



## 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

#### Preparation of design and contract documentation and site supervision for refurbishment of groundwater monitoring wells in Akhuryan basin district of Armenia, including Ararat Valley

##### I. Background

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 Armenia the following measures have been chosen:

- Refurbishment of GW monitoring network in the pilot basin, including the construction of at least one new borehole in Akhuryan River Basin and refurbishment of several existing boreholes in Ararat valley. Design and tender documents to be prepared by state Hydrogeological Monitoring Centre who will also undertake the site supervision.
- A demonstration project for the automated monitoring the critical water abstractions in the Metsamor (Sevjur) River basin in order to strengthen compliance and improve water resource planning and management. The monitoring system will include the development of software and installation of meters and telemetry in a trial area with the objective of testing its feasibility for application on a nation-wide scale in key problem areas.

The following Terms of Reference are for the **preparation of design and tender documents for new groundwater monitoring well in Akhuryan River basin and refurbishment of GW monitoring wells in the Ararat Valley and supervision of construction by the state Hydrogeological Monitoring Centre, Yerevan, Armenia.**

## II. Scope of Work

The contractor is responsible for preparation of a tender documentation and site supervision for refurbishment of groundwater monitoring wells in the Ararat Valley, including the following:

### 1. Preparation of design and tender documents

- Identification of location of the proposed new groundwater monitoring well (s) in Akhuryan basin district of Armenia;
- Identification of locations of the 3 priority groundwater wells proposed for refurbishment in Ararat valley of Armenia;
- Detailed description of the actual situation of the sites, conditions, rock formation (for the new observation well), including pictures from the sites;
- Provision of standard specifications for the works according to national requirements;
- Preparation of the bill of quantities;
- Provision of detailed specification of gauging equipment (LTC logger, barologger, GSM telemetric system);
- Preparation of the contract documentation.

### 2. Tender evaluation

The contractor will participate in the technical evaluation of the tender documents with representatives of Human Dynamics and the project team experts.

### 3. Oversight

The subcontractor will be provide oversight of the construction and refurbishment works, and upon successful completion of all works shall issue certificate of completion in accordance with contract provisions.

## III. Implementation, deliverables and timeframe

The duration of the assignment is **18 months**. The expected commencement of the assignment is May 19, 2014 and the completion date is October 30, 2015. The assignment is divided into three consecutive phases with the following schedule:

Task	2014									2015									
	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	
Preparation of a tender package																			
Tender evaluation																			
Oversight																			

The programme of the above work is given below:

- Identification and description of selected groundwater sites – 31 July 2014
- Design drawings and Bill of Quantities – 31 August 2014
- Contract documents – 30 September 2014
- Tender evaluation – 30 October 2014
- Site supervision – 1 November 2014 to 1 August 2015

All documents shall be prepared in the English and Armenian language.

## IV. Remuneration and payment schedule

The contractor will receive a lump-sum of **5,000 euro** for the above services.

The tranches made will be subject to acceptance of the main three tasks above, namely - 70% upon approval of the tender package, 10% after the evaluation and 20% upon submission of the completion certificate.

## V. Reporting

The contractor shall report to the project TL, Timothy Turner regarding overall deliverables and to the Country Water Management Expert Vahagn Tonoyan, for all day-to-day management issues.