



European Union Water Initiative Plus for the Eastern Partnership (EUWI+ 4EaP)

UPDATED TERMS OF REFERENCE FOR LOCAL CONTRACTOR TO ASSESS THE POLLUTION SITUATION IN THE AREA OF PETRIKOV AND SOUTHEAST IN THE PRIPYAT RIVER BASIN IN BELARUS

**Update of deadlines for submission of tender (marked in red).
No change of remaining content**

1. Financing

European Union (ENI/2016/372-403)

2. Procedure

Competitive Negotiated tender procedure according to EU PRAG

3. Contracting Authority

International Office for Water (IOW)

4. Nature of contract

Service contract

5. Time period of implementation

May 2019 - December 2019

6. Contract amount

Max. amount: 14.000 EUR

7. Background information

The EUWI+East project addresses existing challenges in both development and implementation of efficient management of water resources. It specifically supports the Eastern Partnership¹ countries to move towards the approximation to EU acquis in the field of water management with a focus on trans-boundary river basin management as identified by the EU Water Framework Directive (WFD).

The overall objective of the project is to improve the management of water resources in the EaP countries. The specific objective is to achieve convergence of national policies and strategies with the EU Water Framework Directive, Integrated Water Resource Management (IWRM) and relevant Multilateral Environmental Agreements (MEAs).

The EUWI+East project is divided into three result areas as follows:

¹ The Eastern Partnership (EaP) is a policy initiative launched at the Prague Summit in May 2009. It aims to deepen and strengthen relations between the European Union and its six Eastern neighbours: Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine.

- Result 1: Legal and regulatory frameworks improved in line with the WFD, IWRM and MEAs;
- Result 2: River Basins Management Plans designed and implemented in line with the WFD principles;
- Result 3: Lessons learnt regularly collected, shared and communicated to stakeholders.

This assignment will contribute to the implementation of the Result 2: activity 2.2.1 “[...] organization of hands-on trainings and training of trainers with regard to monitoring [...]” activity 2.3.2. “Technical support in the elaboration and implementation of the pilot River Basin Management Plans (RBMPs)” and activity 2.3.4. “Carry out [...] chemicals surveys as needed to develop and implement the RBMPs, including [...] organisation of joint field surveys in transboundary rivers”.

The gathered data and information will be used for the validation of the delineation of the groundwater bodies, for the validation of the risk assessment and for the assessment of groundwater chemical status for the draft RBMP for the Pripjat river basin in Belarus (52,700 km², see map in annex 1).

8. Scope of work and deliverables

8.1 Scope

The main objective of this contract is to conduct field studies and hydrogeochemical analysis to assess the current state of fresh groundwater under the influence of the disposal of “Petrikov” by pesticides and Cs and Sr radionuclides in the southeast of the Pripjat River basin. The monitoring results will help in assessing the current status and in proposing appropriate remediation and mitigation measures and it will be used for validating the risk assessment and the assessment of status according to the principles of the WFD.

This study will make use of:

- the results elaborated in the frame of EUWI+East project for the “delineation and characterization of groundwater bodies and the design of a groundwater monitoring network in the Pripjat river basin district in Belarus” (February 2019).
- any information available in the study area and any available and reliable monitoring data.

8.2 Tasks to be performed

The selected Local Contractor for this assignment will assist the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus and the EUWI+ Thematic Leader by performing the following tasks:

- Collect and analyse all available information and already existing monitoring data from literature and studies on the Petrikov pesticides disposal and the effect of Cs, Sr radionuclides on fresh groundwater in the southeast of the Pripjat River basin.
- Elaborate in-depth conceptual understandings (conceptual models) of the investigation areas by considering (interpreting) all information and monitoring data obtained from literature search, data from funds and water users and data obtained from the hydrogeochemical field survey.
- Elaborate assessment strategies for the information and data obtained.
- Carefully prepare the scopes and carry out comprehensive field studies in order to search candidate observation wells/springs and their technical condition.
- Characterize each investigated monitoring well/spring according to a provided template.
- Carry out hydrogeochemical field surveys and laboratory analyses for approximately 15 candidate wells/springs and a defined list of parameters which include pesticides and radionuclides. Prepare survey manuals before the hydrogeochemical field surveys and

survey reports after, which include the survey protocols, the laboratory reports and summary Excel tables with all results.

- Analyse and interpret the data obtained and amend the conceptual understanding, if needed.
- Conclude on the current pollution situation and the chemical and quantitative groundwater status and the risk of failing good chemical and quantitative status as a conclusion of the field studies and the compiled monitoring data.
- Propose measures for remediation and mitigation of the impact of the pollution in Petrikov on the concerned groundwater bodies of the Pripjat River basin;
- Add the information obtained into the database "Groundwater of the Republic of Belarus".
- The contractor shall regularly inform the beneficiary about work progress and proposals and agree on single working steps. Drafts and final report needs to be mutually agreed.
- Provided material has to be translated into Russian and elaboration of texts in English and Russian;

8.3 Deliverables

- A detailed road map.
- Survey manual(s) and survey report(s) and all available monitoring data as Excel files.
- Draft final and final report comprising:
 - description of the study approach and the applied methodologies (references and literature);
 - summary of the historical background about the Petrikov study area, in particular the magnitude and type of pollution activities and the polluting substances concerned.
 - summary of the historical background about the study area in the southeast of Pripjat river basin, in particular the magnitude and type of pollution activities and the polluting substances concerned.
 - description of the in-depth conceptual understandings (conceptual models) of both study areas;
 - compilation of all available information and monitoring data and interpretation of the data;
 - description of the assessment strategy of the information and data obtained;
 - statement on status and risk of failing good status as a conclusion of all gathered information and monitoring data;
 - a list of all investigated monitoring wells/springs with coordinates and basic characterization;
 - detailed characterization of each investigated well/spring. (as Excel tables);
 - proposed measures for remediation and mitigation of the impact of the pollution in Petrikov on the concerned groundwater bodies of the Pripjat River basin;
 - a summary of open issues and data gaps which need to be addressed in future (e.g. further research, further data gathering, additional monitoring etc.);
- Maps with investigated and proposed monitoring sites.

9. General aspects

9.1 Data collection

The basic principle of action is that all the datasets presented or used in a map or a table or an indicator must be described in a catalogue of metadata (see the template in annex 2).

All costs incurred in connection with data and information gathering are entirely covered by this contract.

9.2 Format

All the documents consulted, maps, data and information collected, interviews' records will be transmitted in their original forms (paper, files, GIS layers) and their valorised forms (data base, Excel, etc).

Reports will be transmitted in digital form which can be corrected (MS Office 2007). Priority will be focused on illustrations, synthetic tables and straightforward style.

GIS layers will be delivered in Esri-format (.shp) and at the closest possible of scale 1:100,000.

Maps will be produced and delivered in QGIS format and as TIF file (300 dpi), based on a template provided to the contractor by the Project Team (see annex 3). They will constitute an atlas at A3 or A4 format.

Maps will respect the standard GCS_WGS_1984 projection (Geographic Coordinate System of the World Geodetic System) of the UTM coordinate system (Universal Transverse Mercator) or the official projection system adopted at national level.

The report as well as the tables will be produced in national language and in English.

9.3 Meetings & trainings

Regular meetings will be held with the contractor by the project team.

In a first approximation, one groundwater sampling training will be organized.

The costs of this training, any translation services, any daily allowances and the costs of travel are entirely covered under this contract.

9.4 Field Surveys

All costs incurred in connection with the hydrogeochemical field surveys – e.g. the field sampling, the laboratory analyses and reports, any translation and logistical services, any daily allowances and the costs of travel – are entirely covered under this contract.

The number of monitoring sites investigated and the list of parameters analyzed within the single hydrogeochemical field surveys have to be discussed and agreed with the EUWI+ Thematic Leader.

Contracted (subcontracted) laboratories have to fulfill the requirements for laboratories according to the national monitoring programme.

10. Implementation modalities

Works shall be implemented by a local company or group of NGO(s), university, research institution, etc. that are not representing the project beneficiaries. The studies will be closely coordinated, assisted and monitored by the project team, consisting mainly of the thematic experts, the country representative, the technical advisor, the national thematic focal points for RBMP, data management and stakeholders' involvement, and the National Focal Point or his representative. Close relationships will be formed and maintained with the beneficiary who will own the product and take full ownership of the RBMP.

Technical issues as data description (producers, availability, quality, scales, collection frequency, etc), related difficulties to collect them, data formatting requirements, methodological aspects, etc. will be discussed with the project team.

The contractor will have to designate competent specialists for each part of the assignment as well as a coordinator who will be responsible of managing these specialists, harmonising the document, and will inform regularly the project team.

As a matter of illustration, the contractor's team could be typically composed of the following expert profiles:

- 1 team leader, methodology designer and redactor of the chapters;
- 1 hydrogeologist.
- 1 GIS specialist for map production with knowledge of the water sector

10.1 Schedule

Duration of the assignment will be up to 8 months and is expected to start from May 2019 and finish on December 2019. The work on the monitoring chapter which feeds into the River Basin Management Plan has to be finished on July 2019.

The contractor shall regularly inform the projects team and the beneficiary about the problems and the work progress and proposals and agree on single key working steps (e.g. selection of monitoring sites, selection of monitoring parameters). The projects team will be allowed to question the contractor.

It is anticipated however that the draft deliverable will be first reviewed by the project team and the beneficiaries and if necessary will be returned to the implementing institution for finalization and re-submission. Final reports need to be mutually agreed between the projects team and the beneficiary. Therefore, draft report will be submitted to the projects team at least 1 month before the deadline, the last reviewed report must be finalized on December 2019.

Summary of the work schedule

Deliverables	Approx. number of pages	Language of deliverable	Start date	Due date for draft report	Finalization
Pesticide pollution "Petricov" and Radionuclides in the southeast of Pripjat basin		Russian / English	May 2019	November 2019	December 2019

10.2 Contact details

The responsible person at national level (National Focal point):

Ms. Tatiana SLIZH

tanya.sl@tut.by

The coordinator on behalf of EUWI+ (relevant country representative):

M. Alexandr STANKEVICH

alexandr.stankevich@euwipluseast.eu

The responsible thematic leader:

Mr. Andreas SCHEIDLER (Umweltbundesamt)

andreas.scheidleder@umweltbundesamt.at

11. Participation to the tender

Interested parties (individual and legal persons) are invited to inquire the full tender dossier containing instructions and further information about the tender procedure from Mr. Andreas SCHEIDLEDER, Project Manager, Umweltbundesamt (UBA)
Email address: Andreas.scheidleder@umweltbundesamt.at

Deadline for submission of the technical and financial offer is **10 May 2019, 17.00 CET**.

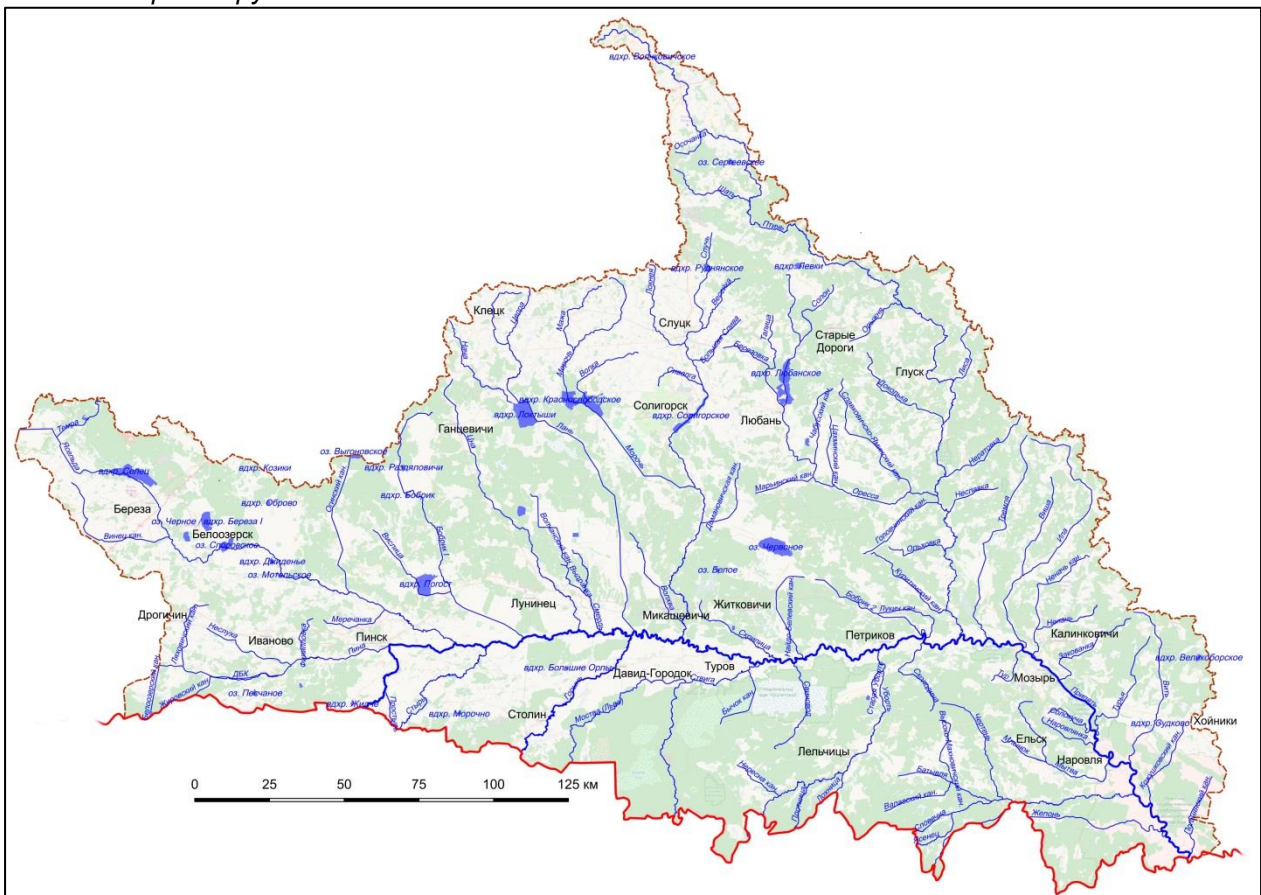
12. Annexes

Annex 1: Map of Pripjat river basin in Belarus

Annex 2: Template for metadata catalogue

Annex 3: Template for mapping

Annex 1: Map of Pripjat river basin in Belarus



Annex 2: Template for metadata catalogue



**European Union Water Initiative plus
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DATA SOURCE IDENTIFICATION FORM - BELARUS

TITLE OF THE DATA SOURCE
(ex: Data Sheet of ..., map of ...
Database of ..., Report on)

ABSTRACT: (Global content, Author and objective: Database/website/map on ... created byto do ...)

**GEO KEYWORD
ADMIN**

Not determined

**GEO KEYWORD
MAIN BASIN**

Not determined

**TOPIC KEYWORD
IWRM**

Not determined

**TOPIC KEYWORD
INSPIRE**

Not determined

INFORMATION ON DISSEMINATION

WEB ADDRESS OR URL WHERE THE DOCUMENT CAN BE CONSULTED AND/OR DOWNLOADED

http://

LEVEL OF ACCESS
(ONE OF THE FOLLOWING:

Not determined

"FREE ACCESS WITH COPYRIGHT", "RESTRICTED TO PARTNERS", "AVAILABLE UNDER PAYMENT OF FEES")

CATEGORY, FORMAT AND SCALE OF THE DATA SOURCE

CATEGORY

Not determined

FORMAT

Not determined

SCALE 1:

(DATASET, "GIS LAYER", "MAP", "DOCUMENT", INFORMATION SYSTEM) (EX: PAPER, PDF; JPEG; SHP...)

(EX: 1/100.000)

CONTACT PERSON TO GET MORE INFORMATION ON THIS DATA SOURCE

NAME

ORGANIZATION

EMAIL

POSITION

FORM OF METADATA COMPLETED BY

NAME

ORGANIZATION

EMAIL

POSITION

Date



International Office for water - v.15/09/2017



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ИДЕНТИФИКАЦИОННАЯ ФОРМА ИСТОЧНИКА ДАННЫХ - БЕЛАРУСЬ

НАЗВАНИЕ ИСТОЧНИКА ДАННЫХ (например : Лист данных ..., карта ..., База данных ..., Отчет о)

АННОТАЦИЯ (Глобальный контент, автор и цель: База данных / сайт / карта ... создан(-а)для ...)

ГЕО КЛЮЧ АДМИНИСТРАТИВ.

Не известен

ГЕО КЛЮЧ ГЛАВНЫЙ БАСЕЙН

Не известен

ТЕМАТ. КЛЮЧ IWRM

Не известен

ТЕМАТ. КЛЮЧ INSPIRE

Не известен

ИНФОРМАЦИЯ О РАСПРОСТРАНЕНИИ

ВЕБ-АДРЕС ИЛИ URL, НА КОТОРОМ ДОКУМЕНТ МОЖЕТ БЫТЬ ПРОКОНСУЛЬТИРОВАН И / ИЛИ ЗАГРУЖЕН

http://

УРОВЕНЬ ДОСТУПА (один из последующих:

Не известен

«БЕСПЛАТНЫЙ ДОСТУП К АВТОРСКОМУ ПРАВУ», «ОГРАНИЧЕННЫЙ ДЛЯ ПАРТНЕРОВ», «ДОСТУПНО ПРИ ОПЛАТЕ ПЛАТЕЖА»)

КАТЕГОРИЯ, ФОРМАТ И МАСШТАБ ИСТОЧНИКА ДАННЫХ

Категория Не известен

Формат Не известен

Масштаб 1:

(«Набор данных», «Слой ГИС», «Карта», «Документ», Информационная система)

(Пр: Бумажный, PDF, JPEG, SHP...)

(Пр: 1/100.000)

КОНТАКТНОЕ ЛИЦО ДЛЯ ПОЛУЧЕНИЯ ПОДРОБНОЙ ИНФОРМАЦИИ ПО ЭТОМУ ИСТОЧНИКУ ДАННЫХ

Имя

Организация

Эл.адрес

Должность

ИДЕНТИФИКАЦИОННАЯ ФОРМА ВЫПОЛНЕНА

Имя

Организация

Эл.адрес



Должность

Дата



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Annex 3: Template for mapping

TITLE		Background layer legend			
<div style="text-align: right; margin-right: 20px;">  </div>					
Thematic symbology	Location Map	Data source			
		Name of the data source			
	<table border="1" style="margin: auto;"> <tr><td style="padding: 2px;">Systeme Coordination Reference</td></tr> <tr><td style="padding: 2px;">WGS 84</td></tr> </table>	Systeme Coordination Reference	WGS 84		
Systeme Coordination Reference					
WGS 84					
	<table border="1" style="margin: auto;"> <tr><td style="padding: 2px;">Scale</td></tr> <tr><td style="padding: 2px;">1:1.743.965</td></tr> </table>	Scale	1:1.743.965	Name of organisation	
Scale					
1:1.743.965					
		Name of the map			
		Elaboration, revision, approval	Path		
		Date	Scale		
Activity implemented by Umweltbundesamt, Austria & International Office for Water, France		