

# MINISTERIAL DECLARATION ON THE 11TH CONFERENCE OF MINISTERS ON THE PROTECTION OF THE RHINE

**Berne, 8 December 1994**

The members of the International Commission for the Protection of the Rhine against Pollution met at ministerial level in Berne on 8 December 1994 under the presidency of Mrs. Dreifuss, Member of the Federal Council, Head of the Swiss Ministry of Home Affairs.

The participants in the conference were:

**For the Federal Republic of Germany**, Mrs. MERKEL, Federal Minister for the Environment, Nature Protection and Nuclear Safety;

**For France**, Mr. BARNIER, Minister for the Environment;

**For Luxembourg**, Mr. HANSEN, representing Mr. LAHURE, Minister for the Environment;

**For the Netherlands**, Mrs. JORRITSMA-LEBBINK, Minister of Transport, Public Works and Water Management;

**For Switzerland**, Mrs. DREIFUSS, Member of the Federal Council, Head of the Swiss Ministry of Home Affairs;

**For the European Commission**, Mr. HENNINGSEN, representing Mr. Paleokrassas, Commissioner for Environment, Nuclear Safety, Civil Protection and Fisheries Policy;

**For the International Commission for the Protection of the Rhine**, Mr. RUCHAY, President of the Commission;

**For Belgium**, Mr. BRUYNEEL and Mr. SMITZ, as observers;

**For the Central Commission for the Navigation of the Rhine**, Mr. van der WERF, Secretary of the Commission, as observer;

**For the International Commissions for the Protection of the Moselle and the Sarre**, Mr. ASSFELD, Secretary of the Commissions, as observer;

**For the International Commission for the Protection of the Elbe**, Mr. HANNSMANN, General Secretary, as observer.

## I Interim report on the 2nd phase of the Rhine Action Programme (RAP)

1. With great interest the Ministers of the countries bordering the Rhine responsible for the protection of the Rhine and the representative of the European Commission have taken note of the report presented by the President of the International Commission for the Protection of the Rhine entitled "The Rhine - an ecological revival".
2. They have noted with satisfaction that essential restoration measures figuring in the Rhine Action Programme concerning point source inputs have proved effective three years ahead of schedule and that reduction quotas well above the 50 % mark have been achieved. Detailed results are listed in the report "Inventory of point source inputs of priority substances, 1992".
3. They are pleased to note that, compared with the target values<sup>1</sup>, 2/3 of the priority substances no longer pose any problem. However, as far as 9 substances are concerned, the target values have not yet been reached. Detailed results are listed in the corresponding report.
4. They welcome the extensive work done in the field of prevention of accidents and safety of industrial plants presented in a compendium.
5. With a view to reaching a policy of integral water protection including the "Rhine living space", they welcome those measures aiming at an improvement of the ecosystem which have already been carried through.

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<sup>1</sup> Target values are standards of assessment for contents in Rhine water or suspended matter in relation to the following assets meriting protection: aquatic communities, fisheries, drinking water supply, quality of suspended matter and sediments; they are not limit values.

## II Pollution of the Rhine with noxious substances

1. The Ministers and the representative of the European Commission note that, in recent years, considerable success has been achieved in the reduction of point source inputs of noxious substances and nutrients. Gaps of knowledge on the discharges of these substances from diffuse sources nevertheless remain.
2. They note that, in 1993, about 2/3 of the priority substances no longer posed any problem as compared to the target values, but that five heavy metals and three persistent organochlorine compounds and ammonia nitrogen have not yet reached the target values along the entire course of the Rhine.
3. They invite the ICPR to examine the measures to be implemented with a view to respecting the target values for mercury, cadmium and lead. These heavy metal contents are continuing to decline in the Rhine.
4. They note that the target values for copper and zinc will definitely not be reached in the next few years.

As regards copper, the reasons are the slow losses from urban installations (e.g. roofs, gutters, railway power supply lines, other power lines and overhead supply lines, water pipelines, etc.) and from other sources (copper contained in anti-fouling paint, copper contained in animal fodder). On the other hand, the use of copper has increased, e.g. replacing more hazardous substances (such as lead).

As regards zinc, the reasons also include the slow losses from existing urban installations (e.g. roofs, gutters, guard-rails) and from other sources (zinc in tyres and motor-oils, zinc contained in animal fodder, sewage sludge).

The use of copper and zinc would have to be limited to a large extent in order to reach the target values. Such a limitation is considered as difficult. Since the effectiveness of other measures (e.g. elimination in municipal wastewater treatment plants) remains doubtful with respect to achieving the goal set and since such measures would undoubtedly be expensive, they call on the ICPR to assess the effects of ongoing actions - measures reducing point source and diffuse emissions - and to evaluate the effectiveness of ongoing and supplementary measures.

5. They note that the still too high contents of the persistent organochlorine compounds hexachlorobenzene and polychlorinated biphenyls (PCBs) as well as lindane in the Rhine are largely due to contaminated sediments and diffuse inputs.

The polluted sediments would have to be removed from the Rhine in order to achieve the target value. Moreover, as regards lindane, diffuse inputs would have to be reduced. The Ministers and the representative of the European Commission note that it is technically complicated and expensive to implement these measures and that the success is uncertain. They invite the ICPR to undertake further investigations, taking into account the ecological and cost-benefit aspects in order to be able to come to a definite evaluation.

6. They note that, in the Lower Rhine area, pollution by ammonium is still too high. Since ongoing action will further reduce ammonium pollution, new decisions are not required. ICPR's work as regards the reduction of total nitrogen is in line with the efforts being made for the North Sea.
7. The Ministers and the representative of the European Commission note that apart from priority substances biocides are relevant in the pollution of the Rhine.

As regards plant protection agents, EC Directives (in particular 91/414/EEC and 94/43/EC) on their marketing and application and corresponding Swiss regulations already exist. These should take requirements of water protection into account to an even greater extent.

The Ministers of the EU Member States are particularly anxious that negotiations within the European Union aimed at the planned modification and extension of the Directives should produce results rapidly.

Important gaps of knowledge remain in the field of non-agricultural biocide agents. The Ministers and the representative of the European Commission call on the ICPR to deepen the available knowledge on the kind and quantity of application, the presence of these substances in the Rhine and their ecological importance, taking into account ongoing activities within the European Union.

8. They note that the ICPR is continuing to identify further plant protection agents and biocides relevant for the Rhine. They call on the ICPR to submit proposals in time for the 1995 Plenary Assembly leading to a reduction of emissions into the Rhine.

### III Protection of water bodies and agriculture

1. On the basis of scientific knowledge the Ministers and the representative of the European Commission note that, in particular due to the leaching of fertilisers and plant protection agents, agriculture also contributes to the pollution of the Rhine and its tributaries.
2. They explicitly call for a considerable reduction of the pollution of the Rhine by fertilisers and plant protection agents. Strict compliance with the codes of good agricultural practice is an essential element in order to achieve this goal.
3. In this connection they refer to the decisions taken by the Ministers following their intermediate meeting in Copenhagen<sup>2</sup>, the recommendations of the Oslo and Paris Commissions, the recommendations adopted by the ICPR and to the engagements of the Contracting Parties concerning diffuse inputs from agriculture, plant protection agents and total nitrogen.
4. They call upon all ICPR Member States to fix the criteria for the codes of good agricultural practice, where this has not yet been done, and to see to their national implementation.
5. The Ministers and the representative of the European Commission expect that in this way and together with measures aimed at point source emissions, the reduction of nutrients, in particular of total nitrogen, and of plant protection agents fixed in the Rhine Action Programme (RAP) will be achieved.
6. Even though measures according to 2. and 3. are regarded as effective means to improve the situation, they now and as a precautionary measure invite the ICPR to examine the introduction of supplementary instruments, including economic instruments, in case the ICPR target is not achieved. When doing so, it must be taken into account that the introduction of such instruments should encourage the users of fertilisers and plant protection agents to apply them in an environmentally acceptable manner and to support compliance with existing or future regulations.
7. In this connection the Ministers and the representative of the European Commission note that in Switzerland and in the Netherlands the introduction under certain conditions of control duties on the use of fertilisers and plant protection agents is under discussion.

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<sup>2</sup> Intermediate ministerial meeting , 7-8 December 1993, of the Ministers responsible for the protection of the environment of the North Sea, the Ministers of agriculture and the Members of the European Commission responsible for environmental protection and for agriculture.

8. In the event of the goal of the RAP not being achieved, the Ministers of the ICPR Member States ask the representative of the European Commission to support the above-mentioned ICPR examination by carrying out a comparable examination within the European Union.

## IV Prevention of accidents

1. The Ministers of the ICPR Member States and the representative of the European Commission consider that, in a highly industrialised catchment area such as that of the Rhine the prevention of accidents and the security of industrial plants are of vital importance for the protection of the Rhine and its tributaries.
2. The Ministers of the ICPR Member States and the representative of the European Commission welcome the compendium submitted by the ICPR entitled "Prevention of accidents and safety of industrial plants", listing concrete technical recommendations regarding the safety and are in favour of its publication. They note with satisfaction that the "general technical measures" and "special technical measures" mentioned at the 7th and the subsequent conferences of Rhine Ministers form the focal points of these recommendations.
3. The Ministers confirm their intention to promote the implementation and application of the recommendations in the ICPR Member States with a view to improving and harmonising safety requirements for water body protection.
4. The Ministers of the ICPR Member States ask the representative of the European Commission to inform the other Member States of the European Union about the recommendations of this compendium.  
They ask the representative of the European Commission to urge the Commission to consider these recommendations as far as possible when working out relevant proposals.
5. They call on the ICPR to continue its work without abatement in the field of prevention of accidents and safety of industrial plants in the manner adopted hitherto and to concentrate more on the "organisational measures" during the 3rd phase of the RAP.
6. The Ministers confirm their intention to support further possibilities of improving common high safety standards in the ICPR Member States. In this connection the exchange of experts working in the executive authorities should be encouraged and there should be an exchange of experience with other river basin commissions.

## V Rhine ecosystem

1. The Rhine river system has undergone far-reaching changes as a consequence of human intervention, e.g. when developing the river into an international waterway, using its water for power generation and by extensive exploitation of the river basin. These changes and cutting-off of large alluvial areas from the river system have led to substantial ecological deficits.
2. The Ministers in charge of the protection of the Rhine and the representative of the European Commission commit themselves to promoting ecological protection of water bodies aimed at natural functioning of the hydrological system in harmony with its sustainable use by man. To this end, sectoral thinking must be overcome and the collaboration of all areas of activity (protection of water bodies, management and use of water bodies, power supply, flood protection, fisheries, nature protection, area planning, navigation, agriculture) must be intensified as part of an integral approach.
3. They support the implementation of the Ecological Master Plan for the Rhine including the Programme for the Return of Long-Distance Migratory Fish to the Rhine (Salmon 2000) developed by the ICPR.
4. They note that, mainly due to the hydrological modifications of the last two centuries, many natural fish habitats have been lost in the Rhine ecosystem and thus the structure of fish species formerly typical of the Rhine no longer exists. They therefore give support to the required measures aimed at a lasting restoration of fish habitats (spawning grounds, nursery grounds and guarantee of free fish migration), which will also have positive effects on the entire ecosystem. This will also be an important contribution to the restoration of a natural structure of fish species typical for the Rhine.
5. With respect to the restoration of a self-supporting stock of salmon in the Rhine they call on the ICPR to co-ordinate the necessary stocking measures in suitable reproduction areas and to evaluate the success of the programme.
6. With a view to allowing migration at least as far upstream as Rheinfelden, the Ministers and the representative of the European Commission welcome and support investigations into the surmountability of barrage weirs upstream of Gamsheim in the light of experience gained during the construction of fish passages on the Iffezheim barrage weir. These are to lead to proposals for the optimisation of migration routes. The same is true of the River Moselle (co-operation with the International Commissions on the Protection of the Moselle and the Sarre) and of other tributaries included in the programme.
7. The Ministers and the representative of the European Commission note that today about 80 % of the originally existing floodplains of the Rhine no longer exist. They insist that the remaining 20 % of typical riverine and alluvial habitats and their fauna must be protected and preserved. As far as possible, the extension and restoration of alluvial areas and their connection to the river dynamics must be pursued, taking into account the needs of flood protection and of navigation.



8. The Ministers in charge of the protection of the Rhine and the representative of the European Commission advocate the financing and implementation of appropriate measures, such as are listed, though not exhaustively, in annexes I and II.
9. They call on the ICPR to develop guidelines for creating a network of biotopes close to the natural state along the river corridor of the Rhine. They particularly support an equivalent high level of protection for transboundary areas of great ecological importance along the Rhine, for the realisation of which measures must be co-ordinated and coherent.
10. They call on the ICPR to continue with the co-ordination and assessment of biological research in order to check the ecological progress of the specified measures.
11. The Ministers in charge of the protection of the Rhine and the representative of the European Commission agree that besides ecological questions matters of flood protection, navigation, power supply and other aspects must be integrated in the considerations, the aim being to ensure a responsible, sustainable management of water resources.

## VI Levies on discharging wastewater into water bodies

1. From the ICPR report "Basis for introducing wastewater levies or adapting existing levy systems in the ICPR Member States" the Ministers and the representative of the European Commission learn that
  - wastewater levies exist in three ICPR Member States (Germany, France and the Netherlands). They create an additional motivation for dischargers to reduce the sewage flow into the water body beyond the limits set for individual discharges. At the same time the financing of measures aimed at improving water quality is supported;
  - in Luxembourg, the introduction of a wastewater levy is being prepared;
  - in Switzerland, no wastewater levy is currently charged apart from that for wastewater treatment. In this country the protection of water bodies is achieved by means of strict provisions of administrative law.
2. The Ministers and the representative of the European Commission note that:
  - in the ICPR Member States regulations on fixing discharge conditions vary, and
  - apart from that, wastewater levies charged in the three Member States mentioned are based on differing legal grounds, aim at different targets and have different application conditions.

Consequently the dischargers are subject to different financial burdens.

3. The Ministers of those ICPR Member States where a wastewater levy is already being collected request the Swiss Minister to review whether wastewater levies might also be collected in Switzerland in support of rapid and efficient measures for the protection of water bodies.
4. The Ministers and the representative of the European Commission invite the ICPR to continue work on creating and harmonizing economic incentives and to submit progress reports.

They stress the importance of a levy aimed at a "reduction of the pollution load", which leads to incentives in the following fields of action:

- construction of treatment plants on the premises of the direct dischargers (municipalities, industry)
- reduction of the waste load discharged by indirect dischargers
- construction of integrated pretreatment installations and wastewater split flow treatment by direct and indirect dischargers
- application of production methods entailing low wastewater volumes
- improvement of wastewater treatment techniques

- careful operation of wastewater treatment plants
  - reduction of accidental waste loads
  - improvement of the state of the drainage system
  - increased limitation of RAP priority substances (nutrients, heavy metals, organic micropollutants)
  - limitation of waste loads due to rain-water discharges
  - limitation of discharges of agricultural origin.
5. The Ministers of the ICPR Member States agree that the funds collected under the wastewater levy must be earmarked for meeting the cost of measures aimed at bringing about an improvement of the quality of water bodies.
6. The Ministers of the Member States of the European Union request the representative of the European Commission to inform the other Member States of the European Union about the results of the ICPR examinations. They believe it is necessary for the European Commission to develop comparable wastewater levies for the rest of the Member States of the European Union. When doing so it is particularly important to reduce distortions of competition resulting from varying financial burdens on the dischargers.

The representative of the European Commission promises that the European Commission will arrange for the possibility of proposing measures aimed at an approximation of the legislations concerned to be examined.

## VII Guidelines for a new Convention on the Protection on the Rhine

The Ministers of the countries bordering the Rhine in charge of the protection of the Rhine and the representative of the European Commission,

- desirous of enabling an integrated approach to be made and aiming to give consideration to sustainable development and the intrinsic value of the Rhine ecosystem,
- intending to strengthen their co-operation for the maintenance and improvement of the Rhine ecosystem,
- having regard to the Convention of 17 March 1992 on the protection and use of transboundary watercourses and international lakes and the Convention of 22 September 1992 for the Protection of the Marine Environment of the Northeast Atlantic Ocean,
- taking into account the achievements under the Convention of 29 April 1963 on the International Commission for the Protection of the Rhine against Pollution and the Additional Protocol of 3 December 1976 (Berne Convention),
- considering that the improvement of water quality achieved under the Convention of 3 December 1976 on the Protection of the Rhine against Chemical Pollution and the Rhine Action Programme of 30 September 1987 should be continued,
- considering that the clean-up of the Rhine also contributes to the protection of the North Sea,
- conscious of the fact that the Rhine is an important European shipping route,

entrust the International Commission for the Protection of the Rhine against Pollution with the development of a new and forward-looking Convention on the Protection of the Rhine.

This convention, which will at the latest enter into force in the year 2000, will take into consideration the following principles and goals:

### AREA OF APPLICATION

The area of application covers:

- a) the Rhine from the outflow from the Untersee as far as the coast line of the North Sea,
- b) the aquatic and terrestrial ecosystems in direct interrelationship with the Rhine,
- c) its catchment area, as far as its material pollution has noxious effects on the Rhine.

## TARGETS

- Integrated improvement of the Rhine ecosystem,  
essentially aimed at:
  - preserving and improving the quality of the Rhine water, and thus also of the sediments,
  - preserving and restoring habitats for fauna and flora that are as natural as possible,
  - improving living conditions for long-distance migratory fish,
  - a river flow management favouring the exchange between the river and the alluvial areas,
- Guarantee of the use of Rhine water for drinking water purposes,
- Contribution to the clean-up of the North Sea co-ordinated with other measures to protect this marine environment.

These targets are to be achieved by continuing and intensifying co-operation in the following fields:

### Quality

Protection of water, suspended matter, sediments and organisms,

Protection of resources, e.g. for the production of drinking water.

### Emissions

Avoidance, reduction and elimination of pollution by noxious substances and nutrients emitted by point sources (e.g. industry and municipalities),

Avoidance, reduction and elimination of diffuse pollution, including that from ground water (e.g. of agricultural or traffic origin),

Reduction of pollution due to navigation.

## Prevention of accidents and safety of industrial plants

Guarantee and if necessary improvement of the safety of industrial plants,

Prevention of minor and major accidents.

## Ecology

Guarantee of the natural functioning of the flowing water, including free fish migration,

Restoration of the relationship between the river and its alluvial areas,

Consideration of ecological necessities when carrying out technical hydrological measures, e.g. in the field of flood protection, navigation, utilisation of water power, etc.

## Optimising the flow regime

Exchange of information and consultation on national programmes for optimising the flow regime, with the aim of considering the river system in its entirety.

## PRINCIPLES

- Principle of precaution and prevention,
- Polluter-pays principle,
- Principle of not increasing nuisances,
- Concern for sustainable development,
- Application and further development of the best environmental practice and of the best available technology (within the meaning of the Convention of 22 September 1992 on the protection of the marine environment of the north eastern Atlantic Ocean),
- Principle of non-transfer of pollutants to other environmental media.

## COMMISSION

- Structure as defined in the Berne Convention.
- The Commission is a legal person. On the sovereign territory of the Contracting Parties the Commission has the legal capacity which national law adjudicates to legal persons. The law in force at the location of its place of establishment is applicable to questions relating to labour and social legislation.
- Organisation similar to that laid down in the Berne Convention.
- Decisions are taken by the Commission unanimously and are addressed to the Contracting Parties as recommendations.
- The Commission's recommendations may also be addressed to other international organisations.
- The Commission's tasks are similar to those laid down in the Berne Convention and in the Convention on Chemical Pollution and are adapted to additional tasks (including the drafting of work programmes).
- Tasks of the secretariat, share of costs, annual reports as laid down in the Berne Convention.
- Exchange of information between Contracting Parties.
- Intensified co-operation with other international organisations, including the possibility of granting observer status.
- Expanded exchange of information with non-governmental organisations and parties concerned, including an appropriate participation of outside experts at a technical and scientific level. Prior to decisions affecting non-members, parties concerned and interested must be duly heard by ICPR institutions and must be informed after the decision has been taken.
- Transfer of existing treaties to the new Convention (Berne Convention, Convention on Chemical pollution).

## VIII Conclusions and perspectives for the 3rd phase of the Rhine Action Programme

1. The Ministers and the representative of the European Commission stress their resolve to press for the financing and implementation of the ongoing and recently adopted supplementary measures in the 3rd phase of the RAP in order to bring them to a conclusion as scheduled.
2. They confirm their determination to pursue their work with a view to bringing the RAP to a successful conclusion in all areas in its 3rd phase. This applies firstly to work not yet concluded in the 2nd phase, and secondly to supplementary tasks as well.

The Ministers and the representative of the European Commission set the following focal points for the 3rd phase:

- Intensify work in relation to those priority substances for which target values have not yet been achieved (zinc, copper, mercury, cadmium, lead, PCB, HCB,  $\gamma$ -HCH, ammonium-nitrogen) and in relation to plant protection agents and non-agricultural biocides relevant for the Rhine.
  - Reduce the pollution of the Rhine by fertilisers and plant protection agents of agricultural origin, inter alia by applying the codes of good agricultural practice.
  - Maintain and carry forward the work with regard to the prevention of accidents and the safety of industrial plants.
  - Implement the Ecological Master Plan for the Rhine.
  - Maintain and, where appropriate, intensify work aimed at reducing the pollution from industrial and municipal discharges, taking into account storm waters and the disposal of sewage sludge.
  - Guarantee regular success monitoring in connection with the targets of the Rhine Action Programme.
3. With a view to the new trend-setting convention, the Ministers and the representative of the European Commission invite the ICPR not only to draw up the text of the new convention but also to integrate the new fields of action, in particular those concerning the improvement of the ecosystem, the reduction of pollution due to navigation and those on the exchange of information on measures aimed at optimising flow management etc., into current work and to intensify work on future focal points of action.

## Arrangements for the Regulations on Waste Materials Discharged to the Rhine from ships

1. The Ministers in charge of the protection of the Rhine welcome the initiative taken by the Central Commission for the Navigation of the Rhine to develop comprehensive legal and organisational regulations under an international agreement concerning the disposal of waste materials discharged from ships to the Rhine, in particular the disposal of bilge water, taking into account the "polluter-pays" principle.
2. They note with the utmost concern that the conclusion of these negotiations may be thwarted simply because of different financing concepts. This would mean that the present organisation in charge of the disposal of bilge water over the total length of the Rhine, the financing of which is always on a short-term basis, would have to stop all activities at short notice. In the Federal Republic of Germany the financing of the disposal of bilge water is guaranteed only until 31 December 1995. It is expected that the financing of waste disposal from ships in Switzerland and the Netherlands, which has up to now been free of charge, will run into difficulties.

The consequence would be the illegal discharge of great quantities of oily mixtures and residues from ships, which would also lead to a clearly visible deterioration of the quality of Rhine water in the shipping lanes connecting with the Rhine and on the river banks. This would have extremely detrimental effects on the success achieved so far with international co-operation to improve water quality and to clean up the Rhine ecologically, as well as on public acceptance of international co-operation.

3. Therefore, the Ministers in charge of the protection of the Rhine undertake to persuade their respective governments to ensure that from 1 January 1996 on a system for the disposal of bilge water according to the polluter-pays principle and which is neutral regarding competition will be put in place. The important problems relating to the discharge of cargo residues and to the disposal of wastewater from passenger ships and cabin cruisers must likewise be settled by mutual agreement.

## Annex I

### General measures

- Construction of efficient installations or bypass channels on weirs or sills as required for free up- or downstream fish migration.
- Removal of sills and weirs no longer used.
- When renovating or extending barrage weirs used for hydrological power supply, up- and downstream effects on fish habitats and migration must be taken into account.
- Preservation of the remaining natural watercourses.
- Structural stimulation of the river bottom (depressions, rapids, gravel banks, shallow gravelly banks, shelter).
- Within certain limits the river bottom should develop its own dynamic, and individual gravel deposits should be preserved.
- Cut-off meanders should be sufficiently supplied with water, an adequate minimum water flow should be fixed, taking into account bilateral agreements.
- Partial shading of small bodies of water.
- Protection, preservation and restoration of important fish habitats or the creation of new habitats elsewhere.
- Use of fish taggings when stocking.
- Installation of checking devices along the Rhine and its larger tributaries so as to monitor fish migration.
- Introduction of more stringent regulations on the protection of species and on fishing with respect to fish species endangered in the Rhine and its tributaries and listed in the "Programme for the return of long-distance migratory fish to the Rhine (Salmon 2000)".
- Interlinking of fishing regulations for the North Sea and the Atlantic Ocean with the on-going programme for the salmon in the Rhine river system.
- Studies on the return of the sturgeon (*Acipenser sturio*).

## Annex II

### Measures concerning different sections of the Rhine

- High Rhine (outlet from Lake Constance to Basle)
  - Observation of the principles according to annex I when carrying out hydrological measures with an important impact, particularly in relation to power plants on the High Rhine situated along the frontier.
  - Step by step realisation of the 12 local Swiss projects chosen as part of the study on "Ecological improvement measures on the High Rhine" aimed at the greening of areas in the cantons bordering the Rhine: Basel-Stadt, Basel-Landschaft, Aargau, Zürich, Schaffhausen, Thurgau.
  - Working out of a cross border network concept by the cantons of Basel-Stadt, Basel-Landschaft, Aargau, Zürich, Schaffhausen and Thurgau, which border the Rhine, and the Land of Baden-Württemberg.
  - Leading bilateral discussions and negotiations between authorities of the Swiss Confederation and of the Land of Baden-Württemberg, including the cantons and the Swiss-German Commission of authorities, taking into account the petition dated 7 December 1994<sup>3</sup> on the future possibilities of extending hydrological power plants on the High Rhine when renewing concessions and on the optimal protection and preservation of the last two larger sections of the watercourse with a natural head of water:  
1st section: Rheinau to upstream of the mouth of the Thur,  
2nd section: Reckingen power station to Koblenzer Laufen.
  
- Upper Rhine (Basle to Bingen)
  - Creation of polders or relocation of dams with flooding for ecological purposes - if possible from a hydrological and hydraulic point of view - in order to improve flood protection and to preserve and regenerate biotopes typical of alluvial areas, taking into account measures agreed upon under treaty.
  - Improvement or restoration of formerly effective hydraulic and biological connections between the river and the flooded areas (cutoff meanders such as Altarm Baltzenheim, Altwasser Daubensand, Hoodt near Gambsheim, Altarm Beinheim, Fahrgiessen near Seltz, Altarm Mothern, Roessmoerder near Offendorf) and the tributaries.
  - Protection of systems of biotopes typical of the flooded areas and of ecological importance, in particular by allocating cross-border nature protection areas

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<sup>3</sup> Petition by 21 Swiss and German organisations for fisheries and nature protection implement the Action Programme Rhine 2000 along the High Rhine in the near future.

- and taking into account measures agreed upon under treaty.  
Creation of a biologically effective network of ecologically important habitats.

- Middle Rhine (Bingen to Bonn)
  - Since the Rhine valley on the Middle Rhine is rather narrow, the possibilities of taking measures aimed at ecological improvement are very restricted.
  
- Lower Rhine (Bonn to the estuary)
  - Based on a Master Plan for the Rhine in North Rhine-Westphalia, ecological conditions on the Lower Rhine are to be improved. Some of the measures are currently being planned and implemented, such as the relocation of the dikes along the curve of the Rhine at Orsoy (Rhine km 799.6 - 805.0), where some 200 ha of floodplains are being returned to the river. Further concrete measures are currently being planned and will be implemented in the short or medium term, so that 1500 ha of supplementary retention plains will be available to cope with cases of floods and in order to improve the ecosystem.
  - Measures aiming at a reduction of the processes of linear erosion.
  - Along the North Rhine-Westphalian part of the Lower Rhine the floodplains of ecological importance in the administrative districts of Kleve and Wesel cover an area of about 20 000 ha. Approximately 11 000 ha have already been declared natural nature reserves, and in the coming years 4 500 ha more will be added to them. A further 5 000 ha of land close to nature is to be developed.
  - Along the Dutch part of the Lower Rhine the areas of ecological importance cover a surface of about 7 500 ha. Approximately 3 000 ha have already been declared natural nature reserves. Estimates based on today's nature protection and water policy indicate that the remaining 4 500 ha will be declared natural nature reserves within the next 25 years and that a further 5 000 ha of foreshores and 3 000 ha of river banks will be developed so that altogether about 40 % of the whole surface area of the river corridor will be close to nature. The measures will particularly cover an improvement of the river dynamics, the deepening of foreshores, the creation of additional channels and the opening of summer dikes. Actions which can be implemented within 5 years will have been taken by the year 2000.
  - All river bank sections of the Rhine arms are to be as close to nature as possible and serve as connecting areas.