flood strategy should “promote the coordinated development, management and conservation of water, land and related resources. Such a holistic approach is based on multilateral and even multinational cooperation, including interdisciplinary planning for the whole catchment areas” (see the 2004 Action program for sustainable flood protection in the Danube river basin, para. 3.2).

Article 5

~~Each Party shall refrain from adopting measures, which may directly or indirectly result in a transfer of flood risks~~

~~National flood protection measures should always take into account their possible impact on the other Riparian States. Paragraph 3.2 (bullet 4) of the 2004 Action program for sustainable flood protection in the Danube states that “rivers do not recognize national borders. Experience has shown that local flood protection measures can have negative effects both downstream and directly upstream. Therefore these effects need to be assessed.....”~~

Article 5 6

Each Party undertakes to consult the other Party for every project, which might cause, directly or due to accumulation with the existing projects and activities, a significant change in the flow regime or a significant alteration of the physical elements of the water and/or alluvial areas, [in a manner likely to increase the risk of floods to the other Party.](#)

⁶ However, see article 16, paragraph 2, of the 1963 Treaty concerning the regime of the Hungarian-Romanian state frontier and co-operation in frontier matters: “the position and direction of frontier watercourses must, in so far as possible, be preserved unchanged. To this end the two Parties shall, by agreement, take the necessary steps to remove any obstacles which may cause displacement of the beds of frontier rivers or streams or a change in the position of canals or which obstruct the natural flow of water”.

Paragraph 10 (c) of the annex to the Report of the Berlin Seminar on flood prevention, protection and mitigation (MP.WAT/SEM.3/2004/3) refers to the need to take into account the principles of the Convention on Environmental Impact Assessment in a Transboundary Context (hereinafter: UNECE 1991 Espoo EIA Convention) and its Protocol on Strategic Environmental Assessment (SEA Protocol) in order to better integrate environmental and health considerations in the preparation of flood action plans and programs. The UNECE 1991 Espoo EIA Convention provides, in its appendix I in conjunction with article 3, for an obligation to notify and involve in an environmental impact assessment procedure any Party that might be affected by the transboundary impact of large dams and reservoirs. The proposed article goes further and, in accordance with the spirit of Part III of the 1997 UN Watercourses Convention, sets the obligation to consult the other Party for any project that might endanger the ecosystem of the basin area in a manner likely to increase the risk of floods for ~~it the other Party~~. An obligation to consult the other Party is included in paragraph 3 (b) of annex II of the 1998 Agreement between Spain and Portugal, covering cases of significant change in the flow regime and the canalization and regularization of the riverbeds within 10 km of the border. As far as the flow regime is concerned, article 25, paragraph 1, of the 1997 UN Watercourses Convention puts upon States a general obligation of cooperation for the regulation of the flow of transboundary waters.

~~The obligation to consult the other Party concretize, in our view, the obligation arising for Riparian States from general international law to take all appropriate measures not to cause any significant harm to another Riparian State, expressed also in article 7, paragraph 1, of the UN 1997 Watercourses Convention: “Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States”.~~