doc. No 01/ISPA/MC/081 ISPA Measure No: 2001 BG 16 P PE 005

# FINANCING MEMORANDUM

# Agreed between the European Commission and the Republic of Bulgaria

Concerning the grant of assistance from the Instrument for Structural Policies for Pre-accession to the following measure

Regional wastewater collection and treatment located in Gorna Oriahovitza in Bulgaria

# FINANCING MEMORANDUM XXX

The European Commission, hereinafter referred to as "the Commission", acting for and on behalf of the European Community, hereinafter referred to as "the Community" represented by the Commissioner for Regional Policy, Mr. Michel Barnier, for the Commission

on the one part, and

The Government of Bulgaria, hereinafter referred to as "the beneficiary"

on the other part,

HAVE AGREED AS FOLLOWS:

## Article 1

The measure referred to in Article 2 below shall be implemented and financed out of the budgetary resources of the Community in accordance with the provisions set out in this Memorandum. The measure referred to in Article 2 below shall be implemented in line with the General Conditions annexed to the Framework Agreement signed between the Commission and the beneficiary and supplemented by the terms of this Memorandum and the provisions annexed hereto.

## Article 2

# **Identification of the measure**

The Instrument for Structural Policies for Pre-accession shall contribute, by way of a grant, towards the financing of the following measure as described in Annex I:

Measure number: 2001 BG 16 P PE 005

<u>Title</u>: Gorna Oriahovitza regional wastewater collection and treatment

Duration: Start date: The date of signature of the financing memorandum by the

Commission

End date: 31 December 2006

Location: Gorna Oriahovitza

Group: Danube river basin

## Article 3

#### Commitment

- 1. The maximum public or equivalent expenditure which may be taken into account for the purpose of calculating assistance shall be € 16 633 945;
- 2. The rate of Community assistance granted to the measure is fixed at 75 % of total public or equivalent expenditure as indicated in the financing plan in Annex II;
- 3. The maximum amount of assistance from the Instrument for Structural Policies for Pre-accession is fixed at € 12 475 459:
- 4. An amount of € 9 775 027 is committed from the 2001 budget under budgetary line B7-020. Commitments in respect of subsequent instalments shall be based on the initial or revised financing plan for the measure, subject to the state of implementation of the measure and to budgetary availability.

## Article 4

## **Payments**

- 1. Community assistance shall cover payments on the measure for which legally binding commitments have been made by the beneficiary and for which the requisite finance has been specifically allocated. These payments must relate to the works described in Annex I.
- 2. Payments made before the date of signature of the financing memorandum by the Commission shall not be eligible for assistance from the Instrument for Structural Policies for Pre-accession.
- 3. The measure described in Annex I and payments by the body responsible for the implementation of the measure shall be completed no later than 31 December 2006.
  - The report required for the payment of the final balance should be submitted not later than 6 months after this date
- 4. The advance payment is fixed at € 2 495 092, which shall be transferred as follows:
  - An amount of € 1 247 546 is paid out after signature of this memorandum by the beneficiary;
  - The remainder is paid out after signature of the first substantial works contract to be agreed between the beneficiary and the Commission and the fulfilment of the other conditions specified in the Art. 8 (3) hereunder.
- 5. In accordance with Annex III. 1, Section III, point 5, the Commission will accept for this measure a total amount of advance and intermediate payments of 90 % of the total assistance granted.

## Article 5

# Respect of Community law and policies

The measure shall be carried out in compliance with the relevant provisions set out in the Europe Agreements and shall contribute to the achievement of Community policies, in particular those concerning environmental protection and improvement.

#### Article 6

# **Intellectual property**

The Beneficiary and the authority responsible for implementation mentioned in Annex I point 3 shall ensure that they acquire all necessary intellectual property rights to studies, drawings, plans, publicity and other material made in conjunction with planning, implementation, monitoring and evaluation of the project. They shall guarantee that the Commission, or any body or person delegated by the Commission shall have access and the right to use such material. The Commission will only use such material for its own purpose.

## Article 7

## Permits and authorisations

Any type of permits and or authorisations required for the implementation of the measure must be provided by the competent authorities of the Beneficiary in due time and in accordance with national law.

## Article 8

# Specific conditions related to the measure

Without prejudice to the general provisions specified in Annex III the Community grant for the measure is subject to the following conditions:

1. Condition on the assumptions and the status of the assets:

The Commission reserves the right to revise the amount of the assistance for ISPA set out in Article 3 if, within five years of the date of the completion of works, the operating conditions (tariffs, revenues, etc.) vary significantly relative to the original assumptions made in determining the level of the grant and/or there is a substantial modification:

- a) affecting the nature of the operation or its implementing conditions, or giving to a private or public body an undue advantage; and
- b) resulting either from a change in the nature of the ownership of any part of the financed infrastructure, or a cessation or material change in the operating arrangements.

The beneficiary country shall inform the Commission of any such change, and shall seek the ex-ante agreement of the Commission to these changes.

# 2. Condition on viability:

The Community grant for the measure is subject to the authorities concerned making available sufficient resources in order to ensure the effective operation and maintenance of the assets.

- 3. The second half of the advance, in addition to the condition specified in Art. 4 (4), shall be subject to:
  - a) an undertaking by the authorities to present the municipal programme for investments in the water sector in Gorna Oriahovitza, Dolna Olriahovitza and Liaskovetz;
  - b) the presentation by the beneficiary of an updated procurement plan under terms acceptable to the Commission;
  - c) the setting up of a Project Implementation Unit and the appointment of a Project Manager for the measure under terms of reference acceptable to the Commission;
  - d) the presentation of evidence that:
    - (i) The industrial wastewater is pre-treated and/or recycled as appropriate.
    - (ii) The pre-treatment is monitored and enforced by the appropriate environmental authorities.
    - (iii) The industrial loads are not harmful to the designed technology of the treatment plant;
  - e) An undertaking by the Bulgarian authorities that an appropriate charge will be introduced for industries, that is acceptable to the Commission, based on the quantity and quality of effluent produced and on the cost of treatment.
- 4. Intermediate payments shall be subject to:
  - a) A final programme for treatment, reuse and disposal of the sludge to be presented by 31 December 2002 under terms acceptable to the Commission.
  - b) Confirmation that progress has been made in carrying out the works included in the multiyear municipal programme for investment in the water sector in Gorna Oriahovitza, Dolna Oriahovitza and Liaskovetz.
- 5. The final payment shall be subject to the presentation by the final beneficiary of a specific operation and maintenance programme under terms acceptable to the Commission by 31 December 2005. The programme shall cover a 10-year period starting from 1 January 2006.

# Article 9

The implementation provisions described in the Annexes to this financing memorandum form an integral part of it.

Non-compliance with the conditions and implementation provisions shall be dealt with by the Commission according to the procedure stipulated in Annex III.1. Section VIII.

## Article 10

The authentic text of this financing memorandum is the present document as signed hereunder.

Done at 50414, 04.02.2002 Done at Brussels, 17-12-2001

For the recipient .

M. Paskalev National ISPA Co-ordinator For the Community

M. Barnier Commissioner

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# **List of Annexes**

Annex I Description of measure

Annex II Financing plan

# **Description of measure**

Regional wastewater collection and treatment in Gorna Oriahovitza

Commission code No: 2001 BG 16 P PE 005

## 1. MEASURE TITLE

Regional wastewater collection and treatment in Gorna Oriahovitza

- **2. AUTHORITY MAKING THE APPLICATION** (National ISPA Co-ordinator)
  - 2.1. Name: Directorate "European Investment Projects", Sector "ISPA Co-

ordination Unit", Ministry of Regional Development and Public

Works (MRDPW)

- 2.2. Address: 17-19 Kiril I Metodii Street, 1202 Sofia
- 2.3. Contact: Vesselina Lubenova
- **3. AUTHORITY RESPONSIBLE FOR IMPLEMENTATION** (as defined at Section II (2) of Annex III.2)
  - 3.1. Name: "Strategy, Accession Programmes and Projects (SAPP)"

Department, Ministry of Environment and Water (MOEW)

- 3.2. Address: 67, W.Gladstone Sq., 1000 Sofia
- 3.3. Contact: Mariana Hristova, Head of Department, MOEW
- **4. FINAL BENEFICIARY** (in case it is a different body from the authority mentioned under 3)
  - 4.1. Name: Gorna Oriahovitza Municipality
  - 4.2. Address: 4, Georgi Izmirliev Sqr, 5100 Gorna Oriahovitza
  - 4.3. Contact: N. Kolev, Mayor

# 5. LOCATION

- 5.1. Beneficiary country: Bulgaria
- 5.2. Region: Yantra River, Danube river basin

## 6. DESCRIPTION

# 6.1. Background

The measure relates to the "Adoption and implementation of the Acquis Communautaire" relating to urban waste Treatment" priority goal of the National Programme for the Adoption of the Acquis (NPAA).

The measure relates also to the following priorities of the Accession Partnership:

- Short-term priority continue transposition of framework and horizontal legislation establishment of implementation of detailed approximation programmes and implementation strategies related to individual acts.
- Medium-term priority development of monitoring and implementation control structures and capacities, continuous planning and implementation of approximation programmes related to individual legal acts.

The measure is one of the 36 priority projects of the "National Programme for construction of urban wastewater treatment plants (WWTPs) in the Republic of Bulgaria". The objective of the Programme is to establish, according to the identified river basins, the priorities for construction of urban WWTPs for all populated areas in the country with over 10 000 population equivalent. The Programme includes finalising the construction of unfinished urban WWTPs, reconstruction, extension and modernisation of the existing WWTPs, as well as design and construction of new urban WWTPs.

The measure is also consistent with the National Development Plan until the year 2006, Sector "Environment", adopted by the Council of Ministers in 1999.

# **6.2.** The Danube basin intervention

The measure is one of several water projects already underway or in preparation which will benefit the Danube river basin financed by ISPA, the Bulgarian budget and / or the IFIs. The measure is consistent with the ISPA environment strategy adopted in June 2000 by the Superior Council for Regional Development.

The receiving water is the Yantra river where, at present, the wastewaters are discharged directly without any treatment. The Yantra river flows after approximately 70 Kms into the Danube river which flows into the Black Sea.

The Bulgarian authorities are financing, with exclusively internal resources, wastewater treatment plants and related investments in the Danube river basin. In particular, amongst the 36 high priority projects of the cited National Programme, the Bulgarian authorities have decided to finance:

- The reconstruction and modernisation of the Veliko Tarnovo WWTP with the National Environment Protection Fund (NEPF) and Government funds;
- The construction of Strazitsa WWTP with the NEPF.

ISPA will potentially intervene in a number of other locations in the Danube river basin in 2002-03. For all these potential projects, project preparation financed with Phare funds is undergoing. In particular to note the water interventions in the following municipalities:

- Sevlievo water project financed with potentially ISPA and Government budget (included in the first 36 national priority projects);
- Montana water project financed with potentially ISPA and Government budget (included in the first 36 national priority projects);
- Popovo water project financed with potentially ISPA and Government budget (included in the first 36 national priority projects);
- Lovech water project financed with potentially ISPA and Government budget (included in the first 36 national priority projects).

The Bulgarian authorities will complete the intervention with a second set of smaller WWTPs between 2000 and 10.000 in the Yantra river, exclusively financed with internal resources, in particular:

- the construction of Triavna wastewater treatment plant;
- the construction of Drianovo wastewater treatment plant;
- the construction of Polski Trambesh wastewater treatment plant;
- the construction of Pavlikeni wastewater treatment plant.

## **6.3.** The ISPA Measure

The measure has a regional feature, because it will affect the wastewaters coming from three different Municipalities: Gorna Oriahovitza, Liaskovetz and Dolna Oriahovitza. The measure is part of an existing masterplan produced for the three municipalities for the extension and upgrading of the sewerage system and construction of the new WWTP

The preparation of the measure was carried out by an international consultant using financing resources of the Government of North Rhine Westphalia (Germany) and of the Municipalities of Gorna Oriahovitza, Liaskovetz and Dolna Oriahovitza.

The measure is considered to be a pilot project in the water sector for Bulgaria, being the first project financing a tertiary treatment plant in a very sensitive river basin (the Danube basin) both for Bulgaria and the neighbouring countries situated on the Black sea basin.

The overall measure comprises the construction of a wastewater treatment plant for the treatment of wastewater generated in the cities of Gorna Oriahovitza, Liaskovetz and Dolna Oriahovitza, and of some elements of the collection system.

The measure will reduce the pollution from untreated sewage discharged into the Yantra River, a tributary to the Danube river.

# **Component 1**

# The regional wastewater treatment plant

The first component of the measure, which is the wastewater treatment plant, is expected to consist of the following main items:

- screening plant;
- a storm water retention tank;
- aerated grit chamber and grease trap;
- flow measurement equipment, inlet and outlet;
- primary settlements retention tanks;
- aeration with internal re-circulation;
- secondary settlements tanks;
- sludge pump station;
- pump station for primary sludge;
- thickener for primary sludge;
- mechanical thickener for surplus activated sludge;
- digester;
- secondary thickening and intermediate storage before de-watering;
- mechanical sludge de-watering;
- bio-gas system;
- sludge liquor balancing tank;
- building for air blowers;
- operational building;
- container depots for de-watered sludge;
- building for mechanical sludge treatment equipment;
- building for transformer and biogas co-generation;
- phosphorus precipitation agent tanks;
- site works;
- utilities;
- transport vehicles;
- roads (external and on site).

The new regional wastewater treatment plant will serve a population of 67.100 for the year 2030. It will treat a flow of approximately 16.064 m<sup>3</sup>/day and will be designed to meet the following parameters:

# Design parameters for the regional WWTP in Gorna Oriahovitza

Parameters	Unit	Situation before realisation of measure Inlet parameters	Situation after realisation of measure Outlet Parameters
Total daily average flow	M <sup>3</sup> /d	16.064	16.064
Population equivalent		102.535	102.535
BoD	Mg/l	309	25
CoD	Mg/l	580	125
Suspended solids (SS)	Mg/l	312	35
Nitrates (N total)	Mg/l	50	10
Phosphates (P total)	Mg/l	10.3	1

# **Component 2**

### Trunk sewer and connections from the sewer network to the WWTP

The second component of the measure is composed by a trunk sewer and five connections from the sewer network to the new WWTP.

This component is expected to comprise by the following main items:

- a) an inlet sewer;
- b) a pumping station;

The operator of the assets will be selected through an open and transparent tendering procedure, under terms acceptable to the European Commission, and will be in charge of the operation and maintenance of the new WWTP.

# 7. OBJECTIVES

The overall objective of the measure is to protect the Danube River basin from discharge of untreated domestic and industrial wastewater by provision of a wastewater treatment plant treating the wastewater to acceptable effluent quality standards.

In particular, the measure will achieve the following objectives:

- Enable the cities Gorna Oriahovitza, Liaskovetz and Dolna Oriahovitza to achieve compliance with the requirements of the Urban Waste Water Directive;
- Reduce the risks to human health for the population living in the target areas served by the new WWTP;
- Reduce the pollution in the Trans-border region, including the Black sea;
- Meet the requirements of the "Danube river protection convention" for the protection and sustainable use of the Danube river;
- Reduce the potential risk of groundwater contamination;
- Reduce of the potential risk of soil contamination;
- Improve the protection of the environment of the river basin waters;
- Improve the state of the flora and fauna of the riverine environment;
- Build-up an effective infrastructure to facilitate increasing economic activity;
- Improve the conditions for the development of key sectors of the economy (ie. tourism and agriculture);
- Improve the quality and quantity of the range of services for the population in the targeted area;
- Create new employment opportunities (temporary and permanent posts) and stimulate local and regional development.

## 8. INDICATIVE WORK SCHEDULE

Activity	Commencement	Completion			
Land acquisition	Marc	h 2001			
Economic analysis	February 2001	April 2001			
Financial analysis	cial analysis February 2001 April 2001				
Feasibility study	udy May 2000 December 2000				
EIA	March 2001	July 2001			
Design studies	January 2001	August 2001			
Tender documents	Tender documents May 2001 December 2				
Construction	tion December 2002 December 2005				
Operational phase	Januai	ry 2006			

## 9. ENVIRONMENTAL IMPACT ANALYSIS

The type of infrastructure investment falls within projects covered by Annex II of the Directive 85/337. The national authorities have discretion to decide if the EIA required and have decided to carry out the EIA. The competent authority is the Ministry of Environment and Water.

The resolution on EIA, including full public consultation, was taken in July 2001 with a set of recommendations which will have to be followed before the start, during the construction and during the operation period of the plant.

In Bulgaria, the municipalities are obliged to take into account the EIA recommendations.

The measure will meet the requirements of the following EC Directives:

- EC Directive 91/271 on Urban Wastewater Treatment by ensuring that the wastewater discharges will comply with the requirements for discharges into "sensitive" waters for agglomerations exceeding 10,000 p.e.;
- EC Directive 78/659 on Freshwater Fish needing protection or improvement in order to support fish life as amended by EC Directive 91/692;
- EC Directive 80/68 on Groundwater Directive as amended by EC Directive 91/692;
- EC Directive 76/464 on the pollution caused by certain dangerous substances discharged into the aquatic environment;
- EC Directive 76/160 concerning the quality of bathing water;
- EC Directive 75/440 concerning the quality required of surface water intended for the abstraction of drinking water;
- EC Directive 80/778 relating to the quality of water intended for human consumption;
- EC Directive 2000/60 establishing a framework for Community action in the field of water policy.

### **10.** COST AND ASSISTANCE (IN €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
16 768 945	0	135 000	16 633 945	12 475 459	75

The national counterpart financing will be provided the Bulgaria State budget.

For an indicative cost breakdown of the measure, please refer to the following Table:

# **Indicative Cost breakdown**

Item	Total cost (Euro)	Expenditures incurred before application (Euro)
Planning/design fees	-	100 000
Land purchase	-	20 000
Site Preparation	-	15 000
Main works	5 408 464	-
Plant and machinery	9 361 291	-
Technical assistance and Supervision during implementation	903 322	-
Contingencies	960 868	-
Tax/public levies	0	-
Total (Euro)	16 633 945	135 000

## 11. INVOLVEMENT OF IFIS

No International Financial Institution is involved in the co-financing of this measure. To note that a bilateral donor (Government of North Rhine Westphalia, Germany) has intervened in the cofinancing of the preparation of the measure.

# 12. SPECIFIC CONDITIONS RELATED TO THE MEASURE

See Article 8 of the Financing Memorandum.

# 13. PROCUREMENT PLAN

The activities included in the measure will be implemented according to the Provisional procurement plan appended as Annex I.a.

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# **ANNEX I.a**

# **Provisional Procurement Plan**

Tender N°	Description of works and services to be tendered	Type of contract (works, supplies or services)	Provisional month of launch of tender (month/ year)	Rate of reimburs. of invoices relating to specific contract
1	Technical assistance for implementation support and Supervision	Services	1 <sup>st</sup> Semester 2002	75%
2	Construction according to Fidic conditions of contract of the following items:  - the regional waste water treatment plant;  - the inlet sewer and connections from the sewer network to the WWTP.	Works	2 <sup>nd</sup> Semester 2002	75%

The specific terms for the award of contracts will be made available in the Official Journal of the European Communities and/or the Internet.

In addition, as normal ISPA practice, technical assistance will be used, following the Framework contractor procedure, to hire independent expertise to supervise the international tendering.

FINANCIAL PLAN (based on commitments from EU budget)

Title of measure:

Regional wastewater collection and treatment in Gorna Oriahovitza in Bulgaria

2001 BG 16 P PE 005

ISPA No:

Euro

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