

Project Proposal

Project Title:

Russian-Norwegian Knowledge and Competence Exchange in Water Management Sector

Project Status: Pre-project

Project Initiator:

Arkhangelsk Region Administration, Committee on International Relations and Tourism Development

Project Rationale:

Existing Situation in the water sector in Arkhangelsk Region:

In Arkhangelsk Region approximately 82% of the total drinking water consumption is supplied by surface water bodies. This is a significantly higher share than the average of 41% in Russia. The main rivers are the Vychedga, the Northern Dvina, the Onega, the Mezen, the Pinega which have been a traditional drinking water source for cities and smaller settlements.

The situation of surface water bodies with respect to pollution by natural and anthropogenic contamination is critical. Specific natural environment causing high organic loads and pollution with wastewater discharged by municipalities and five pulp and paper industries spread along the Northern Dvina flow, result in non-compliance with relevant national sanitary standards. The samples taken from raw water sources and municipal pipes very often exceed the maximum permissible concentrations by chemical and microbiological parameters (especially COD, BOD, heavy metals, lignosulphates, petroleum products, coliform bacteria). It obviously leads to deteriorated drinking water quality and greatly endangers the health of the local population and small children in particular.

Severe ecological problems and the resulting high amount of bacteriological pollution of the water is a big problem in respect of efficient water treatment. The situation with water infrastructure also gives rise to big concern and requires immediate actions. Most of the existing drinking water and waste water treatment plants (DWTP/WWTP) date back to the period of the 1960's to 70's. The deterioration rate of water distribution networks averages from 60 to 80% producing corrosion and reported leakage rates of 20-45%. In some remote settlements especially where ground water is used the raw water is not subjected to any treatment as all. The treatment of raw water taken from surface bodies in minor localities is usually limited to mechanical pre-treatment, sand filtration and chlorination. Taking into account long-term underinvestment into fixed-assets most systems have reached or exceeded their economic life span and need complete reconstruction.

Besides scarce investment in the previous years, the region is experiencing a lack of qualified human resources in water resources management sector. Most of people employed at DWTP and WWTP have no special education in water supply and sanitation and cannot respond to the current demands properly. Arkhangelsk Region has no higher school or vocational school at place that train water engineers, technologies, DWTP/WWTP operators. In view of the above competence enhancement is vital for obtaining commitment and action of the players involved at all the levels to address the respond to the problems faced and improve the water quality.

Great efforts are being undertaken by the regional authorities to reverse the trend. In the run of EU TACIS Project "*Improvement of Drinking Water Quality in North-West Russia*" implemented in cooperation with German Consultant a thorough integrated analysis of the current situation has been made, useful recommendations proposed on different water-related aspects and regional network of related authorities, environmental agencies and water suppliers has been set up. The possibilities to utilize alternative ground water resources are being studied. The project entitled "*Arkhangelsk Municipal Services Improvement in Arkhangelsk/MISP*" is now going on being financed by European Bank of

Reconstruction and Development and focused on remediation of municipal water infrastructure sector. Considerable regional funds are targeted to finance reconstruction of water infrastructure facilities. In the near future the RF Government is intending to launch National Project “*Clean Water*” mainly focusing on water and wastewater facilities reconstruction and modernization.

Awareness raising and training campaign is considered as obligatory precondition for the renewal process. This also accounts for the intention to set up Water Excellence Centre in Arkhangelsk that would run as a platform for raising awareness of water-related issues, training managerial and technical staff and offering opportunities for promoting domestic and exported technologies and state-of the art equipment to the local market. Such Centre could give the best possible learning opportunities for training and research, provide cross-professional dialogue, support innovative approaches and attract in a large scale the manufactures and investors to the regional market.

The Project Initiator believes that on the threshold of the due changes and investment to the sector, it is considered relevant and feasible to take actions aiming at capacity building, attracting world best proven technologies and innovative solutions.

Considering global concern for nature preservation and ensuring better living standards of peoples as well as geographical neighbourhood of Norway and Russia, similar natural conditions and shared interest in water-related issues, it is assumed that the proposed project could make considerably contribution to knowledge building and water quality improvement.

Project Objective:

The piloting Russian-Norwegian Project in the sector of water resources monitoring and management is considered as pre-project aimed at experience exchange, creating international partnership network and making foundation for implementing further project initiatives contributing to environment improvement and better life condition of Barents region population.

Project Tasks:

1. To exchange Norwegian and Russian experience in water resources management system (legislation, water resources monitoring, laboratory management, water and wastewater treatment, etc.);
2. To learn Norwegian experience in water excellence centres set-up and running;
3. To transfer competence and technology in the field of water management and infrastructure to specialists through joint events (study tours / workshops/ technology exhibition);
4. To propose recommendation for water system management improvement in Arkhangelsk Region;
5. To study resources and potential of new joint initiatives and joint planning further projects in water sector.

Project Partners:

1. Committee on International Relations and Tourism Development of Arkhangelsk Region, Arkhangelsk Region Administration
2. Committee on Ecology, Arkhangelsk Region Administration
3. Department of Fuel/Energy and Communal Housing Complex, Arkhangelsk Region Administration
4. NIVA
5. Norwegian Institute of Public Health (?)
6. Norwegian monitoring organizations (?)
7. Norwegian Ministry of Environment (?)
8. Norwegian Partner - Tromso Water Works (?)

Project stakeholders in Arkhangelsk region:

9. Arkhangelsk Branch RF Agency for Technical Surveillance (RosTechNadzor)
10. Arkhangelsk Regional Centre for Hydrometeorology and Environmental monitoring
11. Arkhangelsk Branch of Population Well-Being and Health Agency (RosPotrebNadzor)
12. Arkhangelsk Northern Dvina River Basin Board
13. Arkhangelsk State Technical University
14. Arkhangelsk Vodokanal
15. Local WTPs/WWTPs (up to 50 water works located in municipalities).

Target groups:

- A. Regional and municipal authorities responsible for water sector as decision-makers;
- B. Ecologists/environmentalists;
- C. Managerial staff of local WTP/WWTPs;
- D. Technical staff of local WTP/WWTPs;
- E. Teaching staff of Arkhangelsk Technical University.
- F. Norwegian and Russian water-related business community.

Total number of participants:

Over 200 people

Project Terms: 18 months from the project start-up

Key Project Activities:

1. Kick-off meeting in Arkhangelsk (setting-up project working group, sharing responsibilities, defining best methods of the goals achievement, approving time-table of project activities, project budget redistribution);
2. Norwegian expert's missions to Arkhangelsk Region. Visiting monitoring stations and water facilities for assessing the situation and making recommendations.
3. Norwegian-Russian workshop in Arkhangelsk on water resources monitoring issues (legislation, monitoring programmes, water protection zones) – first target group.
4. Norwegian-Russian workshop in Arkhangelsk on water/waste water treatment technologies) – second target group.
5. First study tour of Arkhangelsk specialists (I target group) to Norway aiming at learning Norwegian water monitoring system running and visiting monitoring stations, laboratories and water excellence centre
6. Second study tour of Arkhangelsk specialists (II target group) to Norway aiming at learning Norwegian water/wastewater treatment technologies and visiting DWTP/WWTP and water excellence centre;
7. Russian-Norwegian business workshop in Arkhangelsk "International Cooperation in Water Sector".
(*suggested topics:*
 - *setting joint-ventures in RF: legal and technical aspects;*
 - *participating in tendering procedures,*
 - *development of private-public partnerships;*
 - *work-out of investment projects on water facilities reconstruction: EU methodology, making a project bankable and attractive for investors).**Presentation of Norwegian technology and equipment to local customers.*
8. Visiting Norwegian Water technology Exhibition and /or holding such exhibition in Arkhangelsk.
9. Summing-up meeting of the project group in Arkhangelsk. Joint planning second stage of the project.
10. Making a final report.
11. Project results visualization and dissemination.

Expected Results:

1. Knowledge awareness in the field of water management systems is raised and strong commitment is demonstrated by both parties to expand collaboration in the water monitoring and infrastructure sector.
2. Local decision-makers and specialists are made aware of water resources management system in partner country and demonstrate willingness to further cooperate aiming at further improving the running systems .
3. Norwegian experience on water excellence centre functioning, its concept and advantages are studied. Decision is taken by Arkhangelsk local authorities to form a similar structure in Arkhangelsk using Scandinavian experience.
4. Local customers find Norwegian water technology and equipment usable and adaptable to local needs and expressed interest in further cooperation with Norwegian related businesses.
5. Practical guidelines are obtained how to develop business relations in the field and further promote Norwegian competence and know-how transfer to the regional market.
6. Larger joint project is planned in the field of water monitoring and water treatment technology transfer (e.g. methods of monitoring, monitoring equipment, automated systems of chemicals preparation and dosing, water quality laboratory control, metering system, washwater recycling at DWT).
7. The project results are made visible through mass-media and disseminated to stakeholders and interested parties.

Project Benefit:

Being the first project between Norway and Arkhangelsk Region in the water sector the project will draw attention to shared interests and concerns in water management field and will foster further partnership of two neighboring countries in the sector.

Considering awareness raising and capacity building a precondition for any development of a society, the project will contribute to further competence enhancement, partners networking and ensuring international dialogue and expertise pool.

The project will facilitate motivated interaction between decision-makers and all other players in water and sanitation sector, will help to make a solid foundation for further cross-border cooperation aimed at solving environmental problems and improvement of living standards of Barents Region population.

The project will give opportunity for a local market research and contribute to overall competitiveness of Norwegian water business in the international market and Norwegian technology transfer to North-West of Russia.

Financing Sources:

- Norwegian Barents Secretariat ((deadlines for larger projects: March 1, 2009 and October 1, 2009; for smaller projects –(under 400.000 NOK) – no deadlines. 30% - Russian co-financing
- Ministry of Environment of Norway
- Other sources.

Project Initiator/ Coordinator (from the Russian side):

Committee on International Relations and Tourism Development of Arkhangelsk Region
 (contact person – Ms. Lyubov Zarubina, Chief-Specialist/Expert of the Section for International Projects and Programs, e-mail: zarubina@pomorland.info, tel : +7(8182) 28-55-89).

*The project proposal has been also forwarded to Troms County Council/International Cooperation Section
 And Norwegian Institute for Public Health.*