

Astana Water Action - Template for reporting

1. Country/Organization:

Please indicate your name, organization and country.

Heide Jekel, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

2. Title of the action committed to in 2011 (see the annex)

Please indicate the title of the action on the implementation of which you are reporting. Those countries that committed to more than one action please kindly note that a template for reporting should be filled in for each action.

Danube Study - Climate Change Adaptation, "Study to provide a common and basin-wide understanding towards the development of a Climate Change adaptation strategy in the Danube River Basin"

3. Overview of progress made

(a) *Has the action been implemented?*

Yes / In progress / No

Please elaborate (up to 250 words):

The study was elaborated by Prof. Mauser and his team of the Ludwig-Maximilians-Universitaet Munich. It is solely based on existing studies and projects, no further scenarios or model calculations were carried out.
See <http://www.icpdr.org/main/activities-projects/climate-adaptation>.

(b) *What challenges were encountered during the implementation of the action? What lessons were learned?*

(up to 250 words)

The main conclusions and outcomes of the study can be summarised as follows:

The impacts on water related sectors are triggered by temperature and precipitation changes; An increase of the air temperature is expected with a gradient from northwest to southeast, annually and in all seasons, but particularly in summer in the south-eastern Danube region; Regarding precipitation, the Danube River Basin is located in a transition zone between increasing (Northern Europe) and decreasing (Southern Europe) future precipitation, resulting in overall small annual precipitation changes for the whole basin on average. However, seasonal changes with a decrease in summer and an increase in winter precipitation are expected;

Changes in the seasonal runoff pattern, triggered by changes in rainfall distribution and reduced snow storage and increasing evapotranspiration are predicted;

An increase in intensity and frequency of heat waves is expected. Droughts, low flow situations and water scarcity are likely to become more intense, longer and more frequent;

Regarding floods, although local and regional increased heavy rainfall might occur, there is no clear picture for changes in flood magnitude and frequency;

An increase of water temperature and increased pressures on water quality are expected;

Water dependent sectors such as agriculture, forestry, navigation and water related energy production are likely to suffer under the projected future conditions;

Changes for ecosystems and biodiversity are predicted with shifts of the aquatic and terrestrial flora and fauna;

But also positive effects are projected, such as a reduction of ice days on rivers or longer vegetation periods.

The study also includes an indication of the uncertainty of the predicted changes and impacts next to a summary of possible adaptation measures.

(c) *What future steps, if any, are planned in relation to the action implementation/follow up?*

(up to 250 words)

On the basis of this study and further discussions in the ICPDR (International Commission for the Protection of the Danube River) an ICPDR climate change adaptation strategy has been adopted in December 2012. This strategy will inter alia be used in the implementation processes of the European Water Framework and the European Flood Risk Management Directives.

See <http://www.icpdr.org/main/activities-projects/climate-adaptation>.

4. *Usefulness of the Astana Water Action*

Please indicate how strongly you agree or disagree with the following statements and provide an explanation, as appropriate.

(a) *The Astana Water Action was useful to strengthen political support related to sustainable water management issues:*

strongly agree / somewhat agree / somewhat disagree / strongly disagree

Please elaborate (up to 250 words):

If it strengthened political support was depending on the country and region. For Germany the Astana Water Action was not really necessary to strengthen political support, but the Action highlighted the importance of sustainable water management issues and was in this sense also a useful symbolic action for Germany.

(b) *The Astana Water Action has helped my country to comply with its international obligations:*

strongly agree / somewhat agree / somewhat disagree / strongly disagree

If agreeing, please elaborate how (e.g. European Union Directives, UNECE and other environmental agreements, Millennium Development Goals, Commitments made within the "Environment for Europe" process) (up to 250 words)

...

(c) *Would your country be interested in continuing to submit and monitor new actions within the AWA framework in the future?*

Yes / No

Please elaborate (up to 250 words)

See explanation in 4. a).

Nevertheless Germany would participate in a follow-up if other countries were interested.