



**Environmental Protection of
International River Basins Project**
Contract No. 2011/279-666



This project is funded by
The European Union

A project implemented by a Consortium
led by Hulla & Co. Human Dynamics KG

Terms of Reference

Assistance in preparation of methodological documentation for WFD compliant monitoring programmes in support of implementation of the 2014 Water Code of the Republic of Belarus

I. General Background and Objectives

The consultant will assist Human Dynamics to fulfil its requirements under the EU technical assistance contract 'Environmental Protection of International River Basins (EPIRB)' (Terms of Reference given in Annex 1). The overall objectives of the EPIRB project are:

- To improve availability and quality of data on the ecological, chemical, and hydro-morphological status of trans-boundary river basins including groundwater; and
- To develop River Basin Management Plans for selected river basins / sub-river basins according to the requirements of the WFD.

The project is being implemented in six countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine) and five pilot river basins:

- Akhurian Basin District (Armenia),
- Central Kura (Azerbaijan),
- Upper Dnieper Basin (Belarus, Ukraine),
- Chorokhi-Adjaristskali Basin (Georgia),
- Prut Basin (Moldova, Ukraine)

As part of the River Basin Management Plan development process the project will implement selected number of improvement measures from the overall Programme of Measures (PoM), as defined under the Water Framework Directive. The selected measures have been agreed with the beneficiaries in each country and will be executed in accordance with the EC contractual conditions. In the Republic of Belarus the following measures have been chosen:

- Preparation and legislative approval of methodological documents for EU Water Framework Directive compliant hydro-morphological and biological monitoring programmes.
- Detailed assessment sources of pollution of potable GW sources in the well field "Novinki" on the territory of Minsk. This will include the development of a mathematical model to elaborate potential pollution pathways and identification of protection measures to be implemented.
- Flood risk assessment and mapping of the Upper Dnieper basin, including determination most at risk areas, field surveying of critical sites, mapping and initial design of protection measures

The following Terms of Reference are to assist the Government of Belarus in preparing methodological documents for EU Water Framework Directive compliant monitoring programmes.

II Country Background and Scope of Works

The Republic of Belarus has a Water strategy until 2020 year. One of the long-term strategic aims is harmonization water legislation according to requirements WFD EU. On April 2014 National Parliament approved and on the May 2014 President of the Republic of Belarus signed the new Water Code which contains the articles requiring creation of basin councils and development of river basin management plans (RBMP).

The main goal of the project activity is a development of RBMP for the Upper Dnieper Pilot Basin, but for successfully and sustainable development and implementation RBMP Belarus has to have modern WFD compliant monitoring and assessment system. Existing monitoring and assessment system of the river Dnieper basin does not satisfy to all requirements WFD, especially in the field of methodological and legislative components. Development of thus components can help to successfully implementation of RBMP, therefore pilot project will develop monitoring system as a priory measure in pilot river Dnieper basin.

The existing monitoring system for surface and ground waters in Belarus does not meet the criteria of the WFD. The two main problems areas are:

- a) Lack of methodological documents for hydromorphological estimation of the lakes (EN 14614 Water quality. Guidance standard for assessing the hydromorphological features of rivers and EN 15843 Water quality. Guidance standard on determining the degree of modification of river hydromorphology were adopted in frame UNDP/EU international project). The objective of this component will adaptation EU standard EN 16039:2011 Water quality guidance standard on assessing the hydromorphological features of lakes into national water legislation.
- b) Lack of methodological documents for providing sampling and measurement of biological elements: phytoplankton, zooplankton, periphyton, macro-invertebrates. The current procedures of biological sampling and laboratory analyses are based on recommendations published in the former Soviet Union. These recommendations are significantly different from EU standards and have no legal status in Belarus. Objective of this component will adaptation of the following EU standards to Belarussian legislation: EN 16698 Water quality. Guidance on quantitative and qualitative sampling of phytoplankton from inland waters, EN ISO 10870:2012: Water quality. Guidelines for the selection of sampling methods and devices for benthic macroinvertebrates in fresh waters, EN 15708:2009 Water quality. Guidance standard for the surveying, sampling and laboratory analysis of phytobenthos in shallow running water, EN 15110:2006nWater quality; and Guidance standard for the sampling of zooplankton from standing waters.

The scope of work is divided into four phases:

III Reporting, Deliverables and Programme

The contractor shall report to Timothy Turner, the project team leader, regarding overall deliverables and to Country Water Management Expert, for all day-to-day management issues. The contract is anticipated to commence on 5 June 2014 and have duration of 6 months, with a completion date of 30 November 2014.

The contractor shall produce the following reports and hold the following consultation meetings:

- Inception report to include scope of methodological documents – due date 23 June 2014
- First draft of methodological documents and first consultation meeting – due date 15 August 2014
- Second draft and second consultation meeting – due date 15 October 2014
- Final methodological documents – due date 30 November 2014
- Final report – due date 15 December 2014.

Drafting, reporting and implementation of above deliverables will be coordinated, advised and monitored by the project Team Leader and respective Country Water Management Expert. In addition, the target and other beneficiary institutions, as well as members of the National Coordination Committee (NCC) will take an active part in collecting data, reviewing of deliverables and final report. Reports will be prepared in **Russian** and English. The documents shall be prepared in both the Russian and English languages.

IV Payment and Contractor/Service Provider qualifications

The contractor will receive a lump-sum of 15,000 euros for the above services to be paid in two tranches. The first tranche of 7,500 euros to be paid on approval the first draft documents and first consultation meeting report, the second tranche of 7,500 euros shall be paid on delivery of the final documents and final report. The final report will summarise the work undertaken and identify where necessary lessons learnt and next steps.

The assignment shall be implemented by a company or consortia of companies that are **NOT** representing the project beneficiaries.

- Experience in Integrated Water Resources Managements (River Basins) issues and similar projects completed.
- Experience in SW Ecological, Chemical and Hydro-morphological status monitoring and GW monitoring
- Demonstrated knowledge of WFD.
- Existence of qualified staff able to fulfill above mentioned tasks and demonstrated commitment to involve other national/international professional consultants