1. General Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizer</td>
<td>GWP Poland</td>
</tr>
<tr>
<td>Date &amp; Place</td>
<td>23 February 2016</td>
</tr>
<tr>
<td>Participants</td>
<td>Regional water management authorities (12), Voivodship boards for land reclamation and water structures (22), academic staff (8), meteo, hydrogeological and agricultural state institutes (5), private sector – small hydropower association (1); 22 women, 26 men</td>
</tr>
</tbody>
</table>

2. Objectives & Programme

**Main objective of the 3rd NCD (which processes are you targeting)**

- to analyse drought of 2015: spatial distribution of the intensity of 2015 drought in Poland in particular season; assessment of economic consequences of this drought;
- to analyse current drought management policy: identifying main gaps and uncertainties; reviewing the measures to prevent drought impacts that are considered in the key economic sectors; discussing activities that may help in the involvement of key sectors in the integrated and proactive approach to drought management (planning / minimizing the impacts)

**How will the 3rd NCD contribute to the development of the Drought Management Plan?**

With the 3rd NCD attention/understanding of the stakeholders for the integrated, cross-sectoral approach will be increased. Bottlenecks in drought management in Poland will be identified.

**Programme of the 3rd NCD**

**Agenda**

**Part I: 2015 DROUGHT**

I. I. Otop, INSTITUTE OF METEOROLOGY AND WATER MANAGEMENT - NATIONAL RESEARCH INSTITUTE - Meteorological drought of 2015
II. T. Tokarczyk, INSTITUTE OF METEOROLOGY AND WATER MANAGEMENT - NATIONAL RESEARCH INSTITUTE - Hydrological drought of 2015
III. P. Herbich, THE POLISH GEOLOGICAL INSTITUTE - NATIONAL RESEARCH INSTITUTE -
Hydrogeological low flow and its impact of water supply during 2015 drought
IV. A. Doroszewski, INSTITUTE OF SOIL SCIENCE AND PLANT CULTIVATION - STATE RESEARCH INSTITUTE - Agricultural drought of 2015 in Poland
V. L. Łabędzki, INSTITUTE OF TECHNOLOGY AND LIFE SCIENCES - Meteorological and agricultural drought of 2015 on pasture areas

Part II: How to prevent effects of drought?
i. B. Więzik, THE SCHOOL OF ADMINISTRATION - Water supply in the Silesia province
   ii. W. Kotowski, WARSAW UNIVERSITY - Drought problem from the ecology perspective: diversity, variety, retention
   iii. E. Malicka, THE POLISH ASSOCIATION FOR SMALL HYDROPOWER DEVELOPMENT - Small hydropower plants as part of the creation of small retention and preventing the effects of drought

3. Report

Report
 short description of the 3rd NCD

In 2015 all phases of drought occurred: atmospheric, hydrological, hydrogeological and agricultural droughts. In some parts of the country it reached the severe or extreme level. Drought consequences were following: (predicted) crop yields reductions in all crops except of cereals, municipal water supply restrictions in the southern part of the country, drying out of shallow wells, wetlands and small rivers.

Poland is not prepared for drought; we do not implement measures for preventing the impacts of drought. In case of municipal water supply in the south of Poland, where groundwater resources are scarce or not available, two options are possible: building small storage reservoirs or connecting local water supply systems to the remote but bigger ones. In current state of local water supply systems ecological requirements (ecological flows) are compromised. Several issues were emphasized during the discussion on agricultural drought:
   i) increase of crop diversity and biodiversity in grasslands should result in better resistance to drought conditions;
   ii) up-to-date agricultural practices, like micro-irrigations, are necessary;
   iii) land reclamation systems are mal-operated or destroyed;
   iv) cautious agricultural practices and selection of crops is needed;
   v) close cooperation of farmers, agricultural agencies and ecologists is needed;
   vi) exchange of knowledge on nature retention measures and how they can mitigate negative impacts of droughts should be intensified;
   vii) small storage reservoirs also offer possibility for water retention increase; many of former water mills and other damming structures still exist and they could be used for small hydropower; still this is criticised by ecologists because of migration disturbance;
   viii) a part of the selection of the measures to prevent drought effects needs to be an economic analysis.

Different sectors of economy consider drought and possible measures for preventing its effects from their own perspective. Drought management plans are developed for the water regions
level (not country level); plans for the river basin districts will be prepared by grouping regional plans.

7 Regional water management authorities (RWMA) in Poland differ in stage of elaborating of the drought plans – some of the plans are already finished, i.e. after public consultations (in 2 RWMAs), in some RWMAs consultations are just taking place (2 RWMAs), and in 3 RWMAs they are at the beginning of development of the DMP. Close cooperation between RWMAs, economy sectors and water users is still missing.

Outcomes

Briefly explain what were the main outcomes of your NCD and if you have achieved any of the below listed outcomes.

The outcomes of the 3rd NCD in Poland were:
- increase of awareness of the drought phenomenon, spatial pattern of its occurrence and intensity level in different parts of Poland;
- increase of knowledge of how to describe drought and possible actions to prevent or mitigate its negative impacts and
- emphasis of the positive effects from information exchange and cooperation of professionals – mainly among water management practitioners and officials.

At present in Polish governmental legislation centre a project of a new water law is being processed (last version is dated 24th April, 2016, which was intended to send to Committee of the Council of Ministers). If this new water law passed, organisational structure of water management authorities in Poland would be changed, together with the competences of the units and planning documents. According to the proposed new law Drought Management Plans will be prepared only for the country level, taking into account river basin districts and water regions (DMP for water regions which are currently being developed are not expected to exist). What elements of Polish (existing, elaborated in 2013) methodology will be preserved during preparation of national plans, after the change of organisational and legal conditions, is still not known.

Statements presented below apply to the present state in Poland:

- Current status of DMP development in water regions has been identified:

<table>
<thead>
<tr>
<th>No</th>
<th>RWMA and River Basin District</th>
<th>DMP for Water Region – year of development</th>
<th>Public consultations</th>
<th>Strategic Impact Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Wrocław (Odra)</td>
<td>II.2016-VIII.2017</td>
<td>15.III - 15.IX.2016 r.</td>
<td>I-VIII.2017</td>
</tr>
<tr>
<td>6</td>
<td>Poznań (Odra)</td>
<td>IX.2015-XII.2017</td>
<td>III-IX.2017</td>
<td>III-IX.2017</td>
</tr>
</tbody>
</table>

- There are no policies or strategies dedicated to drought management in Poland currently.
- At present, a responsible authority for DMP development is a director of Regional Water Management Authority – for water regions under his management.
- The President of National Water Management Authority is responsible for preparation of DMP for the river basin districts; no activities on RBD level have started yet.
Development and implementation of DMP for water regions is mostly a task of drought teams at the RWMA. These teams include 3 work groups: monitoring, data analysis and education. The work groups should operate permanently; data analysis group is issuing warning messages to the RWMA’s drought teams. This group is responsible for issuing reports on current drought status to the administrative units and the water users. The RWMA drought teams have been already created. DM Committees, which were supposed to be appointed at the RWMA, were expected to make decisions on both long term goals, priorities and measures for drought impacts prevention and risk management, and currently applied measures during drought occurrence. However, DM Committees have not been established yet. Two Committees on the national level were planned: for the Vistula and Odra river basin districts, operating also on smaller neighbouring basins. Their activities were supposed to begin when drought has already occurred on the considerable part of the river basin districts. Moreover, these national Committees are delegated to accept DMP for river basin districts and monitoring of their implementation.

Next steps
What were the next steps agreed on the NCD?

We did not agree upon any next steps, but benefits coming from providing knowledge and information exchange were stressed. Any further activities may be undertaken after clarification on legal and organisational conditions.

Impacts that IDMP CEE have in your country
Please explain what are the main impacts in your country that are in some way connected with the IDMP CEE activities (NCDs, demonstration projects, etc.). What kind of changes have you noticed in the last two years in a field of the drought management in your country?

Drought phenomenon is more widely recognised now. Water management practitioners are provided with internet services presenting current data on drought status (Institute of Meteorology and Water Management – National Research Institute (NIR), The Polish Geological Institute – NIR, Institute of Soil Science and Plant Cultivation – NIR, and Institute of Technology and Life Sciences). Practitioners in agriculture increased awareness on drought losses in this sector and learn the importance of preparedness and prevention measures aimed in increase of resilience. Educational activities are appreciated and desirable.