

Integrated Drought Management

Programme in Central and Eastern Europe



Peer Review Group
Progress Report No. 3
October 2014 – March 2015

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October 2014 – March 2015

Peer Review Group

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Foreword

The Peer Review Group (PRG) has presented the first draft of the 3rd PRG report on the 3rd IDMP CEE workshop in Bucharest, Romania (21 April 2015). Additionally, CEE IDMP activities were presented by the different activity leads (summarizing objectives, implementation process, final outputs, added value, dissemination). The PRG had the opportunity to discuss the outcome with them. At the time of the workshop almost all Milestone reports, Milestone Progress report, Outputs and Final Activity reports were ready. Activity 7.1 Good practice compendium was an exception. This report became available after the workshop because it had to include the main outcome of the other activities.

Dr. Sándor Szalai (Szent István University, Hungary) was not available to assess the outcome of the activities over the period October 2014 – March 2015, neither he was involved in the compilation of the General Observations over the whole project period.

We would like to acknowledge the good cooperation with the Programme Manager, i.e. Sabina Bokal. She was an excellent intermediary between the consortium and the PRG. She provided very clear information on which tasks need to be completed, priority of the work and assisted the PRG where to in the relevant documents. Moreover her responses were well on time. We also appreciated very much the support of Richard Müller, on behalf of the Secretariat GWP CEE, Bratislava, Slovakia.

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12 August 2015

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1. Assessment procedure

The Project Review Group (PRG) continued to scientifically assess the Milestone Report(s) and Output Report(s) and to give a final conclusion in terms of: accepted, accepted with modifications or rejected, as introduced after the 2nd IDMP CEE workshop in Ljubljana, Slovenia (8-9 April 2014). In close cooperation with the Programme Manager, the PRG agreed about the setup of the Final Activity Report (FAR) at the 3rd PRG meeting in Budapest, Hungary (2-4 October 2014). The FAR templates has been distributed by the Programme Manager. The Final Activity Report should provide the following information:

1. Basic information
(Name of the Activity, Activity leader, Duration, Participating partners, GWP Chairman)
2. Contribution to Challenges
 - Operational mode/Strategic mode
 - Steps described in the Guidelines for Drought Management Plans (Act. 2.1)
 - Monitoring, forecasting / prediction, impacts, vulnerability, measures, management, risk management
 - Scale: on International, regional (especially CEE), national level
3. Contribution to Objectives
 - Activity objectives achieved
 - Description how these have been achieved (quantitative and qualitative terms) / not achieved
4. Description of the implementation process and methodologies applied
 - Actions that have been taken / instruments applied
 - Description of all phases of implementation
 - Information and methodologies applied
 - Problems encountered during the implementation phase
5. Outputs
 - Main outputs of Activity
6. Added value
 - What new (science, practical experience, guidelines or others) was developed by IDMP CEE?
 - How does your work relate to earlier knowledge (research) and experiences?
7. Lessons learnt and transferability
 - How can the project experience been used elsewhere?
 - What are the most important lessons for other countries and policy level in the preparation / implementation of Drought Management Plans?
8. Proposals for follow-up
 - What aspects would you like to continue?
 - Provide concrete proposals for follow-up projects
9. Annexes
(Milestone reports, tables, other data)

The following report starts with General Observations made during the period October 2014 – March 2015 followed by a summary of the assessment per Activity with reference to the Annexes. The comprehensive Annexes include all assessments done by the PRG and the revisions given by the Activity Teams.

2. General observations

The general observations are subdivided in two parts: (i) comments linked to the progress and outcome from IDMP CEE (Section 2.1), and (ii) remarks associated with the implementation of the WMO/GWP IDMP in the CEE countries (Section 2.2).

2.1 IDMP CEE

1. In Bucharest on 21 April 2015, the Peer Review Group congratulated the IDMP CEE consortium on the outcomes of the project. All Activities produced a Milestone Report / Reports, Milestone Progress Reports, Output Reports, Final Activity Reports during the reporting period (October 2014 – March 2015) or in the months afterwards.
The consortium managed to shift the focus by many responsible persons from reactive to proactive measures in the participating countries. The drought knowledge base was expanded, services were provided to multiple stakeholders and capacity of stakeholders was built. Although not all ambitious project goals could be reached within the rather short lifetime of the project and within the limited budget for all the planned actions (see Section 2.2), this is a major achievement.
2. The development of the Guidelines for Drought Management Plans (Act. 2.1) are a major achievement of IDMP CEE and is a cornerstone of the project. Based on well-known documented approaches (WMO/GWP and EU), seven steps were elaborated. Multi-facetted drought management aspects were described in a context-specific environment (i.e. CEE countries), which were integrated for the compilation of the drought management plan (DMP). The seven steps are well-grounded through the consultation of national drought experts based on the National Consultation Dialogues. The guidelines advocate a proactive risk management approach, which is supposed to become embedded in integrated water management at different levels. It provided a good reference for the whole IDMP CEE project and is well linked to the EU Water Framework Directive and the River Basin Management Plans that need to be updated every 6 years. The guidelines will also help to shape the integration of vertical planning and decision making processes at different levels using a multi-stakeholder approach, including the key sectors of agriculture and energy.
3. The National Consultation Dialogues were a strong mechanism to allow the national stakeholders interact with the international IDMP CEE consortium, which makes IDMP CEE rather unique.
4. Most demonstration activities (Work package 5) were well received in the countries that participated in the development, which implies that the achievements can be classified as being of national interest. Some activities were already been recognized as being of international relevance with a clear example being the acceptance of abstracts for presentations at international platforms (e.g. HYPERDrought Conference, Prague; International Drought Conference, Valencia; European Geophysical Assembly, Vienna).
5. Some activities have a wider perspective than only drought and it is very hard or forced to isolate drought, but these activities should have made this clearer from the beginning. Most reports have been revised to better address this issue.
6. Interaction between the activities has been limited (see also Section 2.2 for some organisational reasons), which explains that: (i) some duplication occurs, and (ii) definitions are not always correctly used. The limited interaction may also be a reason that most Activity Teams had difficulties to describe links with other Activities. Careful reading of the draft Guidelines for Drought Management Plans (Act 2.1) would have prevented this, although the PRG realizes that the guidelines only became available later in the project.
7. Some reports suffer from inadequate referencing, for example; (i) providing insufficient background references for some bold statements, and (ii) old literature from the region and not related to recent widely available literature. In addition, most Output Reports have to be proofread by an expert in English, preferably a native speaker with knowledge of the field.
8. In the final reporting period the Activity Teams became more used to summarize their outcomes through Milestone Progress Reports and Final Activity Reports using the templates than in previous reporting periods. However, in not all revised reports the changes were clearly marked, the date on the cover was not given, which

made it hard for the PRG to reassess the revised document. Because of this some revised reports were not reassessed or assessed in detail.

9. Table 1 provides an overview of the PRG assessments in the period from October 2014 to March 2015. Most of the submitted reports were accepted by the PRG with minor or major comments. The table also gives per Activity the date of submission of the report and the PRG assessment. It appears that in number of cases the PRG was unable to react in due time, particularly in the first phase of the reporting period. The main reason for this was the unforeseen change in the contribution and responsibilities of individual PRG members.
10. The PRG would like to acknowledge the excellent cooperation with the Programme Manager, i.e. Sabina Bokal. She was an excellent intermediary between the consortium and the PRG. She provided very clear information which tasks needed to be completed, helped to set priority of the assessments to be done and assisted the PRG where to find the relevant documents. Another strong point was that her responses were well on time.

2.2. WMO/GWP IDMP implementation in CEE countries

The Integrated Drought Management Programme (IDMP) is a joint initiative of the World Meteorological Organization (WMO) and the Global Water Partnership (GWP). The IDMP was launched at the High Level Meeting on National Drought Policies in Geneva, Switzerland (March 2013). The IDMP is implemented through regional programmes, in addition to a number of national initiatives. Currently, the IDMP has three regional programmes. The Central and Eastern Europe (IDMP CEE) was the first to start in 2013. Later regional programmes were started in the Horn of Africa (IDMP HoA) and in West Africa (IDMP WAF). There are regional initiatives also ongoing in South Asia and Central America. The PRG made some observations about the implementation of the IDMP CEE that might be useful for ongoing and upcoming regional programmes.

1. The identification of the activities started with the IDMP objectives and initiatives proposed by the National and regional GWP CEE Programme¹. The Description of Work (DoW) consisted of a series of Activity Lists that were formulated by the Activity Team for each Activity, which fitted in a set of work packages (Regional and transboundary cooperation; National planning processes; Demonstration projects; Knowledge and awareness; Governance and fundraising). It appeared that in the final phase of the Activity Lists, priorities and needs of countries only were considered to a certain extent and that what could be offered or supplied gained in importance. The resulting series of Activity Lists was very ambitious for the available budget and the rather short lifetime of the project of 2 years. Some activities had to be downscaled by the Activity Team during the implementation phase because these happened to be too ambitious. A thorough feasibility assessment might have prevented these downscaling actions.
2. Not all Activity Lists used the term Milestones and Outputs consistently. In some Activities, Milestones also were named Outputs. The PRG assumed that Milestones were supposed to be steps towards the final product (i.e. Outputs). Outputs were supposed to be published in the public domain, and Milestones would only be available for the consortium in the protected website. However, Milestones and Outputs were differently used among the Activities. Moreover, not all Activities had a synthesis report (i.e. Output) at the end, but instead of that a series of reports that all have to be read to understand the achievement. The IDMP CEE would have been benefited from all Activities having a consistent and logical structure. Such structure needs to be assessed before the kick-off.
3. There was limited interaction across Activities, which had some impact on the IDMP CEE' output (item 6, Section 2.1). This cross-cutting needs to be organized and planned prior to the start as part of the implementation. In case of the IDMP CEE, most of the Activities could have been centred on Act. 2.1 (Guidelines for Drought Management Plan). PRG had tried to encourage Activity Teams to explore links between Activities through targeted questions in the Milestone Progress Report, but that led only in few cases to a sufficient response. Likely the reporting language (English) complicated the work of the CEE countries, incl. the interaction, although knowledge and experiences are improving.

¹ Kindler, J. and Thalmeinerova, D. (2012): Inception report for the GWP CEE part of the WMO/GWP Integrated Drought Management Programme.

4. The IDMP CEE had no scientific coordinator to complement the work of the Programme Manager. It is very likely that such a coordinator would have created more consistency among Activities through an overall conceptual model for the IDMP CEE. This also would have led to more interaction (see item 3). Such a coordinator also would have supported the design of the Activities (logical structure in term of Milestones and Outputs, including a Synthesis Report at the end). The absence of such coordination was discussed at the project meeting in Ljubljana in April 2014. It was decided that scientific coordination will be done to a certain extend by the PRG with strong support of the Programme Manager.
5. The IDMP CEE consortium has expanded the drought knowledge, and capacity of multiple stakeholders was further built. However, some activities are still only half-way completed. The obtained knowledge and experiences are very valuable, but can easily be lost. A follow-up is urgently required (Work package 8 has not led to a concrete proposal, Chapter 3). The Inception Report (see footnote 1, pg. 3) was an excellent start, which was followed by the unique National Consultation Dialogues (Act. 2.2). However, the circle needs to be closed, i.e. the IDMP CEE' outcome has to be explicitly integrated in the national land and water planning and decision making processes through multi-stakeholder involvement at different scales (national, provincial, river basins, communities), including key sectors (agriculture, forestry, energy, ecosystem services). The GWP (especially GWP CEE) and the WMO/GWP IDMP in Geneva could also play an active role here.

3. Assessment of Work packages

Table 1 provides an overview of the stepwise assessment per activity (i.e. PRG comments to Milestone / Output Report(s) and the Final Activity Report, and the replay of the Activity Team). The detailed reports are in the Annexes 1-9. In the table and annexes only those activities are mentioned that produce Milestone or Output Reports. All other activities were assessed by the PRG on the basis of Quarterly Reports, which were compiled by the Programme Manager, the Secretariat GWP CEE and the Activity Leads.

Work package 1 Regional and Transboundary Cooperation

Act. 1.1 Cooperation with international basin commissions and regional organizations

The 4th IDMP CEE Quarterly Report 2014 (October-December) and the 1st Quarterly Report 2015 (January-March) describe participation in: (i) Steering Committees (GWP, Budapest, Hungary), (ii) Conferences (European River Restoration Conference, ERRC, Vienna, Austria; EUROPE-INBO 2014-12th European conference implementation of WFD, Bucharest, Romania; HYPER Drought Conference (EGU Leonardo Conference Series on the Hydrological Cycle), Prague, Czech Republic; International Conference on Drought Research and Science-Policy Interfacing, Valencia, Spain), General Assembly of the European Geophysical Union (EGU2015), Vienna (Austria), and (iii) Drought Dialogue Fora (3rd Pan-EU Drought Dialogue Forum, Brussels, Belgium, and 4th Forum, Valencia, Spain). Furthermore, the potential role of the CEE Drought Information Platform, possibly as one of the GDIS pilots (Global Drought Information System), was discussed, in Pasadena, California, USA. The listing of activities demonstrates that Activity 1.1 satisfactorily developed contacts with international organizations and exchanged views with various drought institutions (policy makers, stakeholder organizations, water managers, research institutes, universities, across Europe and beyond).

Act. 1.2 Review of the current status of the implementation of DM plans and measures within RBMP according to EU WFD

As planned the review was finalized in March 2014. No activities in the current review period.

Act. 1.3 Drought Data Exchange Platform

The Act. 1.3 has been assessed (Annex 1A-C). The original idea was that the 10 participating countries were expected to have: (i) access to relevant data (meteorological observations), (ii) capacity to prepare digital drought maps, and (iii) knowledge and expertise in national drought monitoring and relevant maps. It appeared that not all countries had the capacities, and the project was not meant to develop all these capacities during the project. One technical workshop was held in 2014, however, this was not sufficient to develop the full capacity. More efforts are required in a follow-up project. A positive achievement is the drought metadata catalogue that has been compiled by all 10 countries.

The PRG trusts that the selection of EDO (JRC) for the implementation of the information platform was a reasonable choice; the EDO has the support of the European Commission. No MoU has been signed to formalize the implementation.

Act. 1.4 Development of GIS Based Communication Technology Platform for the Sustainable Management of Transboundary Water Resources in Lithuania, Poland and Kaliningrad Region

Activity 1.4 does not belong to IDMP CEE, as discussed in Budapest, 4 Oct 2014.

Table 1 Overview of the assessment of Activities, October 2014 – March 2015²³

Activity	Report(s) submitted	Assessment PRG	Reply Activity Lead	Assessment PRG	Reply Activity Lead	Assessment PRG
1.3 Drought data exchange platform	Milestone 3 (=Output 2) and Final Activity Report 28.01.15	(3) 20.03.15 (Annex 1C)	Revised: - Final Activity Report - Milestone 3 / Output 2 - Reply to PRG Assessment 14.04.15 (Annex 1B)	(1) Accepted with some comments 04.05.15 (Annex 1A)		
1.4 Development of GIS Based Communication Technology Platform for the Sustainable Management of Transboundary Water Resources in Lithuania, Poland and Kaliningrad Region	Discussed in Budapest, 4 Oct 2014; Act. does not belong to IDMP CEE					
2.1 Guidelines for Drought Management Plans	Revised guidelines 23.03.15	(2) Reply in report 29.03.15	Revised guidelines 03.04.15	(1) Reply in report 08.04.15		(1) Final assessment 11.05.15 (Annex 2)
5.1 Drought management by agricultural practices and measures increasing soil water holding capacity	Milestone 3 09.01.2015	(1) 09.02.15 (Annex 3B)	- Joint Final Report (09.01.15) - Final Activity Report (23.03.15)	(1) Final assessment 27.04.15 (Annex 3A)		

² (1) Accepted, without modifications; (2) Accepted, minor modifications; (3) Accepted, major modifications, and (4) Rejected/not approved

³ In the table and annexes only those activities are mentioned that produce Milestone or Output Reports. All other activities were assessed by the PRG on the basis of Quaterly Reports, which were compiled by the Programme Manager, the Secretariat GWP CEE and the Activity Leads.

Table 1 Overview of the assessment of Activities, October 2014 – March 2015 (cont'd)

Activity	Report(s) submitted	Assessment PRG	Reply Activity Lead	Assessment PRG	Reply Activity Lead	Assessment PRG
5.2. Assessment of drought impact on forest ecosystems	Milestone 4 / Output 3 12.12.14	(4) 22.01.15 (Annex 4C)	Revised (15 March 2015): - Milestone 3 / Output 2 report - Milestone 4 / Output 3 report - reply to PRG assessment Milestone 4/Output 3 - reply to PRG assessment Milestone 3 / Output 2 Final Activity Report (15.04.15) (Annex 4B)	(1) Accepted with some comments 04.05.15 (Annex 4A)		
5.3 Natural landscape retention – combining drought mitigation, flood protection and biodiversity conservation Please note: Original activity title changed.	Milestone 4 25.11.14	(1) 27.01.15 (Annex 5D)	Milestone 5 09.01.15	(1) 04.02.15 (Annex 5C)	- Milestone 6 (23.03.15) - Reply to PRG comments Milestone 5 31.03.15 - Final Activity Report 01.04.15 (Annex 5B)	(1) 15.05.15 (Annex 5A)

Table 1 Overview of the assessment of Activities, October 2014 – March 2015 (cont'd)

Activity	Milestone report(s) submitted	1 st Assessment PRG	Reply Activity Lead	2 nd Assessment PRG	Reply Activity Lead	Assessment PRG
5.4. Drought Risk Management Scheme: a decision support system	- Milestone 3.2 report 08.04.15 - Final Activity Report 09.04.2005 .	(1) with some comments 24.04.15 (Annex 6)				
Act. 5.5 Policy oriented study on remote sensing agricultural drought monitoring methods	Milestone 3 / Output 3 29.01.15	(2) 27.02.15 (Annex 7C)	Revised: - Milestone 3 / Output 3 Reports - Milestone 3 Progress Report Response to our PRG assessment Final Activity Report 19.03.15 (Annex 7B)	(1) Accepted with some comments 15.05.15 (Annex 7A)		
Act. 5.6 Upgrading agricultural drought monitoring and forecasting: the case of Ukraine and Moldova	Milestone 4 22.01.15 Milestone 5 24.03.15	(2) 13.04.15 (Annex 8C)	Final Activity Report 24.04.2015 (1 st version) and 18.05.2015 (2 nd version) Milestone 4 (Output 3a and 3b) (18.05.15) Reply to PRG Assessment (18.05.15) (Annex 8B)	(1) Accepted with minor comments 08.06.15 (Annex 8A)		

Table 1 Overview of the assessment of Activities, October 2014 – March 2015 (cont'd)

Act. 7.1 Development of the Compendium of Good Practices	Milestone 3 09.02.15	(2) 27.03.15 <i>(Annex 9B)</i>	Compendium of good practices (draft) 23.06.15	(1) Accepted with minor comments and some suggestions to elaborate 01.08.15 <i>(Annex 9A)</i>		
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Work package 2 National planning processes

Act. 2.1 Guidelines for Drought Management Plan

The PRG assessed the draft Guidelines for Drought Management Plan (Annex 2). This is an important outcome of the IDMP CEE. The team synthesized recent knowledge and information of word-leading EU, UNCCD and WMO/GWP documents on Drought Management, which was complemented with experiences, incl. examples and case studies from the 10 countries. Seven steps outlined in the Guidelines describe the development and implementation of a national drought management policy and associated drought management tailored to the conditions in the CEE countries, which makes it extremely useful. It has been made clear that drought management and the compilation of the Drought Management Plan is a dynamic and iterative process that needs to be regularly revised and updated according to an appropriate post-drought evaluation process, which in the EU Member States is supposed to be linked to the 6 years cycle of River Basin Management Plans (RBMPs) planning process. The iteration process allows also inclusion of relevant outcome from very recently-concluded drought research.

Act.2.2 National Consultation Dialogues

The 2nd round of National Consultation Dialogues (NCDs) was held in every country, except in Slovakia. The NCDs contributed to the completion of the Guidelines for the Drought Management Plan (Act. 2.1). It is strong mechanism of the IDMP CEE. PRG has not assessed the reports on the web (under Planning) nor the Summary Report. We assume that the main issues have been incorporated in the Guidelines (Act. 2.1), which have been assessed (see above).

Work packages 3 and 4 - do not apply to the IDMP CEE

Work package 5 Demonstration Projects

Act. 5.1 Drought management by agricultural practices and measures – increasing soil water holding capacity

The Act. 5.1 has been assessed in Annex 3A-B. This activity has demonstrated concrete measures to increase the soil water holding capacity. Several well-known methods were tested, including real world implementation in farming practices. A theoretical study was combined with field experiments using currently available machineries and technologies for sub-soiling and respective farming practices. The importance of soils as stores of water to overcome dry spells is well described. A good overview is presented of the principal farming systems, including soil tillage systems and the role of farmyard manure. Conclusions point out that sub-soiling (loosening and breaking up soil at depth) increases both water infiltration into the soil profile and yields of some crops. Although the team achieved relevant results for drought management (strategic measures), they did not succeed to embed these well in IDMP. They should have paid more direct attention to the relevance of appropriate management of soil water to reduce drought risk. As mentioned in previous PRG assessments: (i) a number of statements are made about the importance of soils to store water without referring to literature, (ii) conventional definitions for drought, which are described in the Guidelines for Drought Management Plan (Act. 2.1) are not followed, and (iii) soil water drought do not start at plant wilting point, but earlier when actual evapotranspiration drops below potential evapotranspiration.

Act. 5.2 Assessment of drought impact on forest ecosystems

Annexes 4A-C give the assessment of Act. 5.2. The main objective of the activity was to identify measures for forest ecosystems to adapt to drought, based on experiences from four CEE countries with a substantial area of forest. Interesting results were obtained on the impact of climate change (not drought) on forests, vulnerability and adaptation measures, i.e. (i) number of maps with different climate indices, (ii) number of tables with drought

vulnerability data for different climate conditions, and (iii) number of adaptation measures identified to mitigate negative effects of drought. The team had difficulties to organize the work, i.e. to consistently follow the Activity List (e.g. titles of milestones changed, milestone reports “hidden” in other documents), which made it hard for the PRG to assess the outcome. The intended actions were clearly too ambitious, and hence the impact on forest ecosystems had to be removed from the list, milestones reports were very brief (i.e. Milestone Report 5 about the dissemination). Revision of the activity was not clearly communicated. However, important in terms of outreach is that the activity has drawn the interest of ministries, decision makers and stakeholders and that likely that the output will be used for the National Strategy on Adaptation to Climate Change.

Act. 5.3 Natural small water retention measures

Small water retention belongs to adaptation measures to reduce negative impacts of extreme water situations (strategic measures) through conserving water in the catchment from wet periods for its use during subsequent dry periods and slowing down water outflow during floods. The aim of the activity is to compile Guidelines for natural small water retention measures. The PRG assessed the Act. 5.3 outcome in Annex 5A-D. The Activity Team has produced a good set of guidelines. The PRG appreciates that more literature has been included in the final phase to support statements about impact of measures, although there still is some bias to Polish sources and there might also be some more recent literature available. We are also pleased about the information that natural small water retention measures are meant to be designed to lead to positive impacts, but not all do, in particularly too wet conditions may happen, if water conservation is followed by unexpected above-normal rainfall. The bias in previous documents to flood in an IDMP project has been removed to some extent (e.g. more drought aspects have been included); retention affects both extremes (floods and drought). The PRG realizes that knowledge about Small Natural Water Retention Measures is different (experiences and terminology) among CEE countries.

Act. 5.4 Drought risk management scheme: a decision support system

Act. 5.4 developed a framework for integrated drought risk mapping that can be adjusted to a given drought context. The proposed framework for a decision support system (DSS) is generic in nature. The framework is designed to help during an ongoing or upcoming drought in an operational mode and to search for drought adaptation measures (strategic mode) that can be context specific dependent on local needs, data and characteristics. In the outcome three drought contexts are provided: (i) drought risk mapping for early warning in Poland, (ii) agricultural drought risk mapping to evaluate profitability of different management practices in Romania, and (iii) risk mapping of water scarcity in the context of integrated water resources management in Lithuania. PRG has assessed Act. 5.4 outcome in Annex 6. As said in the previous PRG Review reports, Act. 5.4 really is an ambitious activity. However, the Activity Team managed to provide useful guidance on integrating drought risk management concepts and practices into development of planning and programme frameworks. Although the role of a DSS in drought management is important, the link with the Guidelines (Act. 2.1) was identified rather late.

Act. 5.5 Policy oriented study on remote sensing agricultural drought monitoring methods

Annexes 7A-C provide the PRG assessment of Act. 5.5. The activity focused on identification of agricultural drought characteristics and development of a monitoring method using remote sensing to broadcast an early warning before irreversible yield loss and/or crop quality degradation occurs. The study in a Central European river basin involved several water management practices both for rainfed and irrigated systems for the most important crops in the region. The activity generated relevant outcomes, namely with the obtained spatial decision support system, farmers and/or specialized extension services can diagnose drought impacts 1.5 to 2 months earlier than before. The Activity Team confirmed that the DSS is not meant as guideline for National Governments. The role of the activity in an operational mode within IDMP CEE was identified, e.g. with Activities 2.1, 5.1 and 5.6. The Activity Team contributed to the visibility of IDMP CEE through dissemination of the results at the HYPER Drought Conference in Prague, Czech Republic, the General Assembly of the European Geophysical Union in Vienna, Austria, and submission of a manuscript to the Journal of Remote Sensing of the Environment.

Act. 5.6 Upgrading agricultural drought monitoring and forecasting: the case of Ukraine and Moldova

PRG has assessed Act. 5.6 outcome (Annex 8A-C). Activity 5.6 aimed at upgrading agricultural drought monitoring and forecasting in the Ukraine (main producer of grain on the world market) and adjacent Moldova (shared Dniester River Basin), which should consider climate zonation and drought risk areas. Trends in changes of soil water holding capacities due to erosion caused by agriculture also were planned to be studied. Additionally, development of forecasting models for crop yield losses caused by droughts were foreseen to be developed. Eventually, it was planned to raise drought-related awareness of stakeholders and policy makers in water management and agriculture areas.

As said in the previous PRG reports, the structure of the Activity (i.e. how it is organized) was hard to understand, even after reconsideration and a discussion with the PRG (Budapest, 2014). This complicated the task of the PRG. However, it was understood that the situation in both countries became very difficult because of the war in the Eastern Ukraine, which started in May 2014, and hence coordination of the activity was difficult and challenging. In light of the situation it was agreed to reduce activities, e.g. to restrict the study to two main crops (winter wheat and spring barley) and not to work on a new, not yet identified crop.

Despite the difficult working conditions the Activity Team achieved substantial output: (i) updated agro-climate zoning of the Ukraine and the shared Moldova-Ukraine Dniester river basin, (ii) drought risk maps showing sensitive areas, (iii) models to forecast drought-related yield loss for major crops (winter wheat and barley), and (iv) guidance for good practices of soil moisture conservation in (Moldova) and on crop-drought management (Ukraine) to raise awareness.

Work Package 6 – Capacity Development

Act. 6.1 Workshops

The 3rd IDMP CEE workshop was held at the beginning of this reporting period (2-4 October 2014) in Budapest, Hungary. The IDMP CEE community discussed progress and follow-up actions with members of the Drought Management Centre for Southeastern Europe (DMCSEE) and participants from international organizations (WMO, UNCCD, JRC). with more than 60 participants, from 17 countries of the Central-Eastern and South-Eastern Europe. Brief presentations of the main activities and their current focus from both organizations at the beginning of the session gave the participants a quick overview of the drought management status in the Central and South Eastern Europe. Afternoon session was then continued separately.

The final 4th IDMP CEE workshop was organized in Bucharest, Romania from 21 to 22 April 2015. Final outcome was presented per activity, incl. an outlook and some dissemination options. Furthermore, the workshop dealt with follow-up drought activities in the region jointly with the DMCSEE and other international organization from the region (WMO, G-WADI, JRC) and international initiatives (SATIDA, EODC, EU Strategy for Danube region, Sava Commission, Adriatic & Ionic Strategy).

The two IDMP CEE workshops were informative, productive and very well organized.

Act. 6.2 Capacity building trainings

DMCSEE and IDMP CEE experts worked together in a joint capacity building training “From monitoring to end users”, in Budapest, Hungary on 3 October 2014. Good practices were presented from United Kingdom, Romania and Greece.

Act. 6.3 Peer Review Group (PRG)

The reviewing process has been further formalized by introducing the Final Activity Report (see Chapter 1). The Programme Manager, Sabina Bokal, takes care of a very quick efficient information flow between the PRG and the consortium, which is highly appreciated.

Work Package 7 – Knowledge and awareness

Act. 7.1 Good practice compendium

PRG has assessed Act. 7.1 outcome (Annex 9A-B). The Compendium of Good Practices was planned to provide an overview of existing documents on drought management that have been implemented in several countries across Europe, incl. CEE countries. Focal points of DMCSEE and IDMP Activity Leads were planned to be interviewed about drought policy and management in their countries/regions/organisations. Cooperation with international organization was organized (e.g. the European Drought Centre, European Drought Observatory, DMCSEE, UNECE). A final publication was envisaged as a mix of existing information and IDMP CEE achievements (success stories from WP2 and WP5). The Compendium intends to reach: (i) the general public, (ii) policy makers, and (iii) end users / stakeholders (e.g. farmers, water managers).

The Activity Team faced challenges because of the late delivery of final output of several Activities, even beyond the IDMP CEE final deadline. Already earlier, this was foreseen, but is hard to cope with. This explain why some project documents are delayed. This also is the main reason that the PRG did not assess the final version of the Compendium, but a draft version.

The Compendium presents a good overview of existing information on DMP (several European countries) and guidance from the IDMP CEE National Consultation Dialogues (WP2). The role of a Decision Support System (DSS) in DMP is highlighted, which is supported by the PRG, but in the final version the place of the DSS in the seven DMP steps that were distinguished in the IDMP CEE (WP2), should better be indicated. Next the Compendium addresses the important role of drought monitoring and early warning and reports on project achievements (WP1 and WP5). It continues with measures to reduce drought impacts, vulnerabilities and risk that find their basis in the demonstration projects (WP5). Like the DSS, some of these measures also need to be better put in the context of the seven IDMP steps, The Compendium concludes with experiences from EU drought project and how to communicate with end-users. Not all sections are completed. The PRG trusts that these will be finalized. The Compendium has the great potential to the „final publication” of the 2 year WMO/GWP Integrated Drought Management Programme in Central and Eastern Europe.

Act. 7.2 Rising awareness

In November 2014 two IDMP CEE videos were released: (i) Integrated Drought Management Programme, and (ii) Small water retention measures. The videos are very informative and have been disseminated via YouTube on the IDMP CEE, WMO/GWP IDMP and the main WMO websites. They have also been disseminated via WMO to the Milan Expo 2015 and the 17th World Meteorological Congress in June 2015. However, there have been no reports on the number of hits on the various websites. The PRG suggests that the Programme Manager tries to obtain these number of hits before the end of the project.

Work Package 8 – Governance and Fundraising

Act. 8.1 Improving fundraising capacity of CWP and RWP

The Regional Coordinator, the IDMP CEE Programme Manager and some IDMP CEE partners started to prepare follow-up activities (see also Act. 6.1 and Act. 8.2).

Act. 8.2 Project preparation activities

A new activity has been started early 2015 that deals with the IDMP CEE follow-up. This was done in cooperation with DMCSEE. The ideas were complimented with those that were put forward during the NCDs (Act. 2.2). These ideas were distributed among the whole IDMP CEE community for comments, additions and to which task they would like to contribute. As a last step the follow-up ideas were discussed in the IDMP CEE workshop in Bucharest, Romania on 22 April 2015. The PRG encourages the initiatives for follow-up actions, because many of the activities are not fully completed.