

ISPA Measure No.: 2000/BG/16/P/PT/001

**FINANCING MEMORANDUM
of**

**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

**Transit Roads Rehabilitation Project III –
Sections on Pan-European Transport Corridors**

Located in **Bulgaria**

C(2000) .../...

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" represented by

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: *2000/BG/16/P/PT/001*

Title: *Transit Roads Rehabilitation Project III – sections located on the route of Pan-European Transport Corridors*

Duration: *Start date: The date of signature of the financing memorandum by the Commission*
End date: Until 31 December 2003

Location: Northwest and Central regions, Bulgaria

Group: Pan-European transport corridors N° IV, VIII & IX

ARTICLE 3

COMMITMENT

- (1) The maximum eligible public or equivalent expenditure which may be taken into account for the purpose of calculating assistance shall be € 40,000,000;
- (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 € 30,000,000.
- (4) An amount of € 24,000,000 is committed from the 2000 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 in 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 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 final beneficiaries concerning the measure shall be completed no later than *31 December 2003*. 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 € 6,000,000 which shall be transferred as follows:
 - An amount of € 3,000,000 is paid out after signature of this memorandum by the beneficiary;
 - The remainder is paid out following the signing 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. Conditions relating to the second instalment of the advance payment

The second instalment of the advance payment is conditional on the presentation by the beneficiary of a procurement plan, which has to be agreed by the Commission.

- 4. Implementation arrangements already in place for Transit Roads III (and as described in section 12 of Annex I of this memorandum) should apply to this project with, in particular, the continued involvement of an international consultant, approved by the Commission, for technical assistance and management and supervision functions.
- 5. The competent Bulgarian environmental authorities must notify the Commission as soon as they become aware of any change to the design or construction of the project that might have a significant adverse effect on the environment and consequently require an EIA.
- 6. The final payment of ISPA grant will be conditional on the presentation by the Bulgarian authorities of a repair and maintenance programme for the sections of road rehabilitated and upgraded under this project. This programme shall cover a period of at least 10 years after completion of the project, and must relate to the operation of the road sections in question at standards required by EC Directive 96/53.

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.

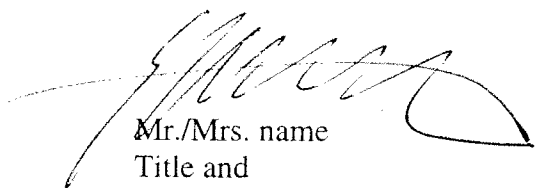
ARTICLE 10

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

Done at Sofia

Date

for THE RECIPIENT

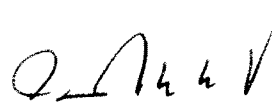


Mr./Mrs. name
Title and
Function
Institution

Done at Brussels

Date 12 -10- 2000

for THE COMMUNITY



Mr. M. Barnier
Commissioner

List of Annexes

- Annex I - Description of measure.
- Table A Lots included in Transit Roads III Programme
 - Map A Transit Roads III proposed sections for ISPA
 - Map B Environmentally sensitive areas
- 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.

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DESCRIPTION OF MEASURE

Summary

N° 2000/BG/16/P/PT/001

1. Measure title

Transit Roads Rehabilitation Project III – sections on the route of Pan-European Transport corridors

2. Authority making the application (National ISPA Co-ordinator)

2.1. Name: Ministry of Regional Development and Public Works, ISPA Task Force

2.2. Address: 6 Sveta Nedelia Sq., 1000 Sofia, Bulgaria

E-mail: pharecbc@mail.bol.bg

3. Authority responsible for implementation (as defined at Section II (2) of Annex III.2)

3.1. Name: General Roads Administration (GRA)

3.2. Address: 3 Macedonia Blvd., 1606 Sofia, Bulgaria

E-mail: ktaushanov@gra.bg

4. Final beneficiary (in case it is a different body from the authority mentioned under 3)

4.1. Name: as above

4.2. Address:

5. Location

5.1. Beneficiary country: Bulgaria

5.2. Region: Northwest and Central Regions

6. The Project**6.1 Overview**

The project concerns the rehabilitation and upgrading of several sections of main trunk roads in Bulgaria along the route of priority Pan-European transport corridors N° IV, VIII and IX. It represents the continuation of the successfully completed Transit Roads I programme, and of the ongoing Transit Roads II programme, which were financed by a combination of EIB loans, PHARE grants and national sources.

The Transit Roads III programme, as in the case of its predecessors, aims to tackle the serious deterioration of main roads in Bulgaria and upgrade them to meet international standards. This includes the restoration of pavement surface parameters to achieve load capacities in compliance with EU norms, the rehabilitation and widening of existing structures, and improved road signs and markings. When the programme is complete a very large proportion of the Bulgarian main road network will comply with European standards of quality, safety and load bearing capacity.

The particular sections selected for ISPA financing - organized into four Lots for contracting purposes - form part of the Transit Roads III programme as a whole and relate to corridors on the TINA “backbone network.” They account for some 250 Kms of main highway and represent sections with the heaviest traffic and/or worst problems.

The project is consistent with Bulgaria’s national transport infrastructure policy and complies with the priorities of the Accession Partnership and National Programme for the Adoption of the Acquis. It addresses the urgent need to improve main transit routes in the country to cater for growing traffic and to overcome the backlog of restoration work. The project represents a reasonably cost-effective way of achieving significant improvements in road conditions and thus traffic flows and safety. Well functioning transit routes reconstructed to international standards are vital for stimulating international trade and local development.

6.2 Background

Bulgaria is strategically situated and is crossed by major transit routes linking Western, Central and Eastern Europe with Greece, the Middle East and Asia via the Balkan Peninsula. Of the ten Pan-European transport corridors identified at the Crete and Helsinki Conferences, five cross Bulgarian territory, including four road and rail corridors and the Danube river international waterway. The three corridors of relevance to this project are:

Corridor IV: Berlin/Nürnberg – Prague – Budapest – Constanta/Thessaloniki/Istanbul

In Bulgaria corridor IV is a major North-South route from the Romanian border at Vidin, to the capital Sofia, and then proceeding to the border with Greece at Kulata (in the case of one branch), and the border with Turkey at Kapitan Andreevo (in the case of the other branch).

Corridor VIII: Dures – Tirana – Skopje – Sofia – Burgas – Varna

The corridor facilitates East-West movements across the length of Bulgaria from the border with FYROM at Gjusevo, via Sofia and Plovdiv, to the Black Sea ports of Burgas and Varna.

Corridor IX: Helsinki – St. Petersburg – Moscow – Kiev – Chisinau – Bucharest – Dimitrovgrad – Alexandropoli

This corridor provides another North-South link from the Romanian border at Ruse (only existing bridge across the Danube between Bulgaria and Romania), via Stara Zagora and Dimitrovgrad to the Greek border at Makaza (road link only), with a branch to the Greek border at Novo Selo/Ormenion (road and rail).

The main road network in Bulgaria consists of some 300 Kms of motorway largely built in the 1980s and needing rehabilitation, and over 3000 Kms of primary routes. The latter consist primarily of single carriageway trunk roads with in many cases badly deteriorated surfaces and inadequate signposting and marking. Poor construction in the past and lack of maintenance due to a shortage of funds allocated to the road sector have led to the present situation.

In order to tackle these problems, the Bulgarian authorities have embarked on the Transit Roads Rehabilitation programmes, as well as other schemes aimed at improvement of the road infrastructure such as the PHARE/CBC programme relating to the E79 and E80/85 Sofia - Greece. The principal features of the Transit Roads programmes can be summarised as follows:

Table 1: Bulgarian Transit Roads Rehabilitation Programmes

Current

Pgmme.	Appx.Kms rehabilitated (equiv. to 7.5m)	Total cost Euro mill.	Start	Funding sources	Status
Roads I	673 Kms	106	1993	EBRD, EIB, PHARE, national budget	Complete
Roads II	780 Kms	133	1996	EIB, PHARE, national Budget	To be completed 2000
Roads III	605 Kms	133	1999	EIB, ISPA, national Budget	To be completed 2002

Proposed

Pgmme.	Appx.Kms rehabilitated (equiv. to 7.5m)	Total cost Euro mill.	Start	Funding sources	Status
ISPA project (part of Roads III)	250 Kms	40	2000	ISPA & national budget	To be started 2000

6.3 Objectives

The principal objectives of the Transit Roads III Programme as a whole, and of the component presented for ISPA financing, are to upgrade Bulgarian road infrastructure to EU standards and thereby improve traffic flows, to reduce vehicle operating costs and travel times, and to enhance safety. The development of fast and efficient road connections form an essential part of Bulgaria's efforts to promote trade and economic development.

As already indicated, the particular project presented for ISPA financing will aim to rehabilitate some 250 Kms of the most problematic and/or heavily trafficked sections of the main Pan-European corridors that cross Bulgarian territory. The sections concerned are described in the following paragraphs and are listed in Annex Table A.

6.4 Description

The project comprises rehabilitation and upgrading of individual sections of main highway organized into 4 Lots for contracting purposes. Full details of these Lots and sections of road concerned are to be found in Annex I TableA. The following table gives a summary:

Table 2: Lots proposed for ISPA financing

Lot N°	Road N°	Type	Pan-European corridor	Section name	Section length Kms (equiv.7.5 m width)
3	I-5 II-66	2 lanes	IX	Kazanlak-Stara Zagora Stara Zagora bypass	62.90
4	A-2	4 lanes	IV	Hemus motorway	38.63
8	I-6 & I-9	2 lanes	VIII	Sliven-Burgas-Varna	76.515
9	I-1	2 lanes	IV	Vidin-Montana	71.00
Total					249.045

See Annex I Maps for the location of these Lots.

Lot N° 3: The sections in this Lot traverse the central part of the country and will be used by both transit and locally generated traffic of the large population and industrial centres of Kazanlak and Stara Zagora. The latter is situated at the crossing point between corridors VIII and IX. The pavement of most of these sections is heavily distressed. Typical defects are deformations due to sub-grade shear failure, rutting, corrugation, raveling, pot-holing and extensive cracking. No major structures on these sections will require attention. Most of the existing structures require some concrete surface repairs, change of waterproofing and new pavement installation.

Lot N° 4: The sections on this Lot are located on the existing “Hemus” motorway which is an important arterial route. They are adjacent to the large Sofia population and industrial centre but serve a high proportion of international traffic. Although in service for around 18 years, the pavement is heavily distressed. Typical defects are raveling, pot-holing and extensive cracking. There are also a few major structures on this lot that need attention (bridges 4.787 Kms).

Lot N° 8: The sections on this Lot serve East-West traffic to and from the Black Sea coast as well as traffic from the major centres of Iambol, Burgas and Varna. These sections suffer from similar defects to those identified in the previous Lots, namely deformations due to sub-grade shear failure, rutting, corrugation, raveling, pot-holing and extensive cracking. Most of the existing structures require some concrete surface repairs, change of waterproofing and new pavement installation.

Lot N° 9: These sections relate to a less densely populated area than the previous examples but lie on an important North-South transit route leading to the Romanian border at Vidin. Traffic on this route might be expected to increase with the completion of the proposed second bridge over the Danube. Problems due to lack of maintenance are very similar to those on the other Lots.

According to Bulgarian law, road rehabilitation projects undertaken from 1 January 1996 must comply with EU requirements. This means, in particular, upgrading to load bearing capacity of 11.5 tonnes axle weight. The design speeds, the vertical and horizontal alignments, elements of the vertical and horizontal curves, vertical cross-section slopes, carriageway width, etc. are defined in GRA's "Instructions for Road Design." Design speeds are as follows:

⇒ for the Lots on the motorways – design speed 120 Kms/hr.

⇒ for the Lots on primary roads Class I – design speed 80 Kms/hr.

In all the above Lots the main works will be essential, but technically relatively straightforward, road construction involving the following main elements:

- increase in pavement structure load-bearing capacity in compliance with Council Directive 96/53/EC of 25 July 1996 concerning the maximum size and weight of vehicles;
- provision of adequate cross falls and positive surface and side drainage;
- restoration of the pavement surface characteristics – skid resistance and evenness;
- repair and, where necessary, widening of existing bridge structures, change of waterproofing, joints, bearings, repair of concrete surface defects, etc;
- provision of new traffic signing and horizontal marking;
- refurbishment of existing and provision of new guard railings.

7. Work schedule

Category of work	Start	Completion
Feasibility studies	..	1997
Financial/CBA	..	30/04/2000
Planning and design	1998	15/04/2000
Tender documents	..	31/05/2000
Land acquisition	NA	NA
Construction	10/2000	10/2002

8. Economic and social cost-benefit analysis

The economic benefits of the project derive from the fact that it will improve traffic flows and reduce vehicle operating costs along the main transit corridors and will thus have a positive effect on trade and economic development.

The selection of priority sections for attention and justification for each investment is based on a cost-benefit methodology which has been agreed and verified by international financiers including the European Investment Bank.¹ Benefits to road users are calculated over a period of 10 years on the basis of cost savings per vehicle/Km under improved road surface conditions, including reduced vehicle maintenance, wear and tear, fuel and oil consumption, and improved safety.

The results of applying the above methodology to the specific road sections in question are as follows:

Table 3: Results of economic analysis

Lot	Economic rate of return (ERR)	NPV @ 5% Euro mill.	Benefit/cost ratio
3	17.5	2.455	2.29
4	18.5	0.985	1.85
8	22.0	1.050	2.76
9	19.0	1.325	2.42

Realistic traffic growth scenarios have been assumed in these analyses of around 2% p.a. for light vehicles and 1.5% p.a. for Heavy Goods Vehicles (HGV). It is to be noted that HGVs account for a relatively high proportion of total traffic on the corridors concerned, while international traffic is also important.

The following table gives average traffic flows on the sections of road in question together with projections for completion date and 5 years from completion:

Table 4: Traffic data

Section	Year	AADT*	% International traffic	%Heavy goods
Lot N° 3 corridor IX	current	7499	12.6	12.8
	completion	8248	15.5	12.8
	completion+5	9298	19.3	12.8

Section	Year	AADT*	% International traffic	%Heavy goods
Lots N° 4 & 9 corridor IV	current	6455	13.1	16.1
	completion	7102	15.5	16.8
	completion+5	8150	20.0	16.8

Section	Year	AADT*	% International	%Heavy goods
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¹ [“Methodology for Assessing the Economic Efficiency of Repair Works Projects on Bulgarian Roads” Central Laboratory of Roads and Bridges – based on World Bank HDM-III methodology.](#)

			traffic	
Lot N° 8 corridor VIII	current	11782	16.2	12.2
	completion	12416	18.0	12.7
	completion+5	13813	23.0	12.9

* AADT = average annual daily traffic

Source: GRA

It is estimated that the project will create just over 2000 temporary jobs directly and indirectly during the construction phase. Jobs will also be created during the operational phase through requirements for repair and maintenance and as a result of spin-off effects from activity generated as a result of transport improvements undertaken.

9. **Main elements of financial analysis**

The sections in question do not involve road tolls and the project is not therefore revenue generating.

10. **Environmental impact**

The project falls within the scope of Annex II of directive N°85/337/EEC on the environmental impact of infrastructure projects, as amended by Directive N° 97/11/EEC. In such cases, an Environmental Impact Assessment is not compulsory. However, the competent authorities have to confirm that an EIA is not necessary and justify the decision based on certain criteria specified in the directives.

The Bulgarian Ministry of Environment has confirmed that because of the nature of the works concerned in this project – rehabilitation of existing roads along the same alignment – no environmental assessment is required under national legislation. They have also confirmed that the projects are not located within or adjacent to an environmentally sensitive area, and will not have a significant effect on the environment (see annexed Map).

A condition has been added to the financing Memorandum (Article 8) making it an obligation for the Bulgarian authorities to notify the Commission of any changes to the design or construction of the roads in question that might have an adverse environmental effect.

Measures taken to mitigate any possible adverse environmental effects are estimated to account for 11% of total project costs and include the planting of trees, shrubs and grasses to reduce soil erosion and noise and dust pollution, together with the use of noise-absorbing road surfacing.

11. Operation and maintenance

Routine repair and maintenance are the responsibility of the General Roads Administration (GRA) and are financed from the recently created Roads Fund which is funded by allocating part of the revenues generated by taxes on petrol and diesel fuel. Maintenance work will be carried out by maintenance teams operating as separate legal entities (parastate/private) following the reorganization of the GRA in early 2000.

The Bulgarian authorities will have to prepare a full maintenance programme for the sections in question on completion of the project (see Article 8c of Financing Memorandum).

12. Implementation and procurement

The project will be implemented by the GRA under arrangements set up under the earlier Transit Roads Programmes and in line with the recent reorganization of the body. Under an agreement with the EIB, the roads rehabilitation projects are managed by a Project Implementation Unit within the GRA with the help and advice of an international consultant. This consultant is involved, inter alia, in the review of designs, tender document preparation, tender evaluation, management of site supervision, monitoring of implementation, maintenance of cost control systems, preparation of payment certificates and regular reports of progress. It is proposed that the same arrangements be used in the case of the sections planned for ISPA financing.

The GRA is now familiar with international procedures for tendering and contracting and is assisted in this function by the international consultant referred to in the previous paragraph. Tendering of all contracts within the project to be financed by ISPA will be consistent with the rules of Title IX of the Financial Regulation - participation in tendering procedures will be open to all legal entities of the EU and beneficiary ISPA countries.

The Lots concerned will be advertised together with a view to awarding contracts later this year. All tender and contracting documents must receive the prior approval of the Commission.

Site supervision will be performed by teams operating under internationally accepted practice with the services being paid by the General Roads Administration.

13. Cost and assistance (in EURO)

Figures in €

Total cost	Private sector contribution	Not eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
40,000,000	0	0	40,000,000	30,000,000	75

It should be noted that the ISPA grant represents 22.6 % of the total estimated cost of the Transit Roads III Programme as a whole.

The estimated total costs of the individual Lots are as follows:

Lot N° 3 Euro 11.0 million
Lot N° 4 Euro 6.0 million
Lot N° 8 Euro 12.0 million
Lot N° 9 Euro 11.0 million

14. Involvement of IFIs

The European Investment Bank has agreed a loan of Euro 60.0 million for the financing of Bulgarian Transit Roads III Programme as a whole (agreement dated 23 September 1998). This loan will not be disbursed on the particular sections proposed for financing by ISPA but will be used on the other seven Lots within the Transit Roads III Rehabilitation Programme (see Annex I Table A).

15. Related road projects of common interest planned in period to 2006

Corridor IV

Danube river bridge at Vidin/Calafat	Estimated cost: Euro 190.0 million Estimated implementation: 2002-2004
Struma motorway	Estimated cost: Euro 443.0 million Estimated implementation: 2003-2008
Ljulin motorway	Estimated cost: Euro 68.0 million Estimated implementation: 2002-2005
Rehabilitation Dupnitsa- Kulata	Estimated cost: Euro 45.0 million Estimated implementation: 2000-2002
E79 to Kulata Motorway	Estimated cost: Euro 524.0 million Estimated implementation: 2003-2006

Corridor VIII

Trakia motorway (Orizovo-Burgas)	Estimated cost: Euro 450.0 million Estimated implementation: 2000-2006
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Corridor IX

Shipka tunnel pass	Estimated cost: Euro 120.0 million Estimated implementation: 2002-2006
Approach road and cross-border checkpoint with Greece at Makaza	Estimated cost: Euro 50.0 million Estimated implementation: 2001-2004

The above projects represent the Bulgarian authorities' plans for the period – these projects are not all earmarked for financing by ISPA.

16. Specific conditions related to the measure

Conditions relating to the proposed assistance to this project are listed under Article 8 of the Financing Memorandum.

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