FINAL ANNOUNCEMENT

CHR – Spring seminar
"Socio-economic influences on the discharge of the River Rhine"
Bregenz, Austria, 26-27 March 2014

Background

Currently hydrological models to predict discharge for the Rhine include prediction of change under future climate change scenarios. However, it is expected that discharge will not only vary through climate change, but will also be influenced by future changes in socio-economic development within the Rhine basin. Notable changes in user functions influenced by population density, changes in land use for agriculture and forestry and energy and other industrial production are expected to influence the discharge of the Rhine.

In the past various projects have investigated changes in land use on the discharge of the Rhine, often with use of hydrological models. This has resulted in valuable insights into current and future changes in discharge functions of the Rhine. However, up to now changes in socio-economic situation and resulting changes in water abstraction and use have to date received less attention within these models. In addition, the methods used thus far have been developed for specific models and may not be transferable to others making it difficult to compare results.

Before implementing a project that will have a focus on the socio-economic aspects that influence water use, the seminar will contribute to get a better focus on the state of the art on socio-economics at this moment. Within this first CHR spring seminar main current water use functions of different users functions will assessed on how these user functions could change under different socio-economic development scenarios. Planned is to have the focus on the low-flow situation, as it is expected that the user functions will have the largest influences under low-flow conditions.

Objectives

- To identify/assess the current use and future developments on abstraction and consumptive use by the most significant user functions (e.g. agriculture, energy and industry) in the international Rhine River basin.
- How could these parameters change under influence of socio-economic developments and how can these changes be incorporated in the existing hydrological models?
- The analyses of the current level of enforcement of past and current water-related policies will provide insight on the ability of different riparian countries to meet future requirements following from developments in climate and economic trends.

Final Programme

Day 1 – 26 March 2014

Session 0: Welcome – Moderator: Eric Sprokkereef, CHR Secretariat	
08.30 – 09.00	Welcome and registration
09.00 – 09.15	Welcome, general introduction – Hans Moser – President of CHR
Session 1: Background – Moderator: Hans Moser, President of CHR	
09.15 – 09.50	Keynote 1: The Alpine water tower – past, present, future – Bruno Schädler (former FOEN and University of Berne)
09.50 – 10.25	Keynote 2: Manifestation of socio-economic influences in discharge patterns – Jörg Uwe Belz, Federal Institute of Hydrology, Koblenz
10.25 – 11:00	Keynote 3: Discharges in the future – Jaap Kwadijk, Deltares
11.00 – 11.30	Coffee / Tea break
Session 2: Experiences, Scenarios – Moderator: Mark de Bel, Deltares	
11.30 – 12.05	Delta scenarios – an outlook on future land and water use – Willem Bruggeman, Deltares
12.05 – 12.40	Socio economic scenarios in interdisciplinary modeling projects– Roman Seidl, ETH Zürich
12.40 – 13.15	Building value data for normalizing damage data and develop socio economic scenarios – Franz Prettenthaler, Joanneum Research, Graz
13.15 – 14.15	Lunch break
Session 3: Energy, Industry, Domestic water demand – Moderator: Astrid Björnsen, University of Berne	
14.15 – 14.40	Abflussvorhersage am Alpenrhein – die Rolle der Speicherseen – Hans Peter Wächter, Rheinunternehmen AG, Widnau
14.40 – 15.05	Environmental benefits and impacts of modern pumped storage plants in the Austrian catchment of the Alpine Rhine – Peter Matt, Vorarlberger Illwerke AG, Vandans
15.05 – 15.30	Flooding of the residual lakes of the Rhinish lignite area by use of the river Rhine - Andreas Wagner and Dirk Hüsener, RWE Power and LANUV North-Rhine-Westphalia
15.30 – 15.55	Scenarios for drinking water and waste waster in the Ruhr area - Michael Kersting, RUFIS, Bochum
15.55 – 16.25	Coffee / Tea break

Session 4: Agriculture, Forestry, Shipping and Ecological functions – Moderator: Enno Nilson, Federal Institute of Hydrology	
16.25 – 16.50	Water and Swiss agriculture – Bruno Schädler (former FOEN and University of Berne)
16.50 – 17.15	Integrating decision making in the agricultural sector into ecohydrological simulations: the GLOWA-Danube approach – Tim Reichenau, University of Cologne
17.15 – 17.40	Prediction, valuation and ecological effects of future stream water quality based on socio-economic scenarios and climate change predictions for 2050 – Nele Schuwirth, EAWAG
17.40 – 18.05	Shipping on the Rhine – developments and prospects for the demand and supply side, with consideration of the climate change – Hans van der Werf, Central Commission for Rhine Navigation, Strasbourg

20.00 – 23.00: Social event and Participants' dinner at the Hotel Schwärzler

Day 2 – 27 March 2014

Session 5: Going forward – Moderator: Willem Bruggeman, Deltares	
09.00 – 10.00	Keynote 4: Socio economic scenarios incorporation into hydrological modelling – Martina Flörke, University Kassel
10.00 – 10.45	Gap analysis
10.45 – 11.15	Coffee / Tea break
11.15 – 11.45	Next steps
11.45 – 12.15	Summary and wrap up
12.15	Closing of the spring seminar

Evening event

Participants' dinner will in the Hotel Schwärzler on 26 March 2014 at 20.00 pm.

Language

Working language of the seminar will be English.

Conference venue

Siechenhaus, Gallusstr. 50, A-6900 Bregenz.

Organisers

The invitation to the event (http://www.chr-khr.org/en/calendar) is issued by the International Commission for the Hydrology of the Rhine Basin (CHR). For further information about CHR, please visit our website at http://www.chr-khr.org

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