

ISPA Measure No:  
2001 BG 16 P PT 003

**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**

**Plovdiv-Svilengrad railway electrification and upgrading  
located 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 PT 003

Title: Plovdiv-Svilengrad railway electrification and upgrading

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

**End date:** Until 31 December 2006

Location: Plovdiv and Haskovo regions

Group: Corridors IV and IX

### *Article 3*

#### **Commitment**

1. The maximum public or equivalent expenditure which may be taken into account for the purpose of calculating assistance shall be € 340 000 000;
2. The rate of Community assistance granted to the measure is fixed at 45 % 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 € 153 000 000;
4. An amount of € 45 900 000 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 € 30 600 000, which shall be transferred as follows:
  - An amount of € 15 300 000 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 after submission of the procurement plan as specified in Article 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 transport and trans-European networks.

## *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 instalment of the advance payment is subject to:

(a) The submission by the Bulgarian authorities to the Commission of:

- Non-technical summaries of all Environmental Impact Assessments (EIAs) which are required to be undertaken by Bulgarian legislation, whether relating to new track alignments or any other component of the project. Such EIAs must be carried out according to provisions similar to those of Directive 87/335/EEC, as modified by Directive 97/11/EC;
- Documentary evidence that public consultations have been carried out for all the EIAs in question according to the requirements of Directive 87/335/EEC, as modified by Directive 97/11/EC. In addition, the Bulgarian authorities should present a document to the Commission describing in detail how the public concerns raised in the public hearings have been addressed;
- A document describing in detail how the mitigation measures foreseen in all the EIAs have been practically and concretely addressed;
- A document describing the comprehensive Environmental Management System to be implemented by the contractor.

(b) The presentation by the Beneficiary of the current restructuring plan of the Bulgarian State Railways (BDZ).

4. Condition relating to restructuring and/or privatisation

The Beneficiary Company (BDZ) shall regularly inform the Commission through the Implementing Authority about the status of its institutional restructuring and possible privatisation of parts of the Company.

5. The tendering and award of contracts for works, services or supplies under this measure shall follow European Community rules and procedures.

Works contracts shall be based on FIDIC conditions of contract, with the specific form of contract to be decided in agreement with the European Commission.

If the total cost of the measure exceeds the amount set down in Article 3(1), the extra financial support required may be provided by additional national co-financing. This additional co-financing shall be recorded as an amendment to the financing plan and shall be provided under the same rules and procedures as for Community funding.

*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 Sofia, 04.02.2002 Done at Brussels,

*For the recipient*

*National ISPA Co-ordinator*

20 -11- 2001

*For the Community*

*M. Barnier  
Commissioner*

*[Handwritten notes]*

*[Handwritten notes]*

## **List of Annexes**

Annex I Description of measure

Annex II Financing plan

Annex III

Annex III.1 ISPA Financial Implementation provisions

Annex III.2 Provisions governing eligibility of expenditure for measures assisted by ISPA

Annex III.3 Model for Payment Claims, for reporting on financial and physical progress and request for modification

Annex III.4 Agreement on minimum requirements for financial control applicable to ISPA assisted measures

Annex III.5 Agreement with respect to irregularities and recovery of sums wrongly received under ISPA

Annex III.6 Information and Publicity requirements

**Description of measure**  
(summary)

**Commission code No:** 2001 BG 16 P PT 003

**1. MEASURE TITLE**

Plovdiv-Svilengrad railway electrification and upgrading

**2. AUTHORITY MAKING THE APPLICATION (National ISPA Co-ordinator)**

2.1. Name: ISPA Co-ordination Unit, Ministry of Regional Development and Public Works

2.2. Address: 17-19 Kiril I Metodi Str.,  
1202 Sofia

Telephone: + 359 2 940 53 43

Telefax: + 359 2 986 48 74

**3. AUTHORITY RESPONSIBLE FOR implementation (as defined at Section II (2) of Annex III.2)**

3.1. Name: Ministry of Transport and Communication

3.2. Address: 9 Vassil Levski Str.  
1000 Sofia

Telephone: + 359 2 932 43 97

Telefax: + 359 2 987 05 93

**4. FINAL BENEFICIARY (IN CASE IT IS A DIFFERENT BODY FROM THE AUTHORITY MENTIONED UNDER 3)**

4.1. Name: Bulgaria National Railways (BDZ)

4.2. Address: 3 Ivan Vazov Str.  
1080 Sofia

Telephone: +359 2 980 53 08

Telefax: +359 2 981 29 70



## **5. LOCATION**

5.1. Beneficiary country: Bulgaria

5.2. Region: Plovdiv and Haskovo

## **6. DESCRIPTION**

The project concerns the reconstruction, upgrading and electrification of some 150 Kms of railway line between Plovdiv, Bulgaria's second city, and the Turkish/Greek border close to Svilengrad. The railway line forms part of priority TINA Corridor IV and (in part) Corridor IX, and provides the main railway connection between Bulgaria, Turkey and the Middle East. The upgraded line will also give improved access to Greece and the port of Alexandroupolis.

The railway line in question represents a continuation of the Sofia - Plovdiv line which is one of Bulgaria's most important routes with double-track and electrified services. But between Plovdiv and Svilengrad the line is at present single track and is operated by diesel trains. The existing line is near the end of its useful life and is in poor condition with high maintenance costs. Existing services are unreliable and slow and have been losing out to competition from the road sector.

The project will fully modernise the railway in question bringing it up to the latest standards. The track superstructure will be constructed in accordance with the alignment design criteria applied to double-track railway lines constructed to European and Bulgarian standards for electrified railways. The design speed for trains along the entire length of the line is 160 Km per hour. However, consideration has been given in the design to the possible future upgrading for higher speeds (e.g. minimum radius of curves of 1500 metres). The design for electrification and signalling equipment will also permit possible future higher speeds.

The project will involve the upgrading of certain sections of the existing single line, renewing parts of the single line, and double-tracking of sections of the route. The proposed double-tracking will meet the requirements of operational efficiency and will minimize disruption during the rehabilitation.

Electrification of the whole of the route, with new power sources and new signalling equipment, telecommunications and radio links is included in the project. The construction of new bridges, provision of grade-separated crossings, upgrading of stations and halts, as well as border facilities and a depot are also planned.

## **7. OBJECTIVES**

The project complements other railway investments proposed along Corridor IV in Bulgaria and neighbouring countries, and represents an important additional step in the development of the pan-European rail network. It has been identified as a high priority in the Bulgarian Government's plans and in the ISPA transport strategy as a result of its expected impact on railway traffic flows, its consistency with the aims and objectives of the Accession Partnership and possible favourable environmental impact.

The main objectives of the project are to improve the speed, efficiency and reliability of rail passenger and freight services along the route in question and thus to enhance the competitiveness of the Bulgarian railway system. By means of this and other railway projects it is hoped to halt, or slow down, the diversion of passenger and freight traffic to the road sector that has occurred in Bulgaria over recent years, as in many other accession countries.

With the implementation of the project the commercial speeds from Plovdiv to the Turkish border are expected to increase from a present average of 50 Km/h to 112 Km/h for international passenger trains, and from 40 Km/h to 68 Km/h for freight trains. Along with service improvements, this is anticipated to encourage traffic growth from the present 13 to 20 passenger trains per day, and from 8 to 14 freight trains per day in the medium growth scenarios.

The project aims to introduce up to date technology and standards in line with Community requirements and norms.

Additional objectives of the investment are to improve the safety of travel and enhance the environment. Safety improvements are expected as a result of the elimination of at-grade crossings of the railway line, the introduction of modern traffic control systems, and the anticipated improvement of the railways' share of traffic compared with roads. Favourable environmental effects are also expected from the transfer of traffic from the roads to the railways, as well as from the proposed replacement of diesel by electric services.

The project is expected to generate additional employment opportunities in the region during the construction phase and operation. From the Bulgarian Railways' viewpoint the project is expected to reduce maintenance and operating costs through the electrification of the line.

The following table gives an indicative list of key indicators and estimated volume of work required for completion of the project (to be updated with final design):

<b>Physical Indicator</b>	<b>Unit Value</b>	<b>Base Estimate Volume</b>	<b>Option Volume</b>
Cuts	m <sup>3</sup>	2,100,000	2,400,000
Fills	m <sup>3</sup>	4,000,000	4,400,000
Rail (UIC 60) Route Kilometre	Km	221	267
Stations & Halts	N <sup>o</sup>	26	26
Bridges, Single Track	M	1820	1420
Bridges, Double Track	M	640	1040
Catenary 25kVa	Km	252	301
Substations 110/27.5 kV, 50 Hz, New	N <sup>o</sup>	4	4
Substations 110/27.5 KV, 50 Hz, Upgraded	N <sup>o</sup>	1	1
Signalling (ETCS Level 1)	Km	252	301
Telecommunications	Km	252	301

## 8. WORK SCHEDULE

Category of work	Start	Completion
Planning and design	June 2000	November 2001
Land acquisition	June 2001	July 2002
EIA	October 2000	June 2001
Construction	September 2002	May 2006
Operation	June 2006	
Defects Notification Period	June 2006	June 2007

## 9. MAIN ELEMENTS OF SOCIO-ECONOMIC COST-BENEFIT ANALYSIS AND FINANCIAL ANALYSIS

The cost-benefit analysis undertaken has determined that the Plovdiv-Svilengrad Electrification and Upgrading project is economically efficient in its widest sense and realises a net benefit for Bulgaria in all of the scenarios developed. It compares total incremental benefits with total incremental costs and has attempted to place a monetary value on each incremental benefit and cost in each rehabilitation scenario. Included among the various benefits identified are estimated impacts on atmospheric pollution, safety and on road vehicle operating costs.

A financial analysis of the investment has also been carried out using the same base assumptions as in the socio-economic analysis but focusing on the cash returns from the project. Under the planned restructuring of Bulgarian Railways (BDZ) a State Railway Infrastructure Company will be established to become effective in January 2002. The Infrastructure Company will charge access fees to train operators which will be determined by the Council of Ministers in the light of proposals to be made by the Ministry of Transport. As the precise level of those fees has not yet been established, various assumptions have had to be made in the financial analysis. In the medium economic growth scenario a modest positive rate of return on the project is estimated.

## 10. ENVIRONMENTAL IMPACT ANALYSIS

The project is a class of development covered by Annex II of the EIA Directive N° 85/337/EEC as amended by Directive N° 97/11/EC. However, sections of new line proposed in the project, as well as some other major components, are considered to fall within the scope of Annex I. A full Environmental Impact Assessment, as required under Bulgarian Legislation, has been undertaken by the Bulgarian authorities on the basis of the preliminary design, including public consultations and consultation of the relevant environmental authorities.

The Bulgarian authorities have submitted to the Commission as required: a copy of the non-technical summary of the environmental impact study (including a supplement dealing specifically with the preferred variant); the results of the public consultation process; and a Resolution by the Ministry of Environment and Waters dated 18 July 2001 giving permission for the project to proceed on condition that various supplementary environmental assessments and mitigating measures are undertaken during the detailed design stage. The recommendations refer in particular to noise barriers, the collection and treatment of waste waters, landscaping and the design of over and under-passes.

The specifications in the design-build contract will include a comprehensive Environmental Management System to be implemented by the contractor.

#### 11. COST AND ASSISTANCE (IN €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
340.000.000	-	-	340.000.000	153.000.000	45

An indicative cost breakdown for the project is given in the following table:

Item	Base estimate (Euro million)
Planning design fees	- *
Land purchase	- **
Site preparation	In works
Works	216.3
Plant & machinery	90.1
Technical assistance	0.5
Supervision	13.0
Interest & taxes	-
Project management	2.0
Contingencies	18.1
<b>TOTAL</b>	<b>340.0</b>

\* financed by Bulgarian Government and PHARE LSIF (Euro 2.9m)

\*\* to be financed by Bulgarian Government (estimated at Euro 14.3m)

**12. INVOLVEMENT OF IFIs**

The project is planned to be jointly co-financed by the European Investment Bank, ISPA and the Bulgarian authorities.

The European Investment Bank has agreed to make available a loan of up to Euro 150 million for financing the project. The first instalment of Euro 80 million was signed in June 1999. The second instalment of Euro 70 million will be signed when the first contracts are awarded. The availability of loan financing has been taken into account in determining the financial support from ISPA.

**13. SPECIFIC CONDITIONS RELATED TO THE MEASURE**

See Article 8.

**14. PROCUREMENT PLAN**

The works will be implemented according to the indicative procurement plan appended as annex I.a

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## 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)
Tender N°1 Lot 1	Civil track and electrification from Kroumovo to Dimitrovgrad – Design –Build Contract  Provision of single partial/double track infrastructure and overhead catenary and power supply for a line length of 66 Km.	Works	June 2002
Tender N°1 Lot 2	Civil track and electrification from Dimitrovgrad to Greek/Turkish Border – Design-Build Contract  Provision of single track infrastructure and overhead catenary and power supply for a line length of 85 km.  Includes an option for partial doubling of the line over a length of 63 km.	Works	June 2002
Tender N° 2	Signalling and telecommunications from Kroumovo to Greek/Turkish Borders – Design-Build Contract  Provision of signalling and train control and telecommunications for single/partial double track.  Includes an option for additional partial doubling of the line over a length 66 Km	Works	June 2002
Tender N° 3	Supervision of construction of Lots 1 to 3 above from Kroumovo to Greek/Turkish Borders.	Services	Dec 2001

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

ANNEX II

FINANCIAL PLAN (based on commitments from EU budget)

Title of measure: Plovdiv-Svilengrad Railway Electrification and Upgrading

ISPA No: 2001 BG 16 P PT 003

Year	Total Cost 1 =2+3	Non Eligible Cost 2	Eligible Cost				National authorities Central Government 7	Loan from IFI* 8	9 (%) =8/1
			Total 3 =5+7	Total 4 (%) =3/1	ISPA 5	ISPA 6 (%) =5/3			
2000	-	-	-	-	-	-	-	-	
2001	102.000.000	-	102.000.000	100	45.900.000	45	56.100.000	-	
2002	41.250.000	-	41.250.000	100	18.562.500	45	22.687.500	-	
2003	59.750.000	-	59.750.000	100	26.887.500	45	32.862.500	-	
2004	72.000.000	-	72.000.000	100	32.400.000	45	39.600.000	-	
2005	31.000.000	-	31.000.000	100	13.950.000	45	17.050.000	-	
2006	34.000.000	-	34.000.000	100	15.300.000	45	18.700.000	-	
non annualised	-	-	-	-	-	-	-	-	
<b>Total</b>	<b>340.000.000</b>	<b>-</b>	<b>340.000.000</b>	<b>100</b>	<b>153.000.000</b>	<b>45</b>	<b>187.000.000</b>	<b>44</b>	

\* EIB co-financing