**Doc.** N° 01/ISPA/MC/056 ISPA Measure No: 2001 BG 16 P PE 008

# 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

Wastewater treatment located in Blagoevgrad in Bulgaria

#### FINANCING MEMORANDUM

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 008

Title: Blagoevgrad wastewater treatment

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

by the Commission

End date: 31 December 2006

<u>Location</u>: Blagoevgrad

Group: West Aegean 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 € 12 580 465;
- 2. The rate of Community assistance granted to the measure is fixed at 70% 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 € 8 806 326:
- 4. An amount of € 7 045 060 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 € 1 761 265, which shall be transferred as follows:
  - An amount of € 880 633 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 a) entield other Comtochangeout in that of

# 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 Blagoevgrad;
  - b) the presentation by the beneficiary of a final procurement plan, which has to be agreed by 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 to 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. A final programme for treatment, reuse and disposal of the sludge must be presented under terms acceptable to the Commission by 31 December 2002.
- 5. Intermediate payments shall be subject to confirmation that progress has been made in carrying out the works included in the multiyear municipal programme for investment in the water sector in Blagoevgrad.
- 6. The final payment shall be subject to the presentation by the final beneficiary of a specific operation and maintenance programme under terms acceptable by the Commission by 31 December 2006. The programme shall cover a 10-year period starting from 1 January 2007.

#### 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 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 50+14,04.02.2002 Done at Brussels,

2 0 -11- 2001

For the recipient

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National ISPA Coordinater

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 Blagoevgrad wastewater treatment

Commission code No: 2001 BG 16 P PE 008

#### 1. MEASURE TITLE

Blagoevgrad wastewater treatment

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

"ISPA Co-ordination Unit"

- 2.2. Address: 6, Sv. Nedelya Sq., 1000 Sofia, Bulgaria
- 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 Department, Ministry of Environment and Water
  - 3.2. Address: 67, W.Gladstone Sq., 1000 Sofia

Contact: Mariana Hristova, Head of Department

- 4. FINAL BENEFICIARY (IN CASE IT IS A DIFFERENT BODY FROM THE AUTHORITY MENTIONED UNDER 3)
  - 4.1. Name: Regional Water Company Blagoevgrad
  - 4.2. Address: Anton Chechov str. N°3, Blagoevgrad.
  - 4.3 Contact: Georgi Tumbev, Head of Regional Water Company Blagoevgrad

#### 5. LOCATION

- 5.1. Beneficiary country: Bulgaria
- 5.2. Region: West Aegean basin

#### 6. **DESCRIPTION**

# 6.1. Background

The measure relates to one of the priorities of the National Programme for the Adoption of the Acquis (NPAA): "Adoption and implementation of the acquis communautaires relating to urban waste treatment".

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 consistent with the National Programme for priority construction of

This river flows southward and enters Greece about 50 km downstream of Blagoevgrad, after which it flows 125 km through Greece until it reaches the Aegean Sea.

The measure comprises the construction of a wastewater treatment plant for the treatment of wastewater generated in the area of Blagoevgrad, which will eliminate the discharge of untreated sewage into the Struma River.

The ISPA measure will be accompanied by a complementary Bulgarian measure for the municipality exclusively financed by the National Environmental Protection Fund, which will aim at constructing the trunk sewer and other assets of the town sewerage network.

The preparation of the measure was carried out by means of an international consultant firm using Phare Cross Border Co-operation funds for Bulgaria.

The measure will serve a population of 87,520 for the year 2025, corresponding to a population equivalent of 111.111.

The new WWTP will treat in 2025 a total daily average flow of 30,000m3/day and it will be designed according to the parameters cited in the following table:

Design parameters for the Blagoevgrad WWTP

Parameters	Unit	Situation today (Parameters)	Situation before ISPA measure(2025) (Inlet parameters)	Situation after ISPA measure(2025)  (Outlet parameters)			
Total daily average flow	m3/d	24 200	30 000	30 000			
Population equivalent			111 111	111 111			
BoD	mg/l	176	200	25			
СоД	mg/l	330	340	125			
Suspended solids (SS)	mg/l	230	235	35			
Nitrates (N total)	mg/l	24	34	23			
Phosphates (P total)	mg/l	1.70	6.0	4.1			

The measure is designed to meet effluent standards within the Urban Wastewater Directive 91/271 for discharges from agglomerations greater than 10,000 population as transposed in the Bulgarian legislation by the Ordinance 6 /9.11.2000.

The wastewater treatment plant, financed between ISPA and the Bulgarian authorities, is expected to be composed of the following main items:

- Main screens, 2 +1 units;
- Grit removal chamber, 1 tank with 4 corridors;
- Primary settling tanks, 2 units;
- Aeration tanks with diffused air aeration, 3 units;
- Secondary settling tanks, 3 units;
- Pumping station for sludge re-circulation and surplus sludge;
- Effluent disinfection;
- Sludge thickening tank, 2 units;
- Open sludge digestion tanks, 2 units;
- Mechanical sludge de-watering plant;
- De-watered sludge silo;
- Emergency sludge drying beds;
- Administrative building, laboratory, workshop and electrical substation;
- Roads (external and on site).

The Bulgarian authorities, using only internal funds will, in parallel, finance with an allocation already committed in the budget the following components: the trunk sewer and the connections from the existing sewerage network to the WWTP:

#### A. Trunk sewer

A trunk sewer with a total length of 5300 m to be built between Blagoevgrad and the WWTP site and will be composed of the following parts:

- 2,700 m of  $\Phi$  1500 mm trunk sewer;
- $1,857 \text{ m of } \Phi 1200 \text{ mm trunk sewer}$ ;
- 693 m of  $\Phi$  800 mm trunk sewer.

#### B. Connections of the sewerage network

Five connections to be realised between the trunk sewer and the sewer network of Blagoevgrad:

# Connection 1: from the Strumsko district to the trunk sewer:[DQC5]

- 381 m of  $\Phi$  1200 mm collector;[DQC6]
- 95 m of  $\Phi$  800 mm collector;[DQC7]
- 252 m of Φ 600 mm collector; [DQC8]
- 228 m of  $\Phi$  400 mm collector.[DQC9]

# Connection 2: between the existing collector arriving from the villages Riltsi, Belo Pole, Zelen Dole and Aidorovo and the trunk sewer:[DOC10]

- 402 m of  $\Phi$  600 mm collector.[DQC11]

### Connection 3: between Main Collector IV and the trunk sewer: [DQC12]

- 51 m of  $\Phi$  1000 mm collector;[DQC13]
- 292 m of  $\Phi$  500 mm collector;[DQC14]
- 66 m of Φ 800 mm overflow collector.[DQC15]

# Connection 4: between Main Collector II on the left bank of the Bistritsa River and the trunk sewer:[DQC16]

- 199 m of  $\Phi$  800 mm collector;[DQC17]
- 140 m of Φ 1500 mm collector.[DQC18]

# Connection 5: Reconstruction / interception of existing right bank collector along Industrial Street and connection via Main Collector 3 to the trunk sewer:[DQC19]

- Interception of 120/76 mm ovoid collector;[DQC20]
- 209 m of Φ 1200 mm collector.[DQC21]

#### 7. OBJECTIVES

The overall objective of the measure is to protect the Struma River from pollution from discharges of untreated sewage and industrial wastewater, by provision of a wastewater treatment plant to treat the wastewater to acceptable effluent quality standards, by upgrading the collection system and by provision of an outfall sewer.

In particular, the measure will allow to:

- Enable the city of Blagoevgrad to achieve compliance with 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 Aegean sea.
- 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/fauna of the riverine environment;
- Build-up an effective ecological infrastructure to facilitate the increasing economic activity;
- Improve the conditions for the development of key sectors of the economy tourism and agriculture;
- Improve the quality and quantity range of services for the population in the targeted area;
- Create new employment opportunities— temporary and permanent and stimulate local and regional development.

#### 8. WORK SCHEDULE

Category of work	Commencement	Completion				
Land acquisition	31/12	2/2000				
Economic analysis	1/2/2001	15/4/2001				
Financial analysis	1/2/2001	15/4/2001				
Feasibility study	1/2/2001	15/4/2001				
EIA	1/2/2001	30/6/2001				
Design studies	1/3/2001	30/6/2001				
Tender documents	1/5/2001	31/7/2001				
Construction	1/10/2002 30/9/2005					
Operational phase	1/10.	/2005				

#### 9. ENVIRONMENTAL IMPACT ANALYSIS

The type of infrastructure investment falls within the scope of Annex II of the Directive 85/337. The national authorities have discretion to decide if the EIA required and 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 three distinct categories of detailed recommendations which will have to be followed before the start of the measure, during the construction and during the operation period of the new wastewater treatment 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:

- 1) EC Directive 91/271 on Urban Wastewater Treatment; by ensuring that the wastewater discharges will comply with the requirements for discharges into less sensitive waters, for agglomerations exceeding 10,000 p.e.;
- 2) EC Directive 78/659 on Freshwater Fish needing protection or improvement in order to support fish life as amended by EC Directive 91/692; by treating the wastewater discharges, the measure will contribute to the improvement of the river basin waters and thus the conditions for the support of fish life;
- 3) EC Directive 80/68 on Groundwater Directive as amended by EC Directive 91/692;

- 4) EC Directive 76/464 on the pollution caused by certain dangerous substances discharged into the aquatic environment;
- 5) EC Directive 76/160 concerning the quality of bathing water;
- 6) EC Directive 75/440 concerning the quality required of surface water intended for the abstraction of drinking water;
- 7) EC Directive 80/778 relating to the quality of water intended for human consumption;
- 8) Water Framework Directive 2000/60 establishing a framework for Community action in the field of water policy.

# **10.** COST AND ASSISTANCE (IN €)

Total cost		Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
12 860 465	0	280 000	12 580 465	8 806 326	70

The national counterpart financing will be provided by the Bulgarian 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	213,300	225,000
Land purchase	-	55,000
Site preparation	820,000	-
Main works	6,086,173	-
Plant and machinery	3,431,899	-
Technical assistance	400,000	-
Site Supervision	536,304	-
Contingencies	950,664	-
Tax/public levies	-	-
Plant Start-Up	142,125	-
TOTAL (EURO)	12,580,465	280,000

# 11. INVOLVEMENT OF IFIS

No International Financial Institution is involved in this measure.

# 12. SPECIFIC CONDITIONS RELATED TO THE MEASURE

See Article 8 of the Financing Memorandum.

# 13. PROCUREMENT PLAN

The works 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 *	Service	Early 2002	70%		
2	Supervision of project implementation (Fidic engineer)	Service	Early 2002	70%		
3	Design and build contract for construction of the proposed WWTP according to FIDIC conditions of contract	Works	Middle 2002	70%		

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

<sup>\*</sup> 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:

Wastewater treatment located in Blagoevgrad in Bulgaria

ISPA No:

2001 BG 16 P PE 008

Euro

	National authorities	Central Government	7			3.019.312		377.414			377.413		3.774.139
			9	=5/3		70	,	70			70		70
Eligible Cost	ISPA	5			7.045.060		880.633			880.633		8.806.326	
			4 (%)	=3/1		100	,	100			100		86
	Total		3	=5+7		10.064.372		1.258.047			1.258.046		12.580.465
	Non Eligible	Cost	2					,				280.000	280.000
	Total Cost		1	=2+3	1	10.064.372		1.258.047			1.258.046	280.000	12.860.465
	Year				2000	2001	2002	2003	2004	2005	2006	non annualised	Total

E	9 (%) =8/1	,	•	·	•	·	•		
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