PROJECT FICHE BG9904.01.02

1.	**Title:**	**REHABILITATION OF MAJOR ROADS IN THE CBC REGION**
2.	**Location:**	Bulgaria's Southern Border Region
3.	**Objectives:**	The general objectives of the project are: • to have an impact for the Accession Partnership by improving major infrastructure in the Pan – European Corridors IV and IX and by conforming with Relevant EC Regulations for weight and dimensions of vehicles • to encourage the creation and development of corresponding transport links on both sides of the Bulgaria/Greece border • to support road infrastructure works in order to facilitate Bulgarian - Greek co-operation • to improve to modern international standards the sections of E-79 approach to the Bulgaria-Greece border crossing station at Kulata • to improve to modern international standards the sections of E-85 approach to the Bulgaria-Greece border crossing station at Svilengrad construction of new approach road to new border crossing station for link Goce-Delcev/Drama
4.	**Description:**	This particular funding is an integral and complementary extension of supervision contract (BG9402.01.02) of the following project : • Rehabilitation of approximately 100 km of the existing road in E79 from Dupnitsa to the existing border crossing station at Kulata on the Bulgaria/Greece border including provision of climbing lanes over specific sections and bridge widening. • Rehabilitation and upgrading of approximately 45 km of the existing roads in E85, including provision of climbing lanes over specific sections and bridge widening. • Road II-19, construction and reconstruction of approximately 13 km of the existing road to a new border crossing station to be opened on the Bulgaria/Greece border. Technical detailed description in Annex VI The project is co financed by EIB. A 40 MEURO loan agreement was signed in February 1998 to finance the rehabilitation of the E79 section (Sofia - Dupnitsa) Feasibility Studies and Environment Impact Assessment are completed, works tender were launched in February 1999. However, the project implementation schedule has been delayed for the following reasons : ❖ additional expertise about environmental issues have been undertaken and have to be finalised before signature of works contracts. ❖ Finalisation of works tender documents was delayed due to procedural difficulties The duration of the existing Supervision Contract does not cover the full extent of the Works contracts and has therefore to be extended.
5.	**Institutional framework:**	The proposal is in relevance with government strategy to support and strengthen the development of Pan European Corridors in their parts on Bulgarian territory. Also it is in relevance with transit border crossing

		facilitation.						
6.	**Budget:**	Investment	Institution Building:	Total Phare (=I+IB):	Recipient:	EIB:	Additional Phare Funding	**TOTAL (M€)**
	Preparation + Land Acquisition	0	0	0	0.6	0	1.74*	**2.34**
	Supervision	0.5	0	0.5	0	0	4.2*	**4.7**
	WORKS							
	E79 (Dupnitsa-Kulata)	0	0	0	0	0	25**	**25**
	E80/85	0	0	0	0	0	10**	**10**
	E79 (Sofia - Dupnitsa)	0	0	0	0	40	0	**40**
	Opening of Gotse – Deltsev	0	0	0	0	0	9**	**9**
	TOTAL: (M€)	0.5	0	0.5	0.6	40	49.94	**91.04**
	*Financed under Phare CBC 1994 ** Financed under Phare CBC 1998							
7.	**Implementation Arrangements:** Implementing Authority:	The Project shall be managed under the Decentralised Implementation System (DIS). The Implementing Agency (IA) is the Ministry of Regional Development and Public Works (MRDPW). The Foreign Investment and Capital Construction Department of General Road Administration (GRA) is responsible towards the CBC IA for the operational management of the project: preparation of terms of referance, of tender documents, of evaluation criteria, of evaluation of offers, of contracts, of invoices for payment. For works contracts under FIDIC rules, an official of GRA acts as the Employer and the invoices have to be certified by an independent Engineer contracted and financed by the Programme. GRA reports monthly to the CBC IA (with direct copies to the EC Delegation) with monthly disbursement and commitment schedules and with sufficientdetail to allow assessment of progress made and remaining work to be accomplished. GRA liaises directly with the EC Delegation for all issues related to the operational management of the project. The existing project team (previously known as Project Implementation Unit -PIU- in the framework of the 1994 and 1995 programmes) within the Department is adequately staffed with 4 qualified full-time experts. Appropriate technical assistance to the project team is to be ensured, financed by the Programme. Works will be tendered to prequalified contractors with relevant financial capacity, and technical and FIDIC experience.							

	CFCU role: Non-standard procedures:	No Since the current Programme is providing additional financing to previous programmes for projects already tendered and contracted, contracts shall therefore be contacted as direct agreements to cover extensions of time or foreseen extensions scope of work with the contractors previously contracted after open tenders.
8.	**Implementation schedule:** *Tendering* *Start of project activity:* Completion:	 already tendered January 2001 June 2001
9.	**Environment:** Date Initial Screening completed: Report for Environmental Impact: Yes/No. In case of existence from which source it can be obtained: Major Environmental Effects:	 November 1997 Yes (WS Atkins Final Report) General Road Administration The Environmental Effects of the Project are predicted to be limited. The minor effects will be principally in the construction stage. Conservation measures are included in the TD
10.	**Rates of Return:** Financial % : Economic internal rate of return % :	WS Atkins Final Report E-79 -- 17% E-80/E-85 -- 12% E-79 -- 21% E-80/E-85 -- 14%
11.	**Investment Criteria:**	Catalytic Effect: Bulgaria is currently in the process of conversion to a market led economy system. As an integral part of this process, Bulgaria is actively pursuing a policy of greater accessibility to trade and economic links with its neighbours Greece, FYROM, Romania and Turkey. Its geographical position inevitably means that international traffic will cross its borders. Therefore it is important that its road network, generally, and international trade routes in particular are of sufficient standard to safety and efficiently convey the anticipated traffic demand. In order to facilitate and sustain regional and national economic development generated through the Bulgarian-Greece border links, it is essential the opening and construction of the approach road to Makaza Border Crossing. It is important to provide this road with a view to accommodating future traffic demands for the next 15 years. Additionality: For the Southern Border Regions Road Project only Phare funding is being sought or utilized. No other funding agencies are contributing to the Project. Sustainability: The Southern Border Region is acknowledged to be isolated by its geographical situation. This combined with a general lack of access has severely disadvantaged the Region. It is estimated that approximately one third of all Phare funding to

		Bulgaria is allocated to the Region. Following studies by international consultants it is expected that an increase in communication and transport facilities will stimulate the economic activity of the Region. The area has had a certain degree of success in attracting foreign investment and with its acknowledged educated workforce and huge potential for tourism the development initiated by the improved road network will be self sustaining – particularly as the democratic and financial changes within the country as a whole continue. Competition: It is confirmed that all aspects of the Southern Border Regions Road Project are open to competitive tender within the European Union and Phare recipient countries, and all Phare procedures regarding competition and transparency are fully complied with.
12.	**Conditionality and Sequencing:**	• Road Design complies with the provisions EC Directive on weight and dimensions. • Land Acquisition and Design is financed by Bulgarian authorities.The Bulgarian authorities undertake to notify to the European Commission before the signature of the works contracts that related land acquisitions have been completed. • The General Road Administration will make all data and inspection equipment fully available for the consultant in charge to complete the detailed design.

ANNEXES TO PROJECT FICHE

ANNEX I	LOG-FRAME
ANNEX II	DETAILED COST BREAKDOWN
ANNEX III	IMPLEMENTATION CHART
ANNEX IV	CONTRACT AND DISBURSEMENT SCHEDULE
ANNEX V	RELATION WITH PREVIOUS PHARE ACTIVITIES
ANNEX VI	FEASIBILITY AND PREFEASIBILITY STUDIES
ANNEX VII	LIST OF RELEVANT LAWS AND REGULATION

LOGFRAME PLANNING MATRIX FOR PROJECT				Date of Drafting	15.02.1999
				Planning Period	Jan 2000 - Dec 2002
Project Number	BG9904.01.02	Project Title	**REHABILITATION OF MAJOR ROADS IN THE CBC REGION**	Total Budget of Project	0.5 M€

Wider Objectives	Indicators of Achievement	Sources of Information	Assumption and Risks
- to promote economic and social cohesion in the CBC region - to promote co-operation with the CEEC regions bordering the European Union, and thus to help these border regions to overcome specific development problems stemming from their relative isolation in the national economy	- increased GDP regional share - increased Greek and foreign investment in the region	Government and international statistics	
Immediate Objective	**Indicators of Achievement**	**Sources of Information**	**Assumption and Risks**
- to rehabilitate major roads infrastructure in southern Bulgaria	- increased traffic and road safety records on rehabilitated sections - reduced journey durations - reduced maintenance costs of rehabilitated sections	- GRA and independent reports - users (e.g. IRU)	- economic growth in other sectors - Bulgarian Government continues its current commitment to reform and to accession to the European Union
Results/Outputs	**Indicators of Achievement**	**Sources of Information**	**Assumption and Risks**
completed rehabilitation works	taking over certificates	- GRA, resident engineer, contractors	- cost of rehabilitation does not exceed cost estimates - no major contingency during construction
Inputs	**Indicators of Achievement**	**Sources of Information**	**Assumption and Risks**
- EIB and Phare CBC co-financing - project team in GRA acting as Employer - project Engineer - contractors	-0.5 M€ contracted and disbursed - team adequately staffed with 3 qualified full-time experts - project Engineer contract and financed under 94 programme - works contracts signed	-reports from MRDPW, GRA, Delegation, EIB, resident engineer and contractors - MRDPW and GRA bank statements	- land acquisition completed - continuity of staff and policy in GRA enabling implementation of project without delay - effective project Engineer - capable contractors

ANNEX II
DETAILED COST BREAKDOWN

	Investment	Institution Building:	Total Phare (=I+IB):	Recipient	EIB:	Additional Phare Funding	**TOTAL (M€)**
Preparation + Land Acquisition	0	0	0	0.6	0	1.74*	**2.34**
Supervision	0.5	0	0.5	0	0	4.2*	**4.7**
WORKS							
E79 (Dupnitsa-Kulata)	0	0	0	0	0	25**	**25**
E80/85	0	0	0	0	0	10**	**10**
E79 (Sofia - Dupnitsa)	0	0	0	0	40	0	**40**
Opening of Gotse – Deltsev	0	0	0	0	0	9**	**9**
TOTAL: (M€) *Financed under Phare CBC 1994 ** Financed under Phare CBC 1998	0.5	0	0.5	0.6	40	49.94	**91.04**

ANNEX III
IMPLEMENTATION CHART

Activities	1999				2000				2001				2002	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
SUPERVISION Current Contract Financed under BG 9402														
WORKS E79 (Dupnitza Kulata) (BG 9803)														
E80/85 (BG 9803)														
Gotse Deltsev (BG 9803)														
SUPERVISION Extension (BG 99XX)														

COMMITMENT SCHEDULE

	Total M€	2000				2001			
		I	II	III	IV	I	II	III	IV
Supervision	0,5					0,5			
Total	0,5					0,5			
Cum. Total	0,5	0	0	0	0	0,5	0,5	0,5	0,5

DISBURSEMENT SCHEDULE

	Total M€	2000				2001			
		I	II	III	IV	I	II	III	IV
Supervision	0,5	0	0	0	0	0,2	0,2	0,1	0
Total	0,5	0	0	0	0	0,2	0,2	0,1	0
Cum. Total		0	0	0	0	0,2	0,4	0,5	0,5

ANNEX V

RELATION WITH PREVIOUS AND ON - GOING PHARE ACTIVITIES

1. Relation with National Phare Programme

In 1994 the General Road Administration of Bulgaria started to implement a rehabilitation project Transit Road, aimed to curtail the further deterioration of the road network of Bulgaria and revive the road construction sector in the country. The project was carried out in two stages, both covering over 1600km. The project financial scheme were formed through co-financing by the European Investment Bank and National Phare Programme. In total Phare committed 40.4 MEURO, representing some 20% of the overall project cost. Within the project scope were rehabilitated 35.9 km of E79 between Dupnitsa and Kulata and 77.8km between Plovdiv and Svilengrad, the two existing roads approaches to the Greek border being priorities for the CBC Programme as well.

2. Relation with Multi-Country Phare Programme

Since 1995 to 1996 on the part of E79 were implemented construction work, co-financed within Phare Multi-Country Transit Facilitation Programme. Phare contribution amounted approximately 2 MEURO and was utilized for improvement of border infrastructure /border approach road and parkings/.

3. Relation with Phare CBC-Programme

Under BG 9411 Programme Phare CBC finances the preparation and the first contract of Supervision of E79,E80 and the opening of the new Cross Border between Gotse Deltsev and Drama.

Under BG 9802 Programme Phare CBC finances the Works for of E79,E80 and the opening of the new Cross Border between Gotse Deltsev and Drama.

ANNEX VI

FEASIBILITY AND PREFEASIBILITY STUDIES

W. ATKINS STUDY AUGUST 1997:
ROAD NETWORK REVIEW FOR THE SOUTHERN BORDER REGION AND IDENTIFICATION OF HIGH PRIORITY BORDER CROSSING AND LINK ROAD IMPROVEMENT PROJECTS: FINAL REPORT

EXECUTIVE SUMMARY	(Attached)
SUMMARY OF ECONOMIC EVALUATION	(Attached)
SUMMARY OF ENVIRONMENTAL IMPACT ASSESSMENT STUDY	(Attached)

DETAILED SCOPE OF WORKS (JPMC MEETING, DEC 1997, SOFIA) (Attached)

Phare

FC45 Preparation of CBC Programming
Bulgaria - Greece

Road Network Review for the Southern Border Region and Identification of High Priority Border Crossing and Link Road Improvement Projects

Final Report (Final Draft)

Volume 1 Text & Figures

August 1997

Road Network Review for the Southern Border Region and Identification of High Priority Border Crossing and Link Road Improvement Projects: Final Report

JOB NUMBER: AF5487			DOCUMENT REF: 2072-T.515			
A	Final Draft	Team	AKP	ACS	AKP	Aug. 1997
		Originated	Checked	Reviewed	Authorised	Date
evision	Purpose Description	WS ATKINS CONSULTANTS LIMITED				

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APPENDIX A - Origin - Destination Data Analysis

APPENDIX B - Technical Details of the Economic Evaluation

APPENDIX C - Terms of Reference

APPENDIX D - SWOT Analysis of Southern Border Region

EXECUTIVE SUMMARY

This study has been undertaken [illegible] between Bulgaria and Greece [illegible] under Co-operation Programme [illegible] programme are

EXECUTIVE SUMMARY

This study has been concerned with the identification of improvements to road transport links between Bulgaria and Greece as part of the European Union's PHARE multi-sector Cross-Border Co-operation Programme (CBC). The objectives of that programme are:

- to promote co-operation between EU and PHARE countries;
- to promote co-operation between the adjacent border regions;
- to encourage economic development;
- to contribute to the development of the Trans-European Network of strategic routes (TENs).

This study has sought to identify the highest priority schemes based on technical need and economic performance consistent with the above Programme objectives and to identify candidates for medium and longer term investment and any associated investments.

Recently, investment in road rehabilitation in Bulgaria has been made through EIB/EBRD funding as part of the TRANSIT programme. This PHARE study and any resulting highway improvement proposals would complement the TRANSIT programme.

DETERMINATION OF PRIORITIES

In the short term, schemes which provide good economic return, can be finalised and implemented without delay and which conform to established objectives can form part of a priority investment programme. The evaluations undertaken during this study have clearly identified a priority investment programme. The findings of the evaluations are summarised below.

ed border crossings at Goce Delcev - Drama, Rodozem - Xanti, and Markaza - lave little or no strategic traffic significance. The existing routes through Kulata Celo provide access to the Aegean and Adriatic ports via the Via Ignatia for al traffic from Eastern and Western Europe.

evaluation clearly demonstrates the greater economic viability of providing ature improvements in the existing TEN corridors.

ment

sting lowland TEN corridors will experience minimal environmental effects resulting ly infrastructure improvements. In contrast, new border crossings in mountainous ill create substantial environmental effects.

ructure Improvements on Greek Territory

ing infrastucture improvements on Greek territory, funded in part by European Union , reinforce the importance of existing crossing points.

ity Programme

e basis of the evaluations the TEN corridors have been selected for investment as part of riority programme. Schemes on these corridors will satisfy the following criteria:

they will generally produce positive economic benefits;

they will be capable of speedy design and implementation;

they will be viewed as pragmatic, practical investments to international communication routes.

package of schemes has been proposed (referred to as the Project) for the priority ogramme.

for new border crossings on the grounds of providing for international traffic cannot le. The large capital costs required and low potential returns do not provide a ntly viable investment for the priority programme. The lead-in times for these ements and the implementation difficulties inherent in their remote locations put them the priority programme.

NTIAL FOR NEW BORDER CROSSINGS

reek and Bulgarian authorities are proceeding with work to provide a crossing at Goce . It is clear that a great deal of support exists for this crossing and that momentum is ı ıtained. Opportunities exist to reinforce the economic and social development rements of the Goce Delcev region and to maximise the tourism potential of the region.

regional areas of Smoljan and Kardjali have a need for economic and social opment. There is a need to provide structural reform of the financial and banking ms to facilitate foreign investment and create the environment for inward investment. ever, improved communications are a precursor to increased investment. If goods and ces cannot access the regions efficiently the investment will not be forthcoming.

provision of new border crossings at either Rudozem or Markaza are not without nical difficulty and the environmental impacts could be significant. In addition, support hese crossings from the Greeks is not as strong as for Goce Delcev.

pears to be a case for opening one further crossing (after Goce Delcev) in order to n up the southern border region to tourism and external markets. At this stage the case is ngest for Rudozem on the following grounds:

- it is less technically difficult than Markaza;
- it will not compete with existing crossings;
- the Greeks have less support for a crossing at Markaza;
- the opportunities for tourism are greater in the Smoljan region;
- opportunities exist to provide improved routes to Kardjali and Dospat which can then benefit from a new crossing;

ıssing is central to the southern region network and can benefit a wide area.

re been recommended that the Goce Delcev crossing forms part of the medium ıme and that a new crossing at Rudozem forms part of a longer term programme. ıtigations and reviews will be required for both programmes.

ECT

t incorporates structural inspections and assessments, review of existing ın (1 designs, detailed engineering design for rehabilitation and upgrading of ıer management and construction works to the E79, E80 and E85. Included design elements of the project are provision of climbing lanes over specific ridge widening and tunnel works. Also required under the Project is the appraisal ine and recurrent maintenance equipment resource of the GRA regional authorities.

ct, as detailed in Appendix C (Terms of Reference) represents an immediate ıt programme in excess of 70 million ECUs.

ER WORK

ge of further work has been recommended in order to maintain the current ım of the priority programme and to begin the necessary reviews and investigations ıed' ın and long term programmes.

iate Further Work

ı Investment Programme

necessary to implement the priority investment programme includes the pre-cation of consultants to provide Technical Assistance to the GRA for implementation Project and the formal procedures for securing European Union funding for the Project.

ım Term Programme

diate further work for this programme relates to the review of the scheme designs for ık roads and border crossing facilities related to the Goce Delcev crossing and for the w of the Maritza Motorway schemes. Such work would include:

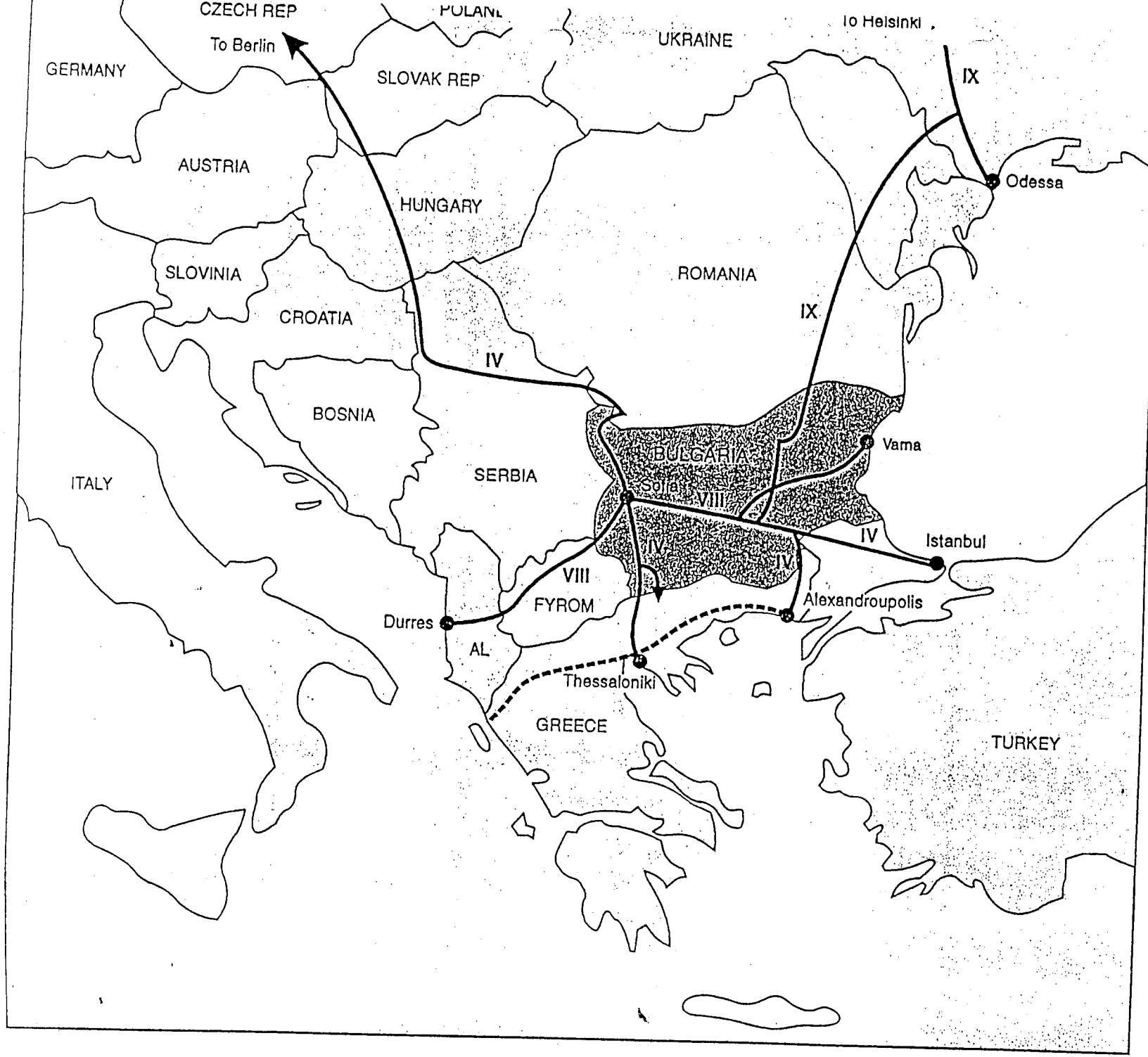
review of detailed designs (possibly in relation to EU standards for new roads);

- review of environmental assessment (EIA necessary for Maritza Motorway);
- review of the cost estimates and risks;
- review or preparation of designs associated with corridor improvements between Simitli and Goce Delcev.

Longer Term Further Work

The longer term further work relates to the investigations associated with the long term programme : the border crossing at Rudozem. Typical assesments include the following:

- completion of the feasibility studies being undertaken by the Bulgarians for the crossing and link roads;
- undertaking a feasibility study for the Greek link roads;
- review of the above feasibility studies;
- preparation and review of scheme designs;
- preparation and review of environmental assesments;
- development study to define the extent of the network of roads to be improved as part of the package; this will include the roads between Smoljan and Kardjali and Smoljan and Dospat as a minimum;
- detailed pavement assesment of the relevant road network;
- preparation and review of scheme designs for network improvements;
- preparation and review of cost estimates;
- economic evaluation.



KEY

- Trans European Corridors (Crete)
- Goce Delcev Border Crossing and Bulgarian Road II-19
- Via Egnatia

FIGURE 2.2
Strategic Network Context and Border Crossing Goce Delcev

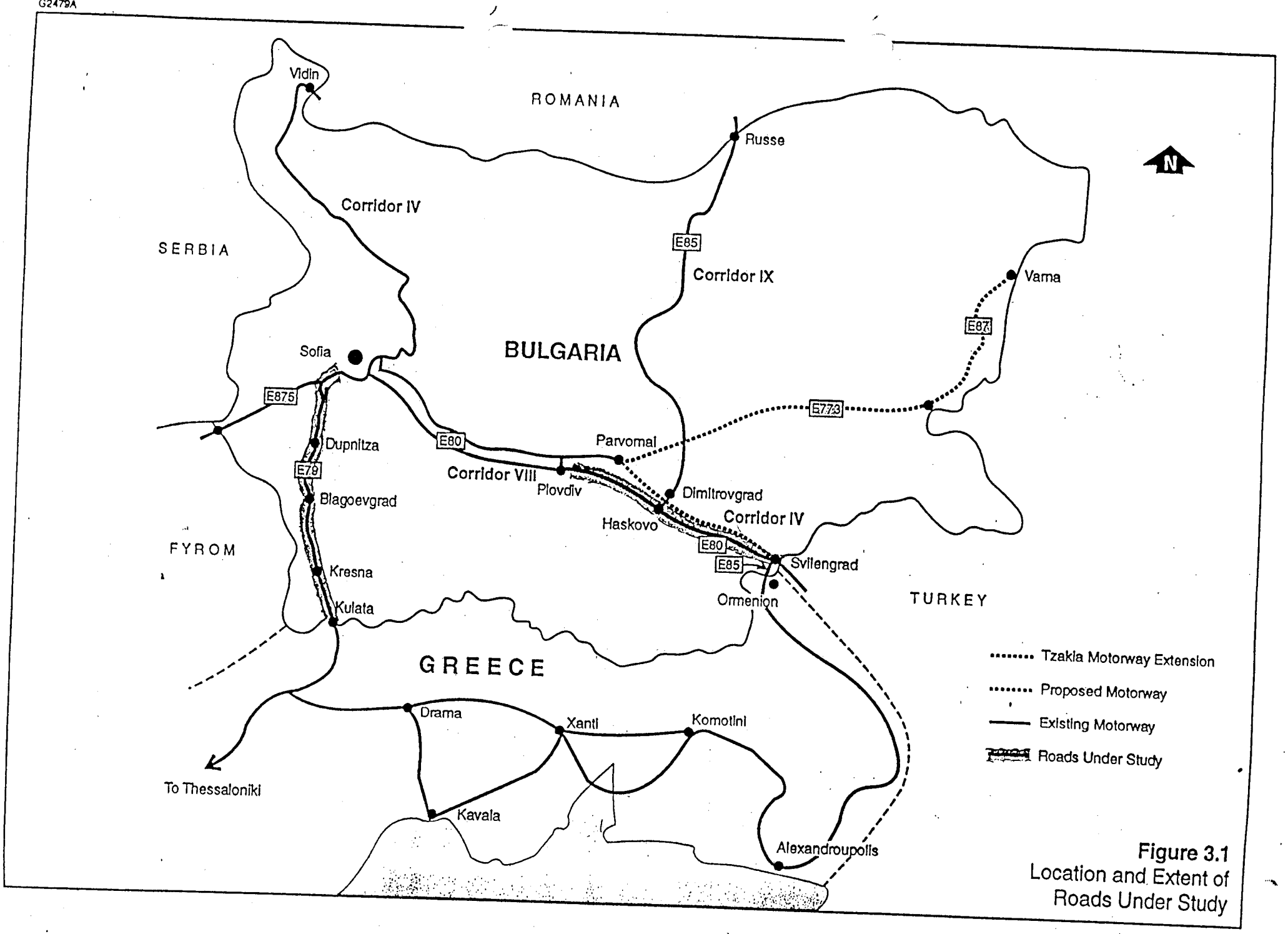


Figure 3.1
Location and Extent of
Roads Under Study

Table 2.6 - Summary of the Economic Evaluation of Packages of Schemes in the Bulgari. Southern Border Region

Road Section	Scheme Costs		Road User Benefits	NPV	Benefit Cost Ratio	IRR (%)	FYRR (%)
	Financial	Economic					
	55.40	35.92	61.82	25.90	1.72	21%	19%
E79	7.81	4.67	5.44	0.77	1.16	14%	14%
E80/E85	23.95	15.48	11.24	-4.24	0.73	7%	8%
Routes to Crossing at Goce Delchev	24.79	16.01	8.80	-7.21	0.55	3%	8%
Routes to Crossing at Rudozem	24.37	15.74	11.51	-4.24	0.73	7%	10%
Routes to Crossing at Makaza (no tunnel)	35.85	23.16	11.51	-11.65	0.50	2%	7%
Routes to Crossing at Makaza (with tunnel)	105.03	67.16	48.43	-18.72	0.72	7%	9%
Rehab to II & III Class Roads (with Tunnel at Makaza)	91.97	59.37	48.43	-10.94	0.82	9%	10%
Rehab to II & III Class Roads (no Tunnel at Makaza)							

All costs and benefits in ECU millions.
All costs and benefits are discounted to 1995 (Discount Rate = 12%).
Financial costs include 5% consultants fees.
(1) Routes coloured purple on Figure 2.6
(2) Routes coloured green on Figure 2.6
(3) Routes coloured orange on Figure 2.6
All packages of schemes have been evaluated for 15 years although some specific works within the packages which relate to patching and surface dressing only (all III class roads) have been evaluated over 7 years

Summary and Conclusions

4.46 The environmental effects and recommended mitigation measures are summarised in Table 4.5. The environmental effects of the proposed projects are predicted to be low/nil. Incorporation of the recommended mitigation proposals will ensure that the effects are avoided or minimised. Such minor effects as do occur will be principally in the construction stage.

Table 4.5 - Summarised Environmental Effects and Recommended Mitigation Measures for the Proposed Projects on the E79, E80 and E85

Environmental Factor	Predicted Effect	Recommended Mitigation Measures
Air quality	low/nil	• Construction vehicles and plant to have well-tuned engines with effective exhaust systems.
Cultural heritage	low/nil	• Any finds to be reported to the Site Engineer who will seek professional advice.
Ecology and nature conservation	low/nil	• Careful siting of work/construction camps and sites. • No wastes' disposal in streams. • Minimise erosion. • Approved aggregate sources.
Landscape	low/nil	• Compensatory tree plantings. • Careful disposal of all wastes. • Careful site maintenance and abandonment.
Traffic noise and vibration	low/nil	• Complete projects in built up areas as quickly as possible. • Advance notification of blasting.
Pedestrians, cyclists, community effects	low/nil	• All work sites to be well protected and kept safe. • Alternative access provided as needed.
Vehicle travellers	low/nil	• Traffic control measures.
Water quality and drainage	low/nil	• All sites kept safe and well marked • Adequate storage of liquids. • Immediate spill clean-up and safe disposal. • Provision of good quality sanitation and waste water disposal. • Careful design of drainage systems.
Geology and soils	low/nil	• Acquisitions and dispositions of soils and wastes by approved methods.

TECHNICAL DESCRIPTION OF THE PROJECT "E79, E80/E85, E871 REHABILITATION"

Sections	from km	to km	Effect lengt h km	Required Design	Width before impr.	Width after impr.	Data Source	Cost mECU
Lot No1 - EIB E-79, Vladaia - I-1/I-6 junction	**275+100**	**283+400**	**4.820**				**Total EIB:**	**40.000**
							Total Lot 1:	**11.474**
Vladaia - I-1/I-6 junction	275+100	278+720	3.620	Rehabilitation and upgrading of single carriageway to dual 2-lane carriageway	10.5/14	18/20	WSAtkins Repotr	5.656
Vladaia - I-1/I-6 junction	282+200	283+400	1.200	Rehabilitation of single carriageway to dual 2-lane carriageway	10.5/14	18/20	WSAtkins Repotr	1.818
Daskalovo Junction	283+400			New construction			Project Fiche	4.000
Lot No2 - EIB E-79, E-871 Pernik - Dupnica	**283+400**	**328+850**	**39.20**				**Total Lot 2:**	**28.526**
E-79	283+400	302+800	19.400	Rehabilitation and upgrading of wide single carriageway to dual 2-lane carriageway from junction I-6/I-1 to Dolma Dicania, with approximately 1.7 km realignment of existing single carriageway north of Dolma Dicania, including rehabilitation of structures	10.5/14	18/20	WSAtkins Repotr	16.960
E-79	302+800	304+100	1.300	Rehabilitation of urban wide single carriageway and structures through Dolma Dicania			WSAtkins Repotr	0.300
E-79	304+100	322+600	18.500	Rehabilitation and upgrading of single carriageway and structures	7.5/12	7.5/12	WSAtkins Repotr	3.220

Sections	from km	to km	Effect length km	Required Design	Width before impr.	Width after impr.	Data Source	Cost mECU
Variant Darvena -km 11 E-871 /I-6/			3.500	Construction of a new I class road	-	7/10.5	Project Fiche I	1.421
Kjustendil by-pass E-871 /I-6/	18+500	26+100	7.600	Rehabilitation of existing single carriageway	7/10.5	7/10.5	Project Fiche II	0.947
Konevo by-pass E-871 /I-6/	31+000	33+720	2.720	Construction of a new I class road	-	7/10.5	Project Fiche III	3.182
Kjustendil - Radomir E-871	44+300	51+600	7.300	Rehabilitation of existing single carriageway	7/10.5	7/10.5	Project Fiche IV	1.364
Kjustendil - Radomir E-871	63+500	65+900	2.400	Reconstruction	7/10.5	7/10.5	Project Fiche V	0.5
Karvavoto E-871	77+685	78+600	0.915	Rehabilitation and upgrading of single carriageway to dual 2-lane carriageway	7/10.5	18/21	Project Fiche VI	0.632
Lot No3 - Phare CBC E-79, Dupnica-Kulata	**328+850**	**439+370**	**97.77**				**Total PHARE CBC:**	**34.670**
							Total Lot 3:	**25.290**
Dupnica - Blagoevgrad	***328+850***	***360+000***	***27.65***					
							Total Lot 5, Section 1:	***9.620***
	328+850	333+820	4.970	Rehabilitation of existing single carriageway	7/10.5	7/10.5	WSAtkins Repotr	1.400
	330+750	332+350	1.600	Climbing lane northbound to single carriageway, ending at Usoika	7/10.5	10.5/14	WSAtkins Repotr	0.290
	343+320	350+100	6.780	Rehabilitation of single carriageway and structures	7/10.5	7/10.5	WSAtkins Repotr	1.100
	347+100	348+700	1.600	Climbing lane southbound to single carriageway	7/10.5	10.5/14	WSAtkins Repotr	1.550
	348+700	349+600	0.900	Climbing lane northbound to single carriageway	7/10.5	10.5/14	WSAtkins Repotr	0.840
	350+100	360+000	9.900	Rehabilitation of dual 2-lane carriageway and structures at Blagoevgrad	18/20	18/20	WSAtkins Repotr	2.730
	350+100	352+000	1.900	Climbing lane southbound to single carriageway	7/10.5	10.5/14	WSAtkins Repotr	1.710

Sections	from km	to km	Effect length km	Required Design	Width before impr.	Width after impr.	Data Source	Cost mECU
Blagoevgrad - Sandanski	*360+000*	*425+820*	*66.320*				*Total Lot 3, Section 2:*	*13.710*
	360+000	389+700	29.700	Rehabilitation of single carriageway and structures	7/10.5	7/10.5	WSAtkins Repotr	5.230
	389+700	406+700	17.000	Rehabilitation of single carriageway	7/10.5	7/10.5	WSAtkins Repotr	2.970
	390+700	391+200	0.500	Minor modifications to existing design to accommodate improvements to sight-lines and horizontal alignment in north part of Kresna	7/10.5	7/10.5	WSAtkins Repotr	0.050
	406+700	412+167	5.467	Rehabilitation of single carriageway	7/10.5	7/10.5	WSAtkins Repotr	0.980
	412+167	425+820	13.653	Rehabilitation and upgrading of single carriageway, widening and improvement to bridge at 418+820	7.5/12	7.5/12	WSAtkins Repotr	4.480
				- existing single carriageway from 412.167 to 418	7/10.5	7/10.5		
				- existing wide single carriageway from 418 to 418.8	10.5/14	10.5/14		
				- existing single carriageway from 418.84 to 426.81	7/10.5	7/10.5		
				- provide climbing lane northbound from 416.2 to 418	7/10.5	10.5/14		
				- minor improvements to existing wide single carriageway to provide climbing lane northbound from 418 to 418.8	10.5/14 7/10.5	10.5/14		
				- widen and improve bridge at 418.82				
				- provide climbing lane southbound from 418.84 to 420	7/10.5	10.5/14		
				- provide climbing lane northbound from 420 to 421.2	7/10.5	10.5/14		
				- provide climbing lane southbound from 421.2 to 422.3	7/10.5	10.5/14		

Sections	from km	to km	Effect length km	Required Design	Width before impr.	Width after impr.	Data Source	Cost mECU
Sandanski - Kulata	***425+820***	***439+800***	***3.80***				***Total Lot3, Section 3:***	***1.960***
	426+810	427+900	1.100	Provide climbing lane southbound	7/10.5	10.5/14	WSAtkins Repotr	0.280
	432+200	433+300	1.100	Provide climbing lane northbound	7/10.5	10.5/14	WSAtkins Repotr	0.510
	434+500	435+800	1.300	Provide climbing lane southbound, includes widening of two bridges	7/10.5	10.5/14	WSAtkins Repotr	0.980
	439+070	439+370	0.300	Provision of final approach road, parking areas with access roads to border crossing post			WSAtkins Repotr	0.190
Lot No4 - Phare CBC E-80/E-85			**44.143**				**Total Lot 4:**	**9.377**
E-80, Haskovo - Svilengrad	***330+277***	***364+730***	***32.393***				***Total Lot 4, Section 1:***	***6.120***
	330+277	332+285	2.008	Provide climbing lane eastbound	7.5/11	11.25/ 14.75	WSAtkins Repotr	0.230
	305+470	305+750	0.280	Railway overpass	-	-		0.500
	334+120	352+495	18.375	Rehabilitation of single carriageway and structures	7.5/11	7.5/11	WSAtkins Repotr	3.000
	353+000	364+730	11.730	Rehabilitation of single carriageway and structures	7.5/11	7.5/11	WSAtkins Repotr	2.390
E-85	***0+000***	***3+420***	***11.750***				***Total Lot 4, Section 2:***	***3.257***
	364+730 184+400	369+000 185+040	4.270 0.640	Road link with Maritsa Motorway				1.111
	0+000	3+420	3.420	Rehabilitation of single carriageway and structures from E-80/E-85 junction to Bulgaria-Greece border	7.5/11	7.5/11	WSAtkins Repotr	0.591
	0+000	3+420	3.420	Rehabilitation of single carriageway to dual 2-lane carriageway	18/20	18/20	WSAtkins Repotr	1.555