

**Logframe Matrix****Annex 1**

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| <b>Project Title:</b><br><b>Prienai Regional Water Supply and Sewerage Network Expansion and Renovation</b>   | Project Number: <b>LI 2000-X-XX</b>  | Date of Drafting:  |  |
|   | Contracting Period Expires: December 2002  | Disbursement Period Expires: December 2003   |  |
|   | Total Budget: <b>2.67 MEUR</b>   | Phare Contribution: <b>2 MEUR</b>  |  |
| <b>Wider Objective</b>  | <b>Indicators of Achievement</b>   | <b>Sources of Information</b>  | <b>Assumptions and Risks</b>   |
| <ul style="list-style-type: none"> <li>Prevention from eutrophication of the biggest Lithuanian river Nemunas and restoration of its biodiversity.</li> <li>Contribution to the achievement of the EU requirements for drinking water and wastewater treatment.</li> <li>Addition to Lithuania's implementation of the environmental requirement set out in the NPAA.</li> <li>Contribution to the regional development</li> </ul>  | <ul style="list-style-type: none"> <li>Reduced water pollution in the basin of Nemunas River in terms of suspended solids, P and N.</li> <li>Reduced groundwater and soil pollution</li> <li>Meeting of the environmental EU requirements for drinking water and wastewater in Prienai town</li> <li>Compliance with HELCOM standards</li> </ul>   | <ul style="list-style-type: none"> <li>pollution and ecological monitoring</li> <li>sectoral and general government statistics</li> <li>reports of the Ministry of Environment, Alytus Regional Environment Protection agency, Prienai Branch</li> <li>economic and financial appraisals</li> <li>NPAA</li> </ul>  | <ul style="list-style-type: none"> <li>State government follows the Approximation Strategy in Environmental in the wastewater sector</li> <li>wastewater discharged by the Prienai s WWTP to Nemunas river makes significant and measurable impact on river's aquatic ecosystem</li> <li>IFI's loan and municipal co-funding is available</li> </ul> |
| <b>Immediate Objectives</b>   | <b>Indicators of Achievement</b>   | <b>Sources of Information</b>  | <b>Assumptions and Risks</b>   |
| <ul style="list-style-type: none"> <li>To prevent a leakage of untreated sewage water to the soil and groundwater.</li> <li>To reduce the discharge of toxic and other dangerous substance into the environment.</li> <li>To expand town's water supply and sewage collection system.</li> <li>To improve the quality of water services in Prienai town and surroundings and to reduce water losses.</li> <li>To improve the quality of drinking water</li> <li>To increase the reliability and efficiency of the water supply and sewage removal systems.</li> </ul> | <ul style="list-style-type: none"> <li>Reduction of the pollution of the Nemunas basin from the present level - BDS7 154 mgO<sub>2</sub>/l to 15,3 mgO<sub>2</sub>/l (ie. reduction of pollution by 103 tons/year)</li> <li>Laying of 11 km of water supply and 8 km of sewage collection pipelines</li> <li>Supply of high-standard quality water in addition to 4,500 inhabitants and connected to the new system</li> <li>Reduction of the number of accidents in the Prienai Water-Supply System by 50%</li> </ul> | <ul style="list-style-type: none"> <li>Laboratory tests and surveys</li> <li>HELCOM reports</li> <li>Reports of the Ministry of Environment and Alytus Regional Environment Protection agency, Prienai Branch</li> <li>Project records</li> <li>General statistics</li> <li>Prienai Water Company's reports, balance sheets and other financial documents</li> </ul> | <ul style="list-style-type: none"> <li>Proper testing and surveying techniques</li> <li>Expansion of the water-supply and sewerage system is in accordance with the General Plan of Prienai City</li> </ul>  |

| Outputs  | Indicators of Achievement   | Sources of Information  | Assumptions and Risks   |
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| <ul style="list-style-type: none"> <li>Expansion and renovation of the water supply – sewerage networks in the central part of Prienai.</li> <li>Connection of the total of 71% of town's population to the centralised water supply and sewage collection system</li> <li>953 thousands cu.m/year of wastewater turned to the Birstonas WWTP for mechanical and biological treatment</li> <li>Reduction of water loses by 50%</li> <li>Reduction of the content of iron in the drinking water to from 1.8 to 0.2 mg/l</li> <li>Decrease of health risks and improvement of living conditions in the Prienai town and surroundings.</li> </ul> | <ul style="list-style-type: none"> <li>Laying and renovation of water-main line - 11 kilometers of 80-300 mm. diameter polyethylene pipes.</li> <li>Laying of sewerage main line - 8 kilometers of 150-200 mm. diameter pipes.</li> <li>Laying the underwater duiker through the Nemunas river for the pressure pipeline of 300 mm diameter, 400 m – length</li> <li>Building of 3 sewerage pumping stations in the town of Prienai</li> <li>Building of 2 water pressure rise stations</li> <li>Establishing of 2 depth artesian well of 150 mm diameter in Prienai watering-place</li> <li>Expansion of iron-removal equipment through installing 2 filters TFB</li> <li>operation and maintenance costs saving annually</li> </ul> | <ul style="list-style-type: none"> <li>Contractor's work schedules and programmes</li> <li>Site and project records</li> <li>Engineer's certificates and reports</li> <li>Site inspections and visits</li> <li>CBC monthly reports</li> </ul> | <ul style="list-style-type: none"> <li>Appropriate materials and construction techniques will be adopted</li> <li>Construction works will be monitored and supervised properly</li> <li>Prienai Water Company has sufficient administrative capacities to manage the implementation of the project</li> <li>A legislative basis is sufficient to ensure a proper functioning of revenues generating and fine systems</li> </ul> |
| Inputs   | Indicators of Achievement   | Sources of Information  | Assumptions and Risks   |
| <ul style="list-style-type: none"> <li>Phare contribution: 2 MEUR</li> <li>Local co-funding: 1.67 MEUR</li> <li>Detailed design and tender documents prepared</li> <li>EIA carried out</li> <li>Supervision and monitoring</li> <li>Phases I and II carried out from local sources</li> </ul>  | <ul style="list-style-type: none"> <li>Engineering design and technical specifications prepared</li> <li>Tenders launched and funds committed and disbursed</li> <li>Supervision structure established in accordance with FIDIC requirements</li> <li>Monitoring structures is place</li> </ul>   | <ul style="list-style-type: none"> <li>CFCU database</li> <li>Project reports</li> <li>Contracts signed</li> <li>EC Delegation evaluation missions</li> <li>Water Company records</li> </ul>  | <ul style="list-style-type: none"> <li>Tender documents and EIA prepared by the end of 2001</li> <li>Proper functioning of structures of committing and disbursing of funds</li> <li>Adequate staffing in the institutions involved</li> <li>Proper co-ordination of work of all the institutions involved</li> </ul>   |