



**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

Development and finalisation of National Water Strategy of the Republic of Azerbaijan

I. Background and Objectives

The consultant will assist Human Dynamics to fulfil the requirements under the EU technical assistance contract 'Environmental Protection of International River Basins (EPIRB)'. 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.

The following assignment, although not a component of the PoM and RBMP for the pilot basin will contribute to the development of **Azerbaijan National Water Strategy** which underpin it. Two drafts of the National Water Strategy have already been developed with support of UNECE (Annex 1) and the Asian Development Bank (ADB) (Annex 2).

This assignment will facilitate the process by contracting a national consultant to work with relevant National and EPIRB project experts to combine these 2 drafts and develop a final draft to be submitted to the government of Azerbaijan Republic for adoption.

The two strategies were developed independently and with different emphasis and between them there are a number of anomalies and differences. Despite the efforts of the Government stakeholders a combined strategy

has not yet been agreed and the EPIRB project has been asked by the MENR to revive the process and produce a new combined draft and support the internal consultation process. This work will be undertaken by a national consultant support by the EPIRB

Detail descriptions of the two draft strategies are given below and their differences high-lighted.

1.1 Draft Water Strategy developed by support of EUWI and UNECE

The National Policy Dialogue in Azerbaijan was established in April 2010 under the EU Water Initiative and has focused on the development of a governmental strategy for management of water resources based on the principles outlined in the European Union Water Framework Directive (EU WFD) and the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention)

The overall goal of the National Water Strategy is: to enhance and promote all national efforts towards the efficient, equitable, and optimum utilization of the available water resources of Azerbaijan for significant socio-economic development on sustainable basis. It aims to have the water resources of the country be protected, used, developed, conserved, managed and controlled in accordance with the requirements of the national legislation and international norms.

The strategy was developed by an International consultant with the support of National Experts and the process was overseen by the NPD IWRM Steering Committee which included representatives of Ministry Of Ecology and Natural Resources (MENR), Ministry of Emergency Situations (MES), Ministry of Health (MOH), Amelioration JSC, Azersu JSC, MFA, National Academy of Science (NAS), BSU, NGOs, other national agencies members.

Steering Committee met twice in 2011 to discuss the main strategy content and guidelines and later the draft strategy and once in 2012 to discuss the final draft. .

Representatives from above agencies, actively supported international and national experts to prepare the strategy. The Strategy in parallel with the National Water Plan preparation, was to be formulated to provide a comprehensive Water Resources Policy and legislation framework.

The strategy was developed with the assistance of a group of experienced Finnish experts

The key goals of the strategy are:

- Guarantee good quality of drinking water and sustainable use of ground water resources
- Improve water supply system on the territory of the country and upgrade the wastewater purification systems by increasing investments on water supply and sewer infrastructure
- Commence regular cooperation in transboundary waters
- Implement integrated planning approach on water uses and water protection in constructed water courses, reservoirs and irrigational infrastructures
- Promote water savings with education and investments on new technologies especially in irrigation
- Increase capacity building in administration based on principles of IWRM
- Develop water legislation concerning water rights based on principles of IWRM
- Create GIS based information on river basin (catchment) areas and water infrastructure
- Develop water monitoring and data system for surface and ground waters(including the study, management and protection of thermal and mineral waters)
- Adaptation to climate change and exceptional water conditions,

- Setting up targets for surface and ground water(including the study, management and protection of thermal and mineral waters) status, setting up environmental flow requirements for water courses and provision of their realization

The Water Resources Strategy has the following short-medium-and long-term objectives:

- Short-term (6-year) objective: Quality and quantity of water supply is sufficient to address water demands of key sectors. Significant improvement in institutional capacity and legal basis supports interagency cooperation and stakeholder participation
- Medium-term (12-year) Objective: Fulfill the the basic needs of the people as well as provide other increased benefits related to sustainable water use. Coordinated water management covering the water needs of all involved sectors. Environmental condition of water ecosystems is improved.
- Long-term (18-year) Objective: The benefits ofwater resources are maximized in Azerbaijan in a sustainable manner. Water supply is efficient. Water quality corresponds to water requirements of relevant sectors. Measures undertaken allow providing environmental requirements.

1.2. Draft Water Strategy for Azerbaijan Republic Developed by support of ADB

1.2.1. Purpose and Background

With the support of the Asian Development Bank (ADB) an assessment of water resources in Azerbaijan Republic was conducted with a view to develop a strategy for better water resource management all sectors of the economy. The strategy paper is a first step in the process that would next consider its implementation including an investment plan and an action plan.

1.2.2. Issues and Opportunities

The following abstract is taken from the proposed Water Resource strategy and indicates the main proposed strategic initiatives.

The team identified a number of issues related to water resource management and these are: issues related to the institutional framework, increasing water scarcity, degradation of water quality, water-related hazards including flooding, and low productivity and water use efficiency in agricultural sector. Agriculture is strategically important for the country's social and economic development, as it provides income and employment for about 40% of the work force, while ensuring household and national food security. Agriculture is also important since irrigation uses 70% of the water diverted from rivers, and there are significant opportunities to enhance productivity and efficiency of water use in irrigated agriculture

The administrative structure currently in place does not ensure optimal use of country's water resources in meeting its diverse needs including food security, good quality water for domestic purposes, managing floods and maintaining healthy river eco-systems. The water sector's institutional framework suffers from a lack of integration and that coordination among related authorities is weak. Of particular concern is the absence of a sector information generation and dissemination program ensuring that data gathered and compiled by a given water agency are readily available to all sector stakeholders and the public in general.

There is legitimate concern over the quantity and quality of all surface waters – especially the ecological situation in the largest two trans-boundary rivers, the Kura and Aras. The data from the Georgian-Azerbaijani border show

values higher than maximum allowable concentrations (MACs) for phenols, oil products, metals and sulphates. The Aras River water entering Azerbaijan is reported to exhibit concentrations in excess of one hundred times the MACs for copper, molybdenum and other heavy metals. Water related hazards – floods and droughts – occur more frequently causing substantial damage to the life and property.

The issues outlined above are interrelated to each other in the sense that they can all be addressed through few key strategic initiatives. The study team proposes that the Government of Azerbaijan undertake following three interrelated strategic initiatives:

- Implement legal-institutional reforms,
- Develop and secure an infrastructure platform, and
- Enhance institutional capacity to generate information and use it for decision-making

The nature of institutional reforms will need careful study and analysis and there are several models that have worked well in other countries, which the Government can consider as it reviews its needs.

One model is the establishment of a Ministry of Water Resources that can combine the functions of trans-boundary coordination, policy, legislation, planning, regulation and water monitoring under one roof. The second model that has worked well in some parts of the world is that of establishing an “Authority” (e.g. National Water Authority) or a “Board” (e.g. National Water Board). It is important this entity be given the mandate to act as a central water oversight organization. The National Water Authority will make water allocation decisions, resolve disputes among competing water uses, and regulate water use.

Legal and Institutional basis for better water governance needs to be strengthened to attract main principles of Integrated Water Resources Management based on ecosystem approach and strong interagency cooperation.

The Government of Azerbaijan has developed considerable water infrastructure including major dams and reservoirs. The agricultural sector, however, has not received the level of attention that is necessary, considering it is an important sector from rural employment and water use point of view. About 50% of the irrigation infrastructure is in poor condition, resulting in substantial conveyance and operational losses. Rehabilitation and modernization, coupled with improved management are needed to improve irrigation efficiencies and crop production. Proper drainage of agricultural lands is also very important for sustainable irrigated agriculture. For security against flooding, an effective flood forecasting system needs to be established, and metrological stations and telemetric network need to be rehabilitated and upgraded to function properly. Flood zoning is an important non-structural measure, which helps minimize damage even from extreme flooding.

The last but not the least building block of strategic initiatives is to enhance human and institutional capacity to acquire information and utilize it for decision-making. Water quality and quantity are monitored in Azerbaijan, but the information does not transmit to actions for improving management. Scarcity of Information on groundwater availability and quality is especially high. The institutional capacity to manage information in support of decision-making needs to be enhanced through education, on-the-job training and applied research.

The water resources assessment shows that water supplies available in Azerbaijan are not necessarily short when compared to the present and future anticipated demands. What is needed is the improved governance and management by strengthening institutions, interagency and transboundary cooperation, securing physical infrastructure and promoting use of good quality information in decision-making. It is important that country apply Integrated Water Resources Management tools based on basin approach.

1.3. Concluding remarks

The two documents approach the problems from different perspectives. The draft document prepared with support of UNECE gives more attention to water resources quality and quantity and their environmental protection, linked to the EU legislative in particular the Water Framework Directive. The draft strategy developed by support of ADB focuses on the need for institutional reform and increased technical capacity, paying more attention to the quantity than quality and water demand and supply. Thus the two strategies are complimentary but need to be combined into a coherent document which provides future operational plan in order to achieve agreed objectives.

II. Scope of Work and Deliverables

The objective of the assignment is to support development of the water legislation, namely the Water Strategy, in Azerbaijan by finalising of a National Water Strategy on the basis of the two current draft documents for submission to the Azerbaijan Government for approval. The following services were included in the assignment:

- Formation of National Water Strategy steering group involving the key Government stakeholders
- Together with national experts analysis of the two strategic documents and proposals for their integration
- National workshop to discuss strategy principles, objectives and targets. preparation of new draft water strategy and second National workshop
- Preparation of final draft water strategy document and submission it to relevant organizations for adoption

III. Schedule and Inputs

Duration of the assignment is 6 months. The expected commencement date for implementation of the assignment is January 25, 2016, and the completion date – July 31, 2016. The consultant's team will provide the required technical input to complete the draft final water strategy and assist the beneficiary in the national adoption process. The consultant will be assisted by experts from the EPIRB technical and management team.

An approximate timeline is shown in the table below; it will vary depending on the country adoption procedures

Workplan	January	February	March	April	May	June	July
Inception report and analysis of draft WS documents							
National workshop and preparation of proposals for combining draft documents							
Preparation of combined draft water strategy and second national workshop							
Preparation of final draft water strategy document and submission it to relevant organizations for adoption							
Adoption procedures							

The **final draft Water Strategy** will be prepared in English and the national language.

The EPIRB Team Leader will have overall responsibility for supervision of the assignment assisted by the Country Water Management Expert and will maintain close contact with the main beneficiaries to ensure proper assignment execution.

The contractor will be required to maintain close contact with the beneficiary, CWME and to submit monthly progress reports to the CWME

IV. Deliverables, budget proposed and payments

Deliverable 1: Inception report, outlining the assignment approach

Deliverable 2: Together with expert group organise working meeting to analyse the outline for the New Water Strategy and make proposals for combining the two Water Strategy documents

Deliverable 3: Organisation of a National workshop at which to agree on strategy principles, objectives and programme of measures.

Deliverable 4: Preparation of draft Water Strategy and organisation of a second National workshop

Deliverable 5: Preparation of final draft National Water Strategy document and submission it to relevant organizations for adoption

The maximum assignment budget is **13,510 euros** which will cover consultation inputs and incidental expenses.

This amount will cover the Consultancy inputs for elaboration of the deliverables, expenses to cover the public consultation inputs and other related expenses, necessary to complete the assignment.

Tranche 1: *15 % of budget on acceptance of Deliverables 1 and 2;*

Tranche 2: *45% on delivery of Deliverables 3 and 4 ;*

Tranche 3: *40% on acceptance of Deliverable 5.*