

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

(ENI SEIS II East)

**Republic of Moldova**  
**Thematic work plan - Water**  
**(2017-2019)**

*Prepared 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)

### Republic of Moldova

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

## 1. Context

### 1.1 Overall context

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

The involvement of Moldova in the ENI SEIS II East project will underpin the improvements of technical capacity in the country 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 Moldova 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 Moldova 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 Moldova 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.

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

Water quality : 1.5.1 WFD and water ecosystem-based management

Water quantity : 1.5.4 Water resources & efficiency/water accounts

WISE : 1.5.5 WISE - data flows and information structure

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<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 the development of online data collection to the national portal and data sharing for promoting SEIS principles

The first phase of the ENI East project was resulted with a comprehensive thematic assessment –*inter alia*- on governance, data and monitoring of water resources in Moldova <sup>(2)</sup>. The assessment 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 associated usually with high institutional fragmentation in terms of roles and responsibilities as well as high staff turnover and financial constraints in the country.

Moldova has made C2-, C3 and C6-C11 water indicators available from UNECE WGEMA water indicators <sup>(3)</sup>. The National Bureau of Statistics of the Republic of Moldova (SSC) provides online 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.

The Ministry of the Environment (MoE) plays a key role in environmental observations and data collection whereas the main network of environmental quality monitoring stations is maintained generally by the State Hydrometeorological Service (SHS). A number of other organizations are also involved in water monitoring, data and information collection and management without optimal level of coordination between those organizations. Therefore, necessary information exists but in fragmented, incomplete and dispersed forms.

Water data can be found in different formats depending on the collected date. For instance, till 1992 data for water are on paper based format, since 1992-2005 – in MSDOS format and from 2005-present in Excel. All these databases are not directly accessible to public, subject to further formal request.

However, it has to be noted that water monitoring in Moldova has quite well-established. Hydrological network is represented with 46 stations spread across the whole territory of the country including Transdnistria for recording water level and water temperature. In transboundary context, there is a well-functioning system for regular data sharing between Moldova and Romania for Prut river basin. Similar data sharing exists for the transboundary area of the Dniester river although there are no joint monitoring stations with Ukraine.

The systematic observations on surface water quality (of Dniester and Prut Rivers) are implemented through 49 monitoring sites set up on 16 large and small rivers, 5 reservoirs, 3 natural lakes and 1 estuary. There are also 5 automatic stations located on Raut River Basin, which provide hydrological information in real time every 4 hours.

A number of projects have been supported by the EU and international organizations in various areas in relation to the water resources management in Moldova. The river basin management plans for

<sup>2</sup> [http://enpi-seis.pbe.eea.europa.eu/east/moldova/enpi-seis-country-report-\\_republic\\_of\\_moldova-final.pdf](http://enpi-seis.pbe.eea.europa.eu/east/moldova/enpi-seis-country-report-_republic_of_moldova-final.pdf)

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

<sup>4</sup> <http://www.statistica.md/pageview.php?l=en&idc=407&nod=1&>



Prut (Moldova and Ukraine) has been developed in line with the EU Water Framework Directive by the EPIRB project <sup>(5)</sup> funded by the EU.

The EU Water Initiative Plus for the Eastern Partnership <sup>(6)</sup> is currently being implemented as complementary actions of EPIRB project to implement the river basin management plan of Prut in Moldova, together with strengthening monitoring systems and improvements with policy development in line with the EU Water Framework Directive.

Another EU funded project (North Water Project) is helping to Moldova to create a regional and integrated water supply system <sup>(7)</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 the Republic of Moldova and Ukraine <sup>(8)</sup>. Similarly, transboundary cooperation for reducing the nutrient loads in the Danube river basin has been supported by the Gef program since early 2000s <sup>(9)</sup>.

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 Moldova include as follows <sup>(10)</sup>;

#### *Cooperation*

- organizational gaps in inter-institutional data sharing and sharing

#### *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 considering the above mentioned challenges with the data and information management, this work plan will support Moldova in;

- operationalizing inter-institutional data sharing 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 Moldova 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

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<sup>5</sup> <http://blacksea-riverbasins.net/>

<sup>6</sup> <http://www.euneighbours.eu/en/east/eu-in-action/projects/european-union-water-initiative-plus-eastern-partnership-euwi-4-eap>

<sup>7</sup>

<sup>8</sup> <https://www.thegef.org/project/enabling-transboundary-cooperation-and-integrated-water-resources-management-dniester-river>

<sup>9</sup> <https://www.thegef.org/project/dbsb-agricultural-pollution-control-project-under-wb-gef-strategic-partnership-nutrient-0>

<sup>10</sup> <http://enpi-seis.pbe.eea.europa.eu/east/final-synthesis-report-enpi-east-march-2015/synthesis-report-east-en>

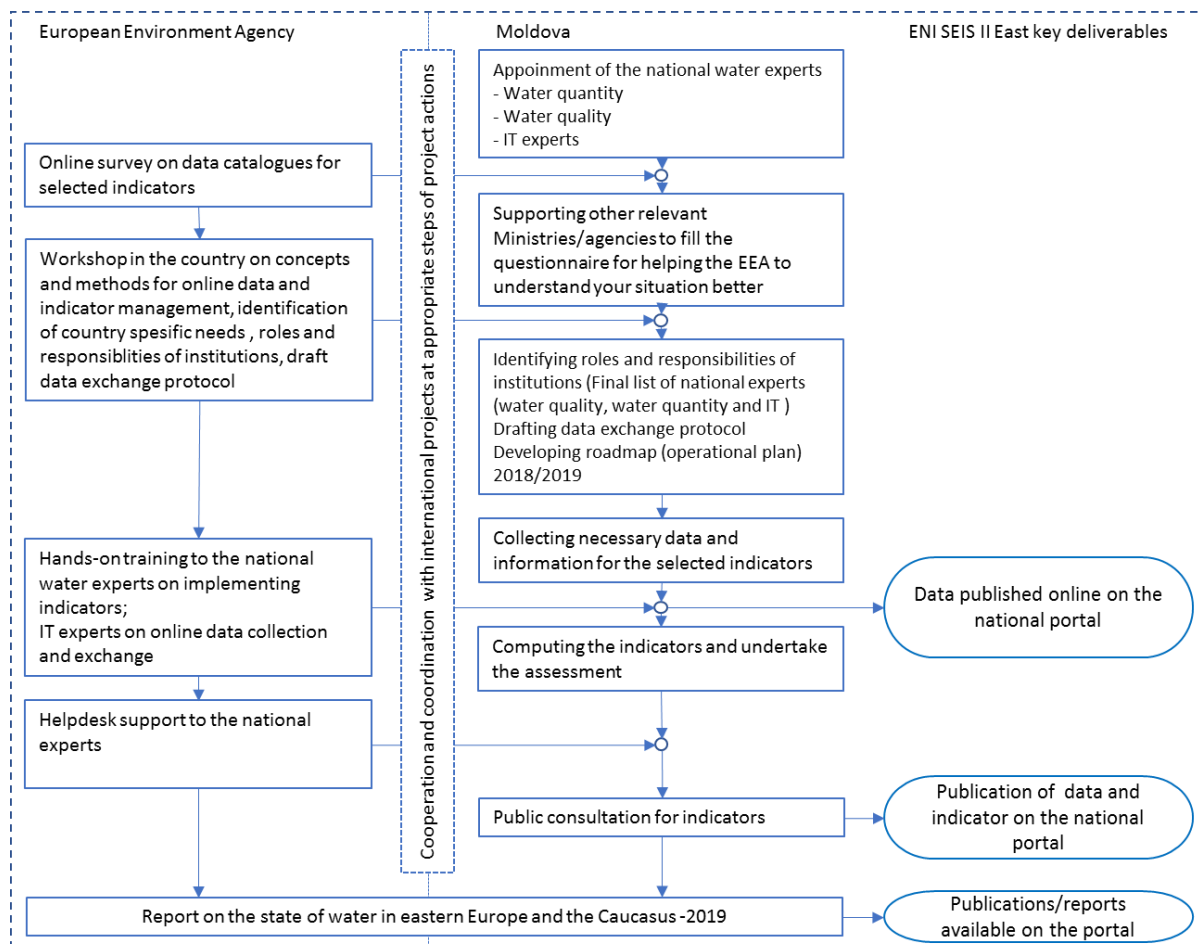


## 2. Description of actions

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 further development with the online data collection and sharing e.g. strengthening the capacity in the Apele Moldovei or Environmental Information Center.

“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 Moldova 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 Moldova 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 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. Moldova has already appointed only one national expert to be involved in the implementation of the water related actions as shown in the below table;

*Table 1: List of national water experts appointed by the Republic of Moldova*

IT Expert	tbd				
Water quantity	Natalia Zgircu	Monitoring Department, State Hydrometeorological Service	Head	+373 22 762466	<a href="mailto:nataliaracovet1901@yahoo.com">nataliaracovet1901@yahoo.com</a>
Water quality	tbd				

#### *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>(11)</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 Moldova 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 online data collection and sharing.
- National IT experts; National IT expert will play crucially important role in ensuring the publication of data and indicators on the national portal. 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 Chisinau.

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>(12)</sup> and the European interoperability framework for European Public Services <sup>(13)</sup> as well as in line with the SEIS components (cooperation, content and infrastructure) an online survey will be performed with the Ministry of Environment and National Bureau of Statistics of the Republic of Moldova with further circulation to other relevant national agencies for the following purposes;

- to develop the metadata catalogue of the selected indicators

<sup>11</sup> <https://unstats.un.org/unsd/envaccounting/seeaw/seeawaterwebversion.pdf>

<sup>12</sup> <http://www.eea.europa.eu/legal/eea-data-policy>

<sup>13</sup> <https://ec.europa.eu/isa2/eif>



- 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 Moldova 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 Moldavian 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 Moldova

### 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>14</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. Moldova has developed the indicators of C2-C3 and C6-C11 at national level. The data underpinned the indicators is available for the years 2001-2016 (<sup>15</sup>). C1, C4 and C5 need to be further implemented in Moldova. 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 Chisinau in January 2018 with the purpose of aligning common conceptual understanding on further supporting the national portal of data collection and sharing as part of the SEIS Moldova and implementation of regionally comparable indicators.

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

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<sup>14</sup> [www.unece.org/env./indicators.html](http://www.unece.org/env./indicators.html)

<sup>15</sup> <http://www.statistica.md/pageview.php?l=en&idc=407&nod=1&>





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

*Table 2: Institutions for water monitoring in Moldova <sup>(16)</sup>*

<b>Monitoring function</b>	<b>Responsible agency</b>	<b>Ministry</b>
Surface water quantity	<b>State Hydrometeorological Service</b>	The Ministry of Environment of the Republic of Moldova
Surface water quality	<b>State Hydrometeorological Service</b>	Ministry of Environment of the Republic of Moldova
Groundwater quantity and quality	Agency for Geology and Mineral resources	
Drinking water sources and quality	State Service for Public Health	
Water abstraction, use and pollution discharge	Apele Moldovei and State Ecological Inspection	Ministry of Environment of the Republic of Moldova
Water statistics	National Bureau of Statistics	
Water data sharing and visualisation	Environmental Information Center	

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 Moldavian NFPs and National Implementation Team.

By taking into account current state of establishment with the SEIS components in Moldova, the following agenda is proposed for the workshop subject for further revisions with Moldavian 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)

***Further development with national portal for data collection and sharing***

- Data harmonization- implementation of WISE SoE water quantity and water quality data dictionaries
- Conceptual approach for the support of development with the SEIS Moldova
- 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 Moldova and water indicators

Based on the outputs from the online survey as well as the workshop in Chisinau, further elaboration will be conducted together with the Ministry of Environment of the Republic of Moldova and National Bureau of Statistics of the Republic of Moldova regarding the prioritization of indicators. As a first step the below table (Table 3) is tentatively illustrating possible prioritisation of the implementation of the UNECE water indicators in Moldova subject for the data availability.

<sup>16</sup> [http://enpi-seis.pbe.eea.europa.eu/east/Moldova/enpi-seis\\_country\\_report\\_Moldova\\_final.pdf](http://enpi-seis.pbe.eea.europa.eu/east/Moldova/enpi-seis_country_report_Moldova_final.pdf)





*Table 3: Implementation phases of the UNECE environmental indicators in the Republic of Moldova*

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

Note: Implementing the indicators are depending on the data availability in Moldova and will be further revised during the workshop

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 sharing protocols among the national water quality related institutions
- Roadmap (Operational plan 2018/2019 and updating the indicator table)

### 2.4 Supporting further development with online data collection and sharing

One of the key objectives of this work plan is to support Moldova in online data collection and sharing in the water field, which then would serve also to underpin the capacity of Moldova in meeting their commitments towards the regional/international reporting obligations.

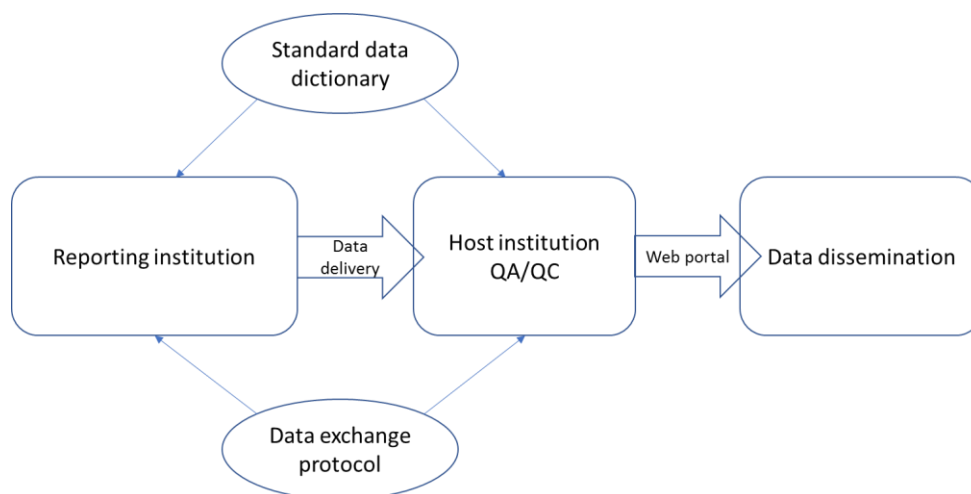
Thus, one of the primary objectives of this work plan is to support further implementation **of online data sharing** among those institutions responsible either for monitoring of water quality or managing the water resources e.g. Apele Moldovei, State Hydrometeorological Service, Agency for Geology and Mineral resources etc.

Two water quality indicators (C-10 and C-11) will be used 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 sharing protocol among the related national institutions for online data collection and processing (Figure 2). EIONET and WISE



(<sup>17</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 online data collection and sharing



EEA/ETC will provide a five days hands-on training to the Moldavian 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 (*Optional, subject to decision of Moldavian authorities*)
- Data harmonization, integration and gap fillings
- Implementation of C1-C8 indicators in line with the EEA indicator guideline (C1, C4 and C5 are subject to the data availability at the country level)
- DPSIR framework for carrying out the assessment

<sup>17</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 online data collection 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 Moldova on the following areas;

- Further development with online data collection in the water field to the national portal
- Computation of water accounts (asset and physical supply and use) – *this component is optional, subject to decision of Moldavian authorities*
- 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 - *Optional*
- 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 Moldova

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. Moldova 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 Moldova



## 3 Cooperation and coordination

### 3.1 Coordination between EEA and National Implementation Team

The overall coordination between EEA and Moldova is going to be ensured by ENI SEIS II East Project team and the National focal points from the Ministry of Environment of the Republic of Moldova and National Bureau of Statistics of the Republic of Moldova. 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 Chisinau.

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 Chisinau as well as based on the level of advancement in terms of implementation of SEIS principles for the data collection and sharing in Moldova (Figure 3).

Figure 3: Implementation phases of the work plan

Moldova - Project activities -Water (2017-2019)	2017												2018												2019											
	Apr.	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	█	█	█	█	█																															
Appointment 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 state of water in Eastern Europe and Caucasus																										█	█	█	█	█	█	█				



## 4.1 Deliverables

### 4.1.1 Main deliverables

No.	Description	NFPs	ETC task manager	EEA responsible	Date
21/1	National water and IT experts identified and thematic expert networks developed	Veronica Lopotenco Elena Orlova		Nihat Zal	28/10/2017
22/2	Metadata catalogue on available data for the respective indicators		Lidija Globevnik	Nihat Zal	28/02/2017
23/3	Revision of the work plan	Veronica Lopotenco Elena Orlova	Lidija Globevnik	Nihat Zal	28/02/2017
23/4	Data sharing protocol	Veronica Lopotenco Elena Orlova		Nihat Zal	30/03/2018
24/5	Training of national experts	Veronica Lopotenco Elena Orlova	Lidija Globevnik	Nihat Zal	28/10/2017

### 4.1.2 Key deliverables

No.	Description	NFPs	ETC task manager	EEA responsible	Date
25/6	Data published online on the national portal	Veronica Lopotenco Elena Orlova	Lidija Globevnik	Nihat Zal	28/09/2018
25/7	Indicators are available on the national portal	Veronica Lopotenco Elena Orlova	Lidija Globevnik (until the end of 2018)	Nihat Zal	28/12/2018
26/8	Report on state of water in Moldova	Veronica Lopotenco Elena Orlova		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 visibility of project activities
	....., National assistance -	Day-to-day execution of the communication with partners
Moldova	Veronica Lopotenco, National Focal Point – Ministry of Environment of the Republic of Moldova	Inter-institutional coordination for the project actions- Report on the state of water in Moldova
	Elena Orlova, National Focal Point - National Bureau of Statistics of the Republic of Moldova	Inter-institutional coordination for the project actions – report on the State of water in Moldova
	tbd	Responsible for further development with online data collection and sharing
	Natalia Zgircu, Water expert, State Hydrometeorological Service	Responsible for implementing the UNECE indicators of C1-C8 including the report on the state of water in Moldova
	tbd	Responsible for implementing the UNECE indicators of C9-C11 including the report on the state of water in Moldova
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 issues, 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 Moldova 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 economic situation in Moldova 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 National institutions. 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.

