

Rhine: adaptation strategy and mainstreaming climate into river basin/flood risk management plans

Session 4: basin-wide adaptation



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Internationale
Kommission zum
Schutz des Rheins

Commission
Internationale
pour la Protection
du Rhin

Internationale
Commissie ter
Bescherming
van de Rijn

International
Commission
for the
Protection of
the Rhine



Rhine Ministers requested the ICPR:

2007:

to carry out a scenario study regarding the impact of climate change on flow regime of the Rhine

2013:

to develop a climate adaptation strategy for the Rhine catchment

2015:

The Climate change adaptation strategy of the Rhine basin was adopted by the parties

Approach

Identification of:

- **Direct effects of CC on flow regime and water temperature**
- **Indirect effect thereof on**
 - ecology
 - chemistry
- **Impact on different uses**

Strategy for the IRBD Rhine for adapting to climate change

Note to the reader

This is a "living document" which will develop along with the increased knowledge on the climate change and its effects.

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CLIMATE CHANGE ADAPTATION STRATEGY (Report 219, 2015)



- Compilation of knowledge, frame to act, not a list of precise measures**
- Mitigation actions: existing activities pave the way to enhance the resilience of the river & floodplain ecosystems**
- Possible consequences of CC reinforce the necessity to act and take measures**
- Monitoring water quantity, quality and ecology: know about changes, new topics considering CC: link WFD-FD, low water and water temperature, effects on ecology, ...**
- Exchange of best practice, actualization of knowledge and continuation of cooperation**

Mainstreaming climate into management plans

(National) **implementation** of the CC adaptation measures through RBMP and FRMP (also 3d and 2d cycle) and the new working mandates and programs 2016-2021

Cc adaptation strategy based on **national strategies and measures.**

Links with the RBMP and the work of the Program of work 2016-2021 for the Working groups "Water quality" and "Ecology"

→ Different mentions and links in the two reports



**Plan de gestion 2015
coordonné au
niveau international du
district hydrographique
international
Rhin**

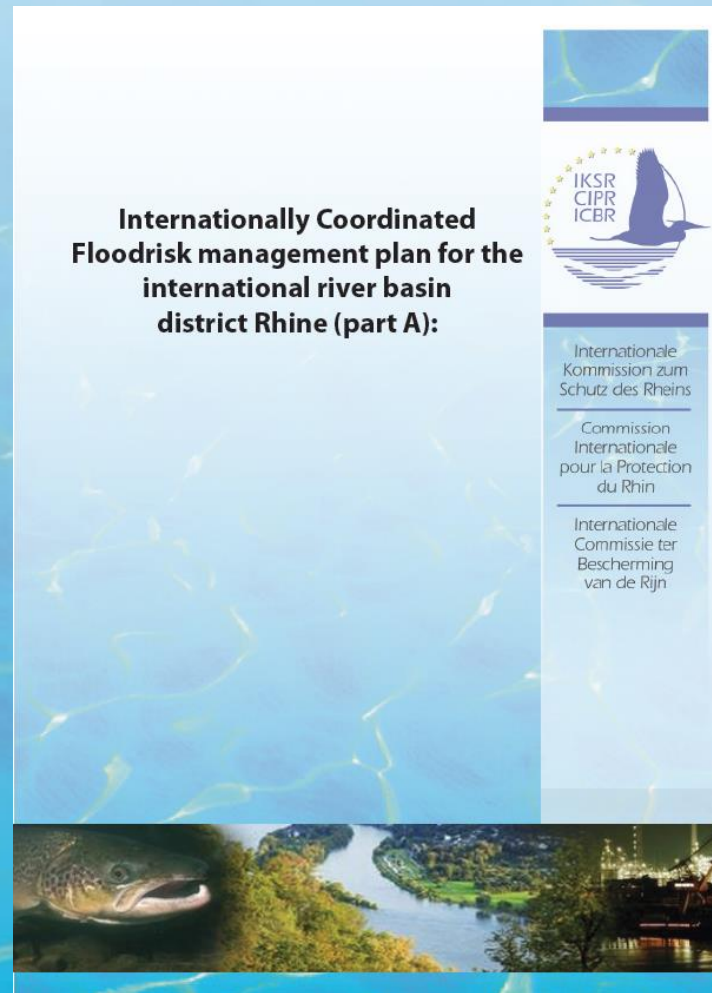
(partie A = partie faîtière)
Décembre 2015




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**Internationally Coordinated
Floodrisk management plan for the
international river basin
district Rhine (part A):**



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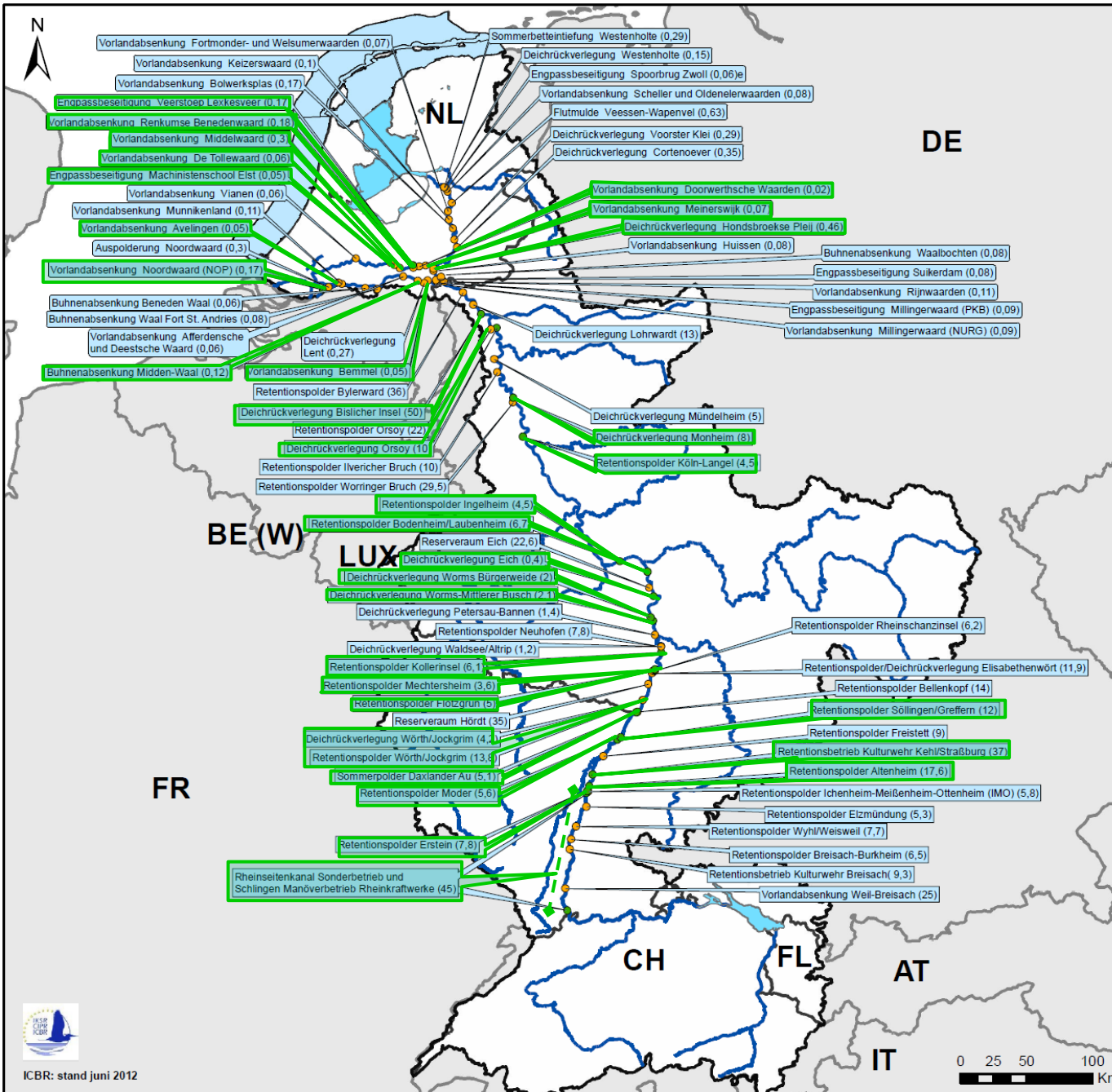
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Financing and implementation of measures

- No special budget allowed for this new tasks but special budget for the coordination of the implementation of WFD and FD
- Implementation and financing of the measures by the States but with reporting obligation to the ICPR
- To tackle the problem of CC we used as much as possible measures already taken by the ICPR or foreseen by the states

Realization of water level reduction measures



Maatregelen voor de retentie van hoogwater in de hoofdstroom van de Rijn

Stand van de uitvoering van de maatregelen

- Afgerond
- In uitvoering / in planning

Wateren

- Rivieren
- Kust- en overgangswateren

Toelichting bij de cijfers

Voor de waterstandverlagende maatregelen in de Rijndelta vanaf Lobith: verlaging van de waterstand in m

Voor de retentiemaatregelen tussen Bazel en Lobith: volumes in miljoen m³

Opmerking: De Franse of Nederlandse naam van de maatregelen is te vinden in de bijgevoegde tabellen.

32 of 76 measures are finalized



Room for the river, Netherlands (Nijmegen, room for the Waal)



Source: *Ruimte voor de rivier*



Source: *regio024.nl*