Implementation of the Shared Environmental Information System principles and practices in the Eastern Partnership countries

(ENI SEIS II East)

# Ukraine

# Thematic work plan - Water (2017-2019)

Prepared for consultation by ENI SEIS II East Project Team European Environment Agency

2017





# Implementation of the Shared Environmental Information System principles and practices in the Eastern Partnership countries

# (ENI SEIS II East)

## Ukraine

## Thematic work plan - Water (2017-2019)

## -for consultation-

# 1. Context

# 1.1 Overall context

The EU and Ukraine signed associated agreement in June 2014 which provides impetus for Ukraine to ensure approximation of its national legislation to EU acts and international instruments, according to concrete provisions and timelines.

The involvement of Ukraine in the ENI SEIS II East project will underpin the improvements of technical capacity in Ukraine to better respond to the national, regional and international environmental agenda. In that context, the ENI-SEIS II East project (<sup>1</sup>) primarily aims at helping Ukraine to better respond to regional/international commitments related to environmental reporting as well as to improve its capacities to manage and use environmental statistics, data and information in support to decision-making. The final goal is to support Ukraine in using the available data and information for developing indicator based assessment and supporting regular State of the Environment Report (SoER).

The thematic national work plan for freshwater outlines actions in line with above defined objectives by supporting Ukraine in implementing respective indicators and assessment proposed by the UNECE Working Group on Environmental Monitoring and Assessment (WGEMA) and Joint Task Force of Indicators.

The overall objective is to support the SEIS implementation at the country and regional level.

In addition to this national work plan, a regional work plan has also been developed separately in order to design the actions which are thematically and spatially common to all ENI East countries including supporting the establishment of the Emerald networks as biodiversity component as well as Black Sea component specific only to Georgia and Ukraine.

#### 1.2 Link to the European Environment Agency Work Programme - 2017

Water quality: 1.5.1 WFD and water ecosystem-based managementWater quantity: 1.5.4 Water resources & efficiency/water accountsWISE: 1.5.5 WISE - data flows and information structure

<sup>1</sup> http://eni-seis.eionet.europa.eu/east





#### 1.3 Thematic context

#### **Expected main outputs**

- a) Production of regionally comparable indicators in accordance with EEA and UNECE implementations
- b) Supporting further development of national portal (SEIS Ukraine) with water data and indicators for promoting SEIS principles

The first phase of the ENI East project was resulted with a comprehensive assessment on governance, data and monitoring of water resources in Ukraine (<sup>2</sup>). The assessment –inter alia- has pointed out the potentials in terms of data availability in water area and also indicator developments, but also addressed to high risks with frequent reorganisations and high staff turnover as well as political unrest and financial constraints in Ukraine.

Ukraine has made C2 and C3 water indicators available from the all UNECE WGEMA water indicators (<sup>3</sup>). The legal basis for adopting a core set of environmental indicators in Ukraine still needs to be finalized. The State Statistics Service of Ukraine (SSC) provides online services for access to environmental indicators (<sup>4</sup>) but with important limitations for access to more detailed background information supporting the data, such as links with references to data sources and methodologies, data validation, policy targets, international agreements and general metadata. Absence of a single methodology for interpretation of data and exchange of environmental monitoring results makes it difficult to assess the quality of the environment (<sup>5</sup>).

Plans for the implementation of a national environmental information system remain unclear. The division of roles needs to be clarified between the MENR, the SSC and other entities such as the Aarhus Centre for coordinating, streamlining and operationalising national/international data flows and data dissemination which is also the case in the water area.

A portal on the SEIS Ukraine (<sup>6</sup>) has been developed by MAMA-96, a Ukrainian National Environmental NGO. The portal is hosting the data compiled manually from various sources on biodiversity and air pollution with potential expansion on water as well.

A number of projects have been supported by the EU and international organizations in various areas in relation to the water resources management in Ukraine. The river basin management plans for Upper Dnieper (Ukraine and Belarus) and Prut (Ukraine and Moldova) have been developed in line with the EU Water Framework Directive by the EPIRB project (<sup>7</sup>) funded by the EU.

The EU Water Initiative Plus for the Eastern Partnership (<sup>8</sup>) is currently being implemented as complementary actions of EPIRB project to implement the river basin management plans in Ukraine, together with strengthening monitoring systems and improvements with policy development in line with the EU Water Framework Directive.

<sup>&</sup>lt;sup>8</sup> http://www.euneighbours.eu/en/east/eu-in-action/projects/european-union-water-initiative-plus-eastern-partnership-euwi-4-eap





<sup>&</sup>lt;sup>2</sup> http://enpi-seis.pbe.eea.europa.eu/east/ukraine/enpi-seis\_country\_report\_ukraine\_final.pdf

<sup>&</sup>lt;sup>3</sup> http://www.unece.org/env/indicators.html

<sup>&</sup>lt;sup>4</sup> http://www.ukrstat.gov.ua/

<sup>&</sup>lt;sup>5</sup> http://enpi-seis.pbe.eea.europa.eu/east/ukraine/enpi-seis\_country\_report\_ukraine\_final.pdf

<sup>&</sup>lt;sup>6</sup> http://seis-ukraine.org/

<sup>&</sup>lt;sup>7</sup> http://blacksea-riverbasins.net/

Another EU funded project (APENA) aims to provide legal assistance to the MENR for streamlining the Ukrainian water legislations towards the EU water acts (<sup>9</sup>).

A new project has been approved by the UNDP Gef for promoting transboundary cooperation and integrated water resources management in Dniester river basin between Ukraine and Moldova (<sup>10</sup>). In addition, the treaty on protection and sustainable development of the Dniester river basin has been recently ratified by the Ukraine's Parliament which was pending since a time.

Despite all national and international efforts in promoting overall environmental management but particularly data and assessment on water resources, still some challenges for application of the SEIS principles for Ukraine include as follows (<sup>11</sup>);

#### Cooperation

- organizational gaps in inter-institutional data exchange and sharing
- lack of coordination among the related institutions dealing with water data, indicators and assessment

Content

- incompleteness of sectoral/institutional databases/registers
- lack of harmonized methodology and approach in data collection and processing
- lack of reliability, accessibility, availability and update of information in the existing databases *Infrastructure* 
  - high turnover of dedicated staff within the institutions, engaging in data collection, input and computer processing

By taking into account the above mentioned challenges, this work plan will support Ukraine in;

- operationalizing inter-institutional data exchange and sharing
- implementing standard data dictionaries of State of Environmental Reporting of the Water Information System of Europe with the aim of harmonizing water quantity and quality data in line with the EU water framework directive
- improving the IT capacities with SEIS Ukraine for hosting also water data and information together with the capacity of online data and information sharing
- developing indicator-based assessment to underpin the knowledge-based policy implementation and further to provide inputs to the regular production of National SoER

# 2. Description of actions

A service contract has been established with the European Topic Centre on Inland, Coastal and Marine waters to provide expertise on data harmonization, indicator implementation and conducting indicator-based assessment as well as IT aspects of SEIS Ukraine as also serving national portal of water information system.

Further developing water component of the SEIS Ukraine as portal of water information system will be implemented as "National Pilot". Depending on further needs during its development,

en





<sup>&</sup>lt;sup>9</sup> http://www.env-approx.org/index.php/en/

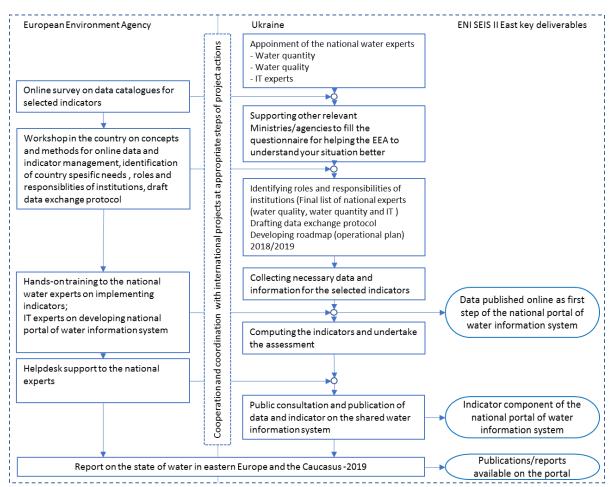
<sup>&</sup>lt;sup>10</sup> https://www.thegef.org/project/enabling-transboundary-cooperation-and-integrated-water-resources-man agement-dniester-river

<sup>&</sup>lt;sup>11</sup> http://enpi-seis.pbe.eea.europa.eu/east/final-synthesis-report-enpi-east-march-2015/synthesis-report-east-

complementary supports would also be provided from the EIONET when needed (see Chapter 2.4 for further clarifications on the National Pilot).

"Learning by doing" will be used as modality for implementing the tasks. EEA will provide necessary expertise from its internal and EIONET pools. It is supposed Ukraine will make necessary commitments needed in the implementation of the actions. The below figure (Figure 1) is illustrating workflow together with the overall share of roles and responsibilities between European Environment Agency and Ukraine during the implementation of the actions.

Figure 1: Workflow of implementation of actions



# 2.1 Appointment of national water experts

The project actions will be mainly provided in the form of expert support (except "National Pilot") as well as capacity building by training the national experts. The national experts are also supposed to ensure the institutional memory on the content. In addition, they will play key role of being national reference centres as in the EIONET. Ukraine has already appointed the following experts to be involved in the implementation of the water related actions (Table 1);





IT Expert	tbd				
Water quantity	Olga Lysuk	Department of Water Resources, State Water Agency	Head	+38 (044) 226-25-37	<u>radio@scwm.gov.u</u> <u>a</u>
Water quality	Valentina Vasilenko	Environmental monitoring, Ministry of Ecology and Natural Resources	Head of division	+38 (044) 206-33-08 2	<u>vasilenko@menr.go</u> <u>v.ua</u>

#### Table 1: List of national water experts appointed by Ukraine

#### Task descriptions for the national water experts;

- National experts on water quantity; Water quantity experts will be involved in developing water quantity accounts in line with the United Nations System of Economic and Environmental Accounting for Water (<sup>12</sup>) as well as implementing water quantity indicators. They will also ensure the collaboration with other water institutions and experts
- National experts on water quality; they will be involved in implementing water quality indicators. The number of national experts on water quality will be identify together with the National Focal Points of Ukraine on the involvement of national institutions and the content of the indicators. Water quality experts will be in close cooperation and collaboration particularly with the IT experts for developing the shared water information system.
- National IT experts; National IT expert will play crucially important role in ensuring the development of the national portal of water information system. They should work closely with the water quality experts as well as IT experts from the EEA topic centre of Inland, Coastal and Marine Waters

The list of national water experts with their national institutions will be finalized during the workshop in Kiev.

The communication with the national water experts will be conducted mainly in English.

#### Deliverables

National water and IT experts identified and thematic expert networks developed

#### 2.2 Online survey on data catalogues for water indicators

Based on EEA data policy document (<sup>13</sup>) and the European interoperability framework for European Public Services (<sup>14</sup>) as well as in line with the SEIS components (cooperation, content and infrastructure) an online survey will be performed with the Ministry of Ecology and Natural Resources of Ukraine and State Statistics Service of Ukraine with further circulation to other relevant national agencies for the following purposes;

• to develop the metadata catalogue of the selected indicators

 <sup>&</sup>lt;sup>12</sup> https://unstats.un.org/unsd/envaccounting/seeaw/seeawaterwebversion.pdf
 <sup>13</sup> <u>http://www.eea.europa.eu/legal/eea-data-policy</u>
 <sup>14</sup> <u>https://ec.europa.eu/isa2/eif</u>





- to further elaborate quantitative and qualitative aspects of organizational and data capacities
  of relevant national institutions in sharing the data and information (cooperation- institutional
  dimension of the data management) as building block of the ENI SEIS 1<sup>st</sup> phase
- to update information on data availability for each of the water quantity and quality indicators as well as operational tools and procedures (infrastructure) for sharing the water data and information at the national scale

A close consultation and cooperation will be ensured with ENI SEIS National Implementation Team of Ukraine as well as with EU WI+, UNECE, UNEP and UNDP Gef and OSCE in order to avoid from possible duplication of similar surveys. For instance, a survey is planned to be conducted by UNECE on the indicators of the Sustainable Development Goals.

European Topic Centre on Inland, Coastal and Marine waters (ETC/ICM) on behalf of the European Environment Agency will conduct the online survey with Ukrainian national institutions.

#### Deliverables

- Metadata catalogue on available data for the respective indicators
- Progress report on current institutional, technological and regulatory dimensions of the online data and indicator management (systems) in Ukraine

#### 2.3 Technical workshop on online data and indicator management

UNECE Joint Task Force on Environmental Statistics and Indicators has proposed 16 water related indicators (<sup>15</sup>) to be implemented as response to the international reporting obligations. About 8 indicators out of 16 are related to water quantity, 3 are for the freshwater water quality, 2 are linking with marine quality while remained 3 indicators are for waste water management. Ukraine has developed the indicators of C2 and C3 at national level. The data underpinning the indicators is available for the years 1990-2015 (<sup>16</sup>). The rest of 9 UNECE freshwater related indicators need to be further implemented in Ukraine. In addition, no indicator-based assessment associated with the available indicators could be found available. Further improvements in terms of data collection in line with the WISE SoE, implementation of indicator according to the EEA indicator guideline as well as undertaking the assessment would be beneficial to support the knowledge-based national water policy implementation.

A two-day workshop will be organized by EEA in Kiev with the purpose of aligning common conceptual understanding on further developing the SEIS Ukraine as national portal of water information system and implementation of regionally comparable indicators.

Eventually the place of the SEIS Ukraine in terms of hosting institution should also be clarified during the workshop e.g. the Ministry of Ecology and Natural Resources of Ukraine, State Statistics Service of Ukraine or Aarhus Centre.

The workshop will also elaborate different aspects of the three SEIS components i.e. institutional *cooperation* for data and information sharing, prioritisation of the *content* of data and information in

<sup>&</sup>lt;sup>16</sup> http://ukrstat.gov.ua/operativ/operativ2006/ns\_rik/ns\_e/opvvr\_rik\_e2005.htm





<sup>&</sup>lt;sup>15</sup> www.unece.org/env./indicators.html

line with the selected indicators as well as designing IT *infrastructure* (tools and application) for the data exchange.

Various national institutions are involved in monitoring and management of water resources in Ukraine. For instance, the below table is illustrating the involvement of different agencies in water monitoring and collecting the data (Table 2)

Monitoring function	Responsible agency	Ministry
Surface water quantity	State Agency of Water Resources,	The Ministry of Ecology and Natural
	State Hydrometeorological Centre	Resources of Ukraine
Surface water quality	State Agency of Water Resources	The Ministry of Ecology and Natural
		Resources of Ukraine
Groundwater quantity and quality	State Geological Service	
Drinking water sources and quality	Sanitary and Epidemiological	The Ministry of Healthcare of
	Service	Ukraine,
		The Ministry of Housing and
		Utilities
Water abstraction, use and	State Agency of Water Resources	The Ministry of Ecology and Natural
pollution discharge		Resources of Ukraine

 Table 2: Institutions for water monitoring in Ukraine (17)

In order to ensure the involvement of relevant institutions and experts, in addition to the national water experts, other participants to the workshop will be identified in close cooperation with Ukrainian NFPs and National Implementation Team.

By taking into account current state of establishment with the SEIS components in Ukraine, the following agenda is proposed for the workshop subject for further revisions with Ukrainian NFPs;

Introduction of conceptual and methodological frames on the international standards and guidelines

- Communication on the results from the online survey
- Introduction of selected indicators
- International indicator guidelines i.e. EEA Indicator guideline and UNECE online indicator guideline
- Overall introduction of the UN SEEA Water framework with a particular focus on flow and assets accounts and case study from the EEA/EIONET Optional
- Mapping the selected indicators with the International reporting streams, policies and assessments (Reporting to the conventions, SDGs, Green growth, Resource efficiency)

Development of the national portal of water information system as National pilot

- Data harmonization- implementation of WISE SoE water quantity and water quality data dictionaries
- Conceptual approach for the support of development with the SEIS Ukraine
- Institutional roles and responsibilities in developing/further improving the portal

Operationalize the implementation of the indicators

- Identifying national water quality and IT experts
- Identifying national water quantity experts
- Defining the data sets for the water quantity and water quality
- Operational plan (Roadmap) of implementation with the SEIS Ukraine and water indicators

Based on the outputs from the online survey as well as the workshop in Kiev, further elaboration will be conducted together with the Ministry of Ecology and Natural Resources of Ukraine and State Statistics Service of Ukraine regarding the prioritization of indicators. As a first step the below table

<sup>&</sup>lt;sup>17</sup> http://enpi-seis.pbe.eea.europa.eu/east/ukraine/enpi-seis\_country\_report\_ukraine\_final.pdf



**European Environment Agency** 



(Table 3) is tentatively illustrating possible prioritisation of the implementation of the UNECE water indicators in Ukraine subject for the data availability.

C. Water	Indicator description	Data production	Glossary of terms	Implementation year by the ENI SEIS II project	Context
C1. Renewable freshwater	<u>PDF</u>	<u>XLS</u>	<u>PDF</u>	2017/2018	e.g. SDG-6
C2. Freshwater abstraction	PDF	XLS	PDF	2017/2018	e.g. SDG-6
C3. Total water use	PDF	XLS	PDF	2017/2018	e.g. SDG-6
C4. Household water use per	<u>PDF</u>	<u>XLS</u>	<u>PDF</u>	2017/2018	e.g. SDG-6
C5. Water supply industry	PDF	XLS	PDF	2017/2018	e.g. SDG-6
C7. Water losses	PDF	XLS	PDF	2019	e.g. SDG-6
C8. Reuse and recycling of	<u>PDF</u>	<u>XLS</u>	<u>PDF</u>	2019	e.g. SDG-6
C9. Drinking water quality	PDF	XLS	PDF	2019	e.g. SDG-6
C10. BOD and concentration	<u>PDF</u>	<u>XLS</u>	<u>PDF</u>	2017/2018	National pilot
C11. Nutrients in freshwater	<u>PDF</u>	<u>XLS</u>	<u>PDF</u>	2017/2018	National pilot

Table 3: Implementation phases of the UNECE environmental indicators in Ukraine

A close coordination should be ensured between the ENI SEIS II East project and EU WI+ and UNDP Gef (together with OSCE) at the overall project implementation level so as to mobilize the national policy dialogue for facilitating the establishment of regulatory process for data sharing. In addition, the cooperation is also essential between the both projects to avoid from possible duplication in terms of training the experts on data management and IT development.

#### Deliverables

- Roles and responsibilities of the institutions in developing the national portal
- Final list of national experts on water quantity, quality and IT
- Draft data exchange protocols among the national water quality related institutions
- Roadmap (Operational plan 2018/2019 and updating the indicator table)

# 2.4 National pilot; supporting further development with SEIS Ukraine as national portal of water information system

One of the key objectives of this work plan is to support Ukraine in expanding SEIS Ukraine to serve also as water information portal to the national level which then it would improve the capacity of Ukraine in meeting their commitments towards the regional/international reporting obligations.

The national pilot will focus on the experimental **<u>implementation of online data sharing</u>** among those institutions responsible either for monitoring of water quality or managing the water resources e.g. State Agency of Water Resources, State Hydrometeorological Centre, State Geological Service, Sanitary and Epidemiological Service etc.

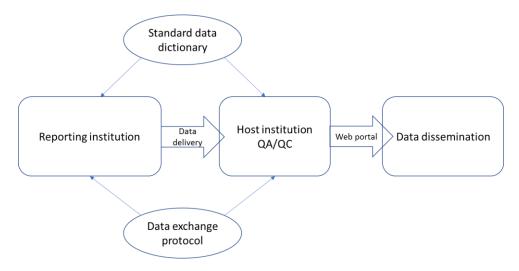
The pilot will use the development of two water quality indicators (C-10 and C-11) as testing the implementation of standard data dictionaries of the State of Environment Reporting of the Water Information System for Europe (WISE-SoE). In addition, it will support developing and operationalising data exchange protocol among the related national institutions for online data collection and





processing (Figure 2). EIONET and WISE (<sup>18</sup>) experiences on quality check and assurance together with dissemination and visualisation of outputs will also be shared with national institutions and capacity of the national experts.

Figure 2: Simplified model of further development with the SEIS Ukraine to be as national portal of water information system



EEA/ETC will provide a five days hands-on training to the Ukrainian IT experts working in the water area. The main focus will be given to tools and applications for online data management (data preparation, data collection, QA and QC and data dissemination) and also to the procedure for manual and predefined quality check and assurance.

Similar hands-on training will also be provided to the water quality experts to collaborate with the IT experts on implementation of the WISE SoE water quality data dictionary, QA/QC and data dissemination. In addition, the hands-on training for the water quality expert will cover the implementation of the water quality indicators including indicator-based assessment.

#### Deliverables

- 3 IT experts trained
- 3 water quality experts trained

# 2.5 Capacity building in the implementation of the UNECE water indicators

A component of the hands-on training will be focusing on improving the capacities of the national content experts in carrying out the implementation of selected indicators and assessment on water resources management.

National water quantity experts will be trained on;

- Implementation of the asset accounts in line with the UN SEEA Water conceptual framework
- Data harmonization, integration and gap fillings
- Implementation of C1-C5 indicators in line with the EEA indicator guideline
- DPSIR framework for carrying out the assessment

<sup>&</sup>lt;sup>18</sup> http://water.europa.eu/data-and-themes







National water quality experts will be trained on;

- Data harmonization, integration and gap fillings
- Implementation of C10-C11 indicators in line with the EEA indicator guideline
- DPSIR framework for carrying out the assessment

#### Deliverables

- Between 2-4 national water quantity experts trained
- Between 2-4 national water quality experts trained

#### 2.6 Helpdesk support

It is envisaged that once the workshop and the hands-on training have been completed, the respective institutions and national experts will have sufficient level of capacity for carrying out the necessary implementation towards the establishment of the national portal of water information system as well as implementation of indicators. However, during the implementation, they would need some ad-hoc supports around online data management or the indicator implementation. In addition, the EEA experiences on the EIONET consultation would be provided to the respective institutions in carrying out the consultation with the respective stakeholders (public or civil society organizations) on the indicators and their publications.

Helpdesk support will ensure the continuation of the works in Ukraine on the following areas;

- Further development with SEIS Ukraine on water component to serve as the national portal of water information system and on-line data management for water quality data indicators
- Computation of water accounts (asset and physical supply and use) tentative
- Implementation of water quantity indicators (given priority to C1-C5)
- Implementation of water quality indicators (given priority to C10 and C11)
- Public consultation for the indicators
- Publication of the indicators on the national portal

#### Deliverables

- Water asset accounts available
- C1-C5 are available at the national level
- C10 and C11 are at the national level

# 2.7 Report on the state of water in Ukraine

ENI SEIS II East aims to provide overview water resources management at the regional scale. For that purpose, based on the available data and information gained from the implementation of indicators, the project will develop a report on the state of water resources in Eastern Europe and the Caucasus. Ukraine is encouraged to work collaboratively with the ENI SEIS II East Project team for developing similar report with a view of supporting the knowledge-based policy implementation at the national level. If such report would be available at the national level, then it might be used as main input into the regional report. The regional report will be developed by the European Environment Agency.

#### Deliverables

Report on the state of water in Ukraine





# 3 Cooperation and coordination

# 3.1 Coordination between EEA and National Implementation Team

The overall coordination between EEA and Ukraine is going to be ensured by ENI SEIS II East Project team and the National focal points from the Ministry of Ecology and Natural Resources of Ukraine and State Statistics Service of Ukraine. The inter-institutional coordination will be conducted by the National Implementation Team. In addition, day-to-day communication with the members of the NIT as well as with the NFPs will be kept by the National Assistant of the ENI SEIS II East Project, in Kiev.

A detailed list of project team members is provided under the chapter 5.

#### 3.2 Coordination with other international institutions and projects

In many cases, outputs of ongoing regional and bilateral projects will be used as input for enhancing data availability on water quality and quantity in the ENI SEIS II East project. The EU Water Initiative Plus (EU WI+ supporting the transboundary water resources management in the Eastern Europe) and UNDP Gef and OSCE for Dniester river basin are examples for those international projects running on the water area in the region. A regular contact with these projects at appropriate levels (national and international) will be ensured so as to mobilize available data and information to be used efficiently for the purposes of the ENI SEIS II East project.





# 4 Implementation phase

As for the time table, the plan is covering the years 2017 and 2019 with possible revisions during the national workshop in Kiev as well as based on the level of advancement in terms of implementation of SEIS principles for the data collection and sharing in Ukraine (Figure 3).

Figure 3: Implementation phases of the work plan

Ukraine - Project activities - Water (2017-2019)		2017						2018											2019													
		May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
Development of country and regional work plans together with ETC/ICM contracting																																
Appoinment of national freshwater experts																																
Online survey on data catalogues for selected indicators																																
Workshop on online data, water quantity accounts and indicator management																																
Collecting data and information for selected freshwater indicators																																
Hands-on training on online data management and implementation of the indicators																																
Computing water quantity accounts, implementing selected indicators and undertake the assessment																																
Public consultation for the freshwater indicators																																
Publication of data on the national portal of water information system																																
Publishing indicators and visualising the CSI 018 on the national portal																																
Helpdesk support																																
National report on the state of freshwater																																
Report on the sate of water in Eastern Europe and Caucasus																																





#### 4.1 Deliverables

Dates of the deliverables are tentative and will be updated and finalised during the workshop in December 2017.

#### 4.1.1 Main deliverables

No.	Description	NFPs	ETC task	EEA	Date
			manager	responsible	
21/1	National water and IT experts identified and thematic expert networks developed	Dmytro Averin Oleg Prokopenko		Nihat Zal	28/10/2017
22/2	Metadata catalogue on available data for the respective indicators		Lidija Globevnik	Nihat Zal	30/11/2017
23/3	Revision of the work plan	Dmytro Averin Oleg Prokopenko	Lidija Globevnik	Nihat Zal	30/11/2017
23/4	Data exchange protocol	Dmytro Averin Oleg Prokopenko		Nihat Zal	29/12/2017
24/5	Training of national experts	Dmytro Averin Oleg Prokopenko	Lidija Globevnik	Nihat Zal	28/02/2018

#### 4.1.2 Key deliverables

No.	Description	NFPs	ETC task manager	EEA responsible	Date
25/6	Data published online as first step of the national portal of water information system	Dmytro Averin Oleg Prokopenko	Lidija Globevnik	Nihat Zal	31/08/2018
25/7	Indicators are available on the national portal	Dmytro Averin Oleg Prokopenko	Lidija Globevnik (until the end of 2018)	Nihat Zal	30/11/2018
26/8	Report on state of water in Ukraine	Dmytro Averin Oleg Prokopenko		Nihat Zal	30/04/2019





# 5. Project team members

Partner	Name and title	Role in the project						
EEA	Galina H. Georgieva, Head of Group - European neighbourhood policy activities	Overall execution of the ENI SEISII East Project						
	Jean-Nicolas POUSSART, ENI East project coordinator	Coordination of the ENI SEIS II East						
	Nihat Zal, Project manager – water, biodiversity, land	Responsible for the overall implementation of this work plan						
	Victoria Goncharova, Project officer- Networking and communication	Contact point for the visiblity of project activities						
		Day-to-day execution of the communication with partners						
Ukraine	Dmytro Averin, National Focal Point - Eastern Ukrainian Ecological Institute	Inter-institutional coordination for the project actions- Report on the state of water in Ukraine						
	Oleg Prokopenko, National Focal Point - State Statistics Service of Ukraine	Inter-institutional coordination for the project actions – report on the State of water in Ukraine						
	tbd	Responsible for National Pilot- SEIS Ukraine						
	Olga Lysuk, Water expert, State Water	Responsible for implementing the UNECE indicators of C1-C8						
	Agency Valentina Vasilenko, water expert, Ministry of Ecology and Natural Resources	including the report on the state of water in Ukraine Responsible for implementing the UNECE indicators of C9-C11 including the report on the state of water in Ukraine						
ETC	Dr. Anita Künitzer (UFZ), ETC/ICM manager	Administration of the contract with EEA						
	Dr. Lidija Globevnik (TC Vode), task leader	Coordination of a ETC/ICM team, content expert on C10						
	Kari Austnes (NIVA), Water expert	C11 content expert (data sources, data extraction, QA/QC, data analysis and visualisation, assessment)						
	Gašper Šubelj (TC Vode), IT expert	Hands-on training on IT, helpdesk support, QA/QC						
	Luka Snoj (TC Vode), Water informatics (IT)	Online survey, hands-on training on IT, organization of the workshop						
	Miroslav Fanta (CENIA), IT expert	WISE data flow, hands-on training on IT, help desk support on IT/data preparation, handling, reporting and quality control issu support on web map production						
	Dr. Maria Mimikou (NTUA), Water expert	Context expert on C1-C5 including UN SEEA Water accounts						
	Alexandros Psomas (NTUA), Water expert	Content expert on water quantity and efficiency – hands-on training on C1-C5						
	Dr. Evangelos Baltas (NTUA), Water expert	Content expert on water quantity and water scarcity indicators – Hands-on training on C1-C5						
	George Bariamis (NTUA), water expert	Content expert on C1-C5, hands-on training on UNSEEA Water and indicator computation						

# 6. Assumptions and risks

The deliverables and key deliverables are very much depending on commitments of Ukraine as well as efficiency of collaboration and cooperation between the EEA and the respective national institutions. In the case of low level institutional commitments to the project activities during the implementation phase, there would be a high risk of failure to achieve the key deliverables. Moreover, unstable political and economic situation in Ukraine would also pose an additional risk with frequent and sometimes rather extensive changes in the national administrations and a high turnover of dedicated staff within the Ministry of Ecology and Natural Resources. The EEA will take necessary dialogue and communication with the National Implementation Team as well as mobilize the Project Assistant to mitigate the impacts of such risks over the key deliverables.



