



Internationale Kommission zum Schutz des Rheins
Commission Internationale pour la Protection du Rhin
Internationale Commissie ter Bescherming van de Rijn

Conference of Rhine Ministers

Bonn, 18 October 2007

**Living and linking Rhine – common challenge of a
watershed**

Living and linking Rhine – common challenge of a watershed

The Ministers in charge of Rhine protection and the Representative of the European Commission met in Bonn on 18 October 2007 to draw a balance of the many years of co-operation in protecting the Rhine, its tributaries and the entire watershed and to determine the guidelines for future cooperation.

Participants in the Conference:

Representing Germany, Mr. Sigmar GABRIEL, Federal Minister of Environment, Nature Protection and Reactor Safety; Mrs. Tanja GÖNNER, Minister of Environment of the Land Baden-Württemberg, President of the Deutsche Kommission zur Reinhaltung des Rheins;

Representing France, Mr. Pascal BERTEAUD, Water Director, representing Mr. Jean-Louis BORLOO, Secretary of State, Minister in charge of ecology and sustainable spatial planning and development;

Representing Liechtenstein, Mr. Helmut KINDLE, Director of the Department of Environment, representing Mr. Hugo QUADERER, Senior executive expert for environment, spatial planning, agriculture and forestry;

Representing Luxemburg, Mr. André WEIDENHAUPT, Director of the Administration of Environment, representing Mr. Jean-Marie HALSDORF, Minister of Interior;

Representing the Netherlands, Mrs. Tineke HUIZINGA-HERINGA, State Secretary in charge of Traffic, Public Works and Water Administration;

Representing Austria, Mr. Wilfried SCHIMON, Water Director, representing Mr. Josef PRÖLL, Minister of Agriculture and Forestry, Environment and Water Management;

Representing Switzerland, Mr. Willy GEIGER, vice-director of the Federal Administration for Environment, representing Mr. Moritz LEUENBERGER, Member of the Executive Federal Council in charge of Environment, Traffic, Energy and Communication;

Representing Wallonia, Mr. Bruno DE KERCKHOVE, water director, representing Mr. Benoît LUTGEN, Minister of Agriculture, Rural Matters, Environment and Tourism;

For the European Commission, Mr. David Grant LAWRENCE, Director, representing Mr. Stavros DIMAS, Commissioner for Environment;

For the International Commission for the Protection of the Rhine, Mr. Fritz HOLZWARTH, President of the Commission.

As Observers

Representatives of intergovernmental organisations and of non governmental organisations

Preamble

1. Due to the committed implementation of the Rhine Action Programme (1987 – 2000) of the International Commission for the Protection of the Rhine (ICPR) in the Rhine bordering countries implying great efforts to reduce inputs of noxious substances and nutrients from industry and municipalities, the water quality of the Rhine has fundamentally improved. The Ecological Master Plan for the Rhine and the programme Salmon 2000 developed simultaneously and implemented with great involvement enhanced the return of the salmon and gave an important impetus towards directing work more towards the ecology of the Rhine.
2. The Action Plan on Floods adopted in Rotterdam in 1998 led to new initiatives and first success in improving flood prevention and flood protection by close co-operation of the ICPR contracting parties. The Floods directive adopted 18 September 2007, modelled on the work of the international commissions, will reinforce co-operation of the states in the Rhine watershed.
3. The new Rhine Convention which entered into force in 2003 is an important step towards cross-sector co-operation targeted at Rhine protection. It integrates the sustainable development of the ecosystem, securing the use of Rhine water for drinking water production, improvement of sediment quality, holistic flood prevention and flood protection taking into account ecological requirements and relief of the North Sea and the other measures targeted at protecting this marine area. The ongoing programme „Rhine 2020“ contributes to expressing the general objectives for sustainable development of the Rhine in concrete terms.
4. For the EU countries, the EC Water Framework Directive and its daughter directives represent essential tools for the implementation of the programme “Rhine 2020”. They imply a joint obligation of the EU states to take measures and emphasize the necessity of integrated management of rivers in river basin districts.
5. The Conference of Rhine Ministers staged in Strasbourg in 2001 lay the foundations for a coordinated implementation of the EC Water Framework Directive in the international Rhine river basin by the EU states and for cooperation with the non-EU states Switzerland and Liechtenstein.
6. Today’s conference allows to draw a balance of objectives achieved, to confirm joint approaches and to come to an agreement on future tasks in the Rhine watershed.

Chemical and ecological state

Reducing the hazardous substance pollution

7. The Ministers and the Representative of the European Commission take note of the following:

- a) due to the implementation of numerous measures, the water quality of the Rhine and of many of its tributaries has substantially improved;
- b) the chemical and biological monitoring of the Rhine and of its tributaries has been reinforced and optimised.

8. They state that:

- a) diffuse nutrient inputs, in particular of nitrogen and noxious substances of agricultural origin continue to be problematic;
- b) noxious substances remobilised due to the excavation of contaminated sediments of the Rhine and its tributaries or to floods may be problematic;
- c) micro-pollutions from urban wastewater (e.g. certain household chemicals, personal hygiene products, pharmaceuticals and radiological contrast substances) are detected in waters and may pose a problem. For some problems, there are distinct signs, but we do not yet dispose of any comprehensive description. Furthermore, there are great gaps in knowledge related to the eco-toxicological assessment of many micro-pollutions detected in the environment which must be filled;
- d) inputs from navigation due to deliberate or accidental losses of noxious substances are recorded.

These substance inputs may cause problems in surface waters and in the groundwater, but also in drinking water production.

9. They confirm the ICPR list of substances Rhine 2007 as a list of important substances, for which, based on environmental quality standards or the EC drinking water directive it must be checked, whether measures targeted at reducing inputs are required or should be strived for.

10. They state that, on a European scale, a future daughter directive will define environmental quality standards for priority and priority harmful substances according to the EC Water Framework Directive.

11. They charge the ICPR to conclude work on determining environmental quality standards for the Rhine for substances relevant for the Rhine with priority, so that these may be adopted by the next plenary assembly. These environmental quality standards for the Rhine are supposed to replace the target values the ICPR defined in 1991.

12. They deem necessary that policy – apart from implementing the EC-Water Framework Directive, the programme Rhine 2020 and further reducing classical pollutions from industrial and municipal point sources – meets new challenges of noxious substances in order to grant the protection of surface waters and groundwater in the Rhine watershed.

13. They therefore ask the ICPR:

- a) to develop a joint and comprehensive strategy for reducing and avoiding micro-pollutant inputs from urban wastewater and other sources into the Rhine and its tributaries by improving knowledge on emissions, eco-toxicological reactions in nature and to draft suitable treatment methods;
- b) to co-ordinate measures for achieving the objectives for the protection of the marine environment, taking into account the future EC directive for marine strategies and OSPAR decisions, above all by reducing diffuse nitrogen inputs

from agriculture.

- c) to draft a „Holistic strategy for the Rhine sediment management“ in order to reduce or avoid pollutions due to remobilised sediments jointly with all those responsible;
- d) to point out possibilities of improved education in inland navigation in terms of risks of deliberate or accidental losses of noxious substances, among others in co-operation with the Central Commission for Navigation on the Rhine.

14. They would welcome a rapid entry into force of the convention on waste concerning the collection, delivery and reception of waste from Rhine and inland water navigation.

15. Since the implementation of measures aimed at avoiding and reducing at the source requires interdisciplinary European co-operation on the EU scale, they will develop initiatives within the EU as elements of a strategy for micro-pollutions working towards improved linking of the policy fields environment and water with those of health, agriculture, industrial products and admission procedures. This issue will figure on the EU agenda. As a matter of principle, impacts of products on the environment and on waters must be taken into account to a greater extent.

Ecosystem improvement

16. The Ministers and the Representative of the European Commission take note of the following:

- a) the biological state of the Rhine and its tributaries continues to improve and the species number continues to rise. Since 2006, migratory fish may again reach the spawning grounds in the Rhine tributaries as far as Strasbourg. However, not all spawning grounds and juveniles habitats located in the tributaries are accessible. Meanwhile, Rhine floodplains have been reactivated, oxbow lakes have been re-connected to the Rhine and to its tributaries and river bank structures have been ecologically upvalued;
- b) in France, negotiations are going on with the concessionaire of the hydro power plant Strasbourg, so that the construction of a fishway for long-distance migratory fish may start at the Strasbourg barrage;
- c) the concept for maintaining, upgrading and linking valuable habitat types along the Rhine from Lake Constance to the sea included in the report and the atlas of the ICPR for achieving a habitat patch connectivity along the Rhine. It defines precise development targets for Rhine sections as well as spatial focal points and indicates need for action for the entire Rhine in order to restore an extensive habitat patch connectivity. The concept simultaneously serves water protection, nature protection as well as flood protection.

17. They state that:

- a) in order to improve the ecological functionality of the entire Rhine system, there is further need for action to achieve the continuity of the system and to restore nature-near structures of river banks and river bottom;
- b) in order to enhance the diversity of habitats and species, floodplains must be extended and interlinked;
- c) self-sustaining stocks of salmon may be established, once upstream migration will be sufficiently secured and as many salmon spawning grounds and juvenile habitats as possible will again be accessible or restored in the Rhine watershed.

18. The Ministers and the Representative of the European Commission state and confirm:

- a) that, since 1987, all states in the Rhine watershed have invested more than 50 million Euro in the programme on migratory fish;
- b) that further measures are planned, such as the partial opening of the Haringvliet sluices entailing investments of some 36 million Euro or are possible, such as the restoration of the upstream fish migration at the five barrages between Strasbourg and Vogelgrün/Breisach, where costs are estimated to amount to about 100 million Euro;
- c) their determination, to step by step restore the continuity of the Rhine until Basel and in the salmon programme waters and to do their best, so that the required financial means are made available;

19. They ask the ICPR:

- a) to conclude the "Master plan migratory fish Rhine" preferably by mid 2008, at latest by end 2009 on the basis of the map representing the present state of the programme on migratory fish with respect to potential habitats and accessibility. In a phased programme, this master plan is to define priorities for required measures in programme waters for salmon, sea trout and other migratory fish, among others eel.

As far as salmon and sea trout are concerned, the master plan is to take into account the results of a research carried out parallel to the drafting of the master plan and permitting an optimal use of measures and means during its implementation (until 2015 and after 2015). This research assesses effectiveness of existing fish passages. On this basis, a total analysis of relevance and priorities of supplementary measures will be analysed and priorities for supplemental measures to be implemented in the entire watershed will be defined, taking into account consistency and complementarity of the measures proposed.

These two steps also include economic aspects and elements of financing.

The first measures to be implemented within the Master Plan 'Migratory Fish' Rhine by 2015 concern an improvement of upstream migration of migratory fish through the water system of the Rhine until 2015 by adapting the floodgates of the Haringvliet and constructing a fish passage at the Strasbourg barrage.

For further upstream river continuity the study must point out the required conditions, so that the hydrographic network of Elz-Dreisam will again be accessible by 2015, and must in particular determine conditions for constructing fish passages at the Gerstheim barrage, and at the agricultural weirs in the loops of the Rhine Gerstheim and Rheinau. Financing will above all apply the principle that the polluter pays. If this principle cannot be applied, discussions on alternative financing methods may, as a second priority, be held within the ICPR. This will open a further section for river continuity into the tributaries and in direction of Basel.

- b) if required as outcome of the research results, to supervise implementation and tightening up of regulations in order to prevent by-catches of migratory fish;
- c) to regularly check the implementation of conceptual guidelines for achieving the habitat patch connectivity along the main stream Rhine.

In this connection, an interlinking with efforts towards water retention within flood prevention along the Rhine and in its watershed is to be taken into account;

- d) within the management plan according to the Water Framework Directive and according to the objectives of the programme „Rhine 2020“ to speed up the

implementation of measures aimed at improving the water structure of the main stream and of Rhine tributaries and to co-operate with the Central Commission for the Navigation on the Rhine or other navigation organisations where waterways are concerned.

Flood prevention

20. The Ministers and the Representative of the European Commission take note of the report on the implementation of the Action Plan on Floods until 2005 and state that:

- a) During the past ten years, great efforts were made towards improving flood prevention and protection, and that almost all measures to be implemented by 2005 have been materialized at the estimated costs, and that their positive effect is demonstrable.
- b) damage risks have been reduced as compared to 1995, the runoff capacity of the Rhine delta has been increased and additional 77 million m³ of retention capacity have been created along the Rhine; if, additionally, retention possibilities created before 1995 are taken into account, the total retention volume today amounts to 213 million m³;
- c) however, the targeted reduction of extreme flood peaks by up to 30 cm as a result of water retention measures taken since 1995 are not achieved at the same level along all sections of the Rhine; this means that the effect of retention measures distinctly diminishes with increasing width of river downstream;
- d) the objective to double forecasting times along the different sections of the Rhine by 2005 has been completely achieved, but that reliability is not the same as before. Early, prompt and long term flood announcement is of great importance in order to be able to avoid flood damages;
- e) maps of flood danger and flood risk are important elements for public awareness and sensitisation of citizens and that the ICPR Rhine atlas has given important impetus for drafting more detailed regional and local maps; the EC Floods directive stipulates the drafting and publishing of such maps for areas at risk of floods.

21. They confirm flood prevention and protection to be and to remain a joint task in watersheds. Therefore, they decide:

- a) to rapidly and comprehensively implement ongoing measures of the Action Plan on Floods drafted on a national level and co-ordinated on an international level so as to achieve the targeted reduction objectives to the greatest possible extent and to check present and planned retention measures with respect to their effectiveness during extreme floods. In this connection, an interlinking with efforts towards improving the ecosystem of the Rhine and its tributaries is to be taken into account;
- b) to examine all imaginable possibilities to create additional retention areas or to take measures targeted at lowering the water table along the Rhine (e.g. retention areas, relocation of dikes, deepening of dike foreshores);
- c) to take into account maps of flood danger and risk to a greater extent in regional as well as town and country planning and to take additional measures regarding all elements of flood prevention (land use control, construction control, flood preparedness and risk preparedness) in order to reduce damage potential;
- d) that, in all fields of policy, it must be taken into account to a greater extent that great natural events may occur topping the dimensions of present flood

protection works and provoking great damage (communication of the residual risk!);

- e) to check the possibility of providing for so called reserve areas taking into account land use or, alternatively, to provide for compartmentalization / divisions of areas in order to improve disaster prevention and to avoid major unpredictable and uncontrollable damages. All depending on local conditions, flood risk may either be lowered by reducing the damage potential or by reducing the probability of flooding.
22. They ask the ICPR:
- a) to update the Action Plan on Floods on the basis of the results of a feasibility study, the programme Rhine 2020 and the EC Floods directive;
 - b) to support the co-ordination required within the implementation of the EC Floods directive between EU states and Switzerland, as far as the watershed is concerned in a comparable manner to what is done within the EC Water Framework Directive;
 - c) to update the Rhine Atlas 2001 according to guidance given in the EC Floods directive and, in cooperation with river commissions and subbasins, to extend it to the entire watershed of the Rhine.

Climate change and its consequences

23. The Ministers and the Representative of the European Commission state that, in water management, effects of climate change are clearly discernable. In future, precipitation patterns will change. In North Western Europe a change in flood events, longer lasting low water levels, a rise in temperatures of surface waters and a change in groundwater recharge must be reckoned with. Regionally, effects may differ.

24. They confirm the necessity to develop adjustment strategies in water management in addition to reducing greenhouse gas emissions.

25. They believe it to be necessary

- a) to apply existing EU regulations or those under preparation or adequate measures in non EU states as a solid and good basis for developing adjustment measures for water management, e.g. the EC Water Framework Directive and the EC Floods directive and the future directive on marine strategy;
- b) to implement the Action Plan on Floods until 2020 in the entire watershed as rapidly as possible, taking into account the expected climate change. This implementation must include all possible measures aimed at reducing flood damage and eventual damages caused by draughts (e.g. reactivating floodplains, avoiding to seal up surfaces, etc.), particularly in the policy areas of spatial planning, agriculture and forestry;
- c) to choose a joint, integrated approach with general public participation including sectors relevant for water management, such as agriculture, navigation, energy and tourism into the adaptation process and to contribute to water protection by innovation and equally including an intensive exchange between the states and all those concerned as well as the general public;
- d) that, due to the expected global warming, water temperatures will also rise and therefore the thermal situation of the Rhine must be followed and possibilities must be examined to further reduce thermal inputs of anthropogenic origin into the Rhine and its tributaries; expected effects on the ecosystem and its variety of habitats and species are equally to be taken into account.

26. They ask the ICPR to draft a study which, passing by common scenarios to be developed for the flow regime of the Rhine and resulting findings for the use of soil and water may immediately lead to an adjustment of water management in the Rhine watershed and in water relevant sectors. The said study is to be implemented in coordination with experts of other organisations, e.g. the Commission for the Hydrology of the Rhine.

Future co-operation

27. The Ministers and the Representative of the European Commission welcome the successful co-ordination of work of all EU states in the Rhine watershed concerning the inventory and the programmes on surveillance monitoring within the implementation of the EC Water Framework Directive, current work on drafting a management plan for the entire international river basin district Rhine and the successful co-ordination of work with the non EU Member States Switzerland and Liechtenstein.

28. Switzerland and Liechtenstein will continue to support this harmonization work on the basis of national law and express their determination to co-operate with the EU in the field of water policy.

29. The Ministers believe the continuation of the hitherto open and trusting co-operation of the states facing the ambitious timetable of the EC Water Framework Directive to be particularly important and underline their willingness to rapidly solve cross-border questions so that programmes of measures and management plans may be drafted in time by end 2009.

30. They confirm that the global approach in the international river basin district requires consistent objectives as a basis for coherent co-ordinated programmes of measures. These objectives must take into account the specific character of parts of the river basin and the ecological function of the entire Rhine ecosystem as well as North Sea protection.

31. They thus acknowledge that a more precise development of objectives for the coastal and transitional waters belonging to the Rhine river basin may comprise constraints entailing obligations for the entire international Rhine river basin district.

32. They charge the ICPR to draft a planning for the coordination of objectives and packages of measures within the management plan 2009.

33. They furthermore welcome the public participation in the current implementation of the EC Water Framework Directive initiated in the different states and support the constructive and trusting co-operation with NGOs representing the organised protection and user groups.

34. The Ministers and the Representative of the European Commission believe that the ICPR programme "Rhine 2020" and the European directives have great similarities in terms of objectives and measures to implement.

Thus, with respect to an economic use of means and to a good understanding by the public, work within the ICPR must be optimized in a way to make actions more coherent and understandable.