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The World Bank

Report No: ICR2410

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IBRD-48590)

ON A

LOAN

IN THE AMOUNT OF 15 EURO MILLION
(US$ 20.0 MILLION EQUIVALENT)

TO THE

FORMER YUGOSLAV REPUBLIC OF MACEDONIA

FOR A

SECOND TRADE AND TRANSPORT FACILITATION PROJECT

December 12, 2012

Sustainable Development Department
Transport Unit
Europe and Central Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective November 1, 2012)

Currency Unit = Euro (€)
€1.00 = US$ 1.29
US$ 1 = MKD 47.45

FISCAL YEAR

ABBREVIATIONS AND ACRONYMS

APL	Adaptable Program Loan	IFRS	International Financial Reporting Standards
ASR	Agency for State Roads	ISR	Implementation Status Report
BCP	Border Crossing Point	MCA	Macedonia Customs Administration
CPS	Country Partnership Strategy	M&E	Monitoring and Evaluation
DIN	Deutsches Institut fur Normaung	MKD	Macedonia Denar
DPL	Development Policy Loan	MZ	Macedonian Railways
EBRD	European Bank for Reconstruction and Development	PAD	Project Appraisal Document
		PDO	Project Development Objectives
EC	European Commission	PCN	Project Concept Note
ECA	Europe and Central Asia	PIU	Project Implementation Unit
EIA	Environmental Impact Assessment	QER	Quality Enhancement Review
EIRR	Economic Internal Rate of Return	RAP	Resettlement Action Plan
EMP	Environmental Management Plan	SEE	South East Europe
EU	European Union	TOR	Terms of Reference
FM	Financial Management	TTF 2	Second Trade and Transport Facilitation Project
fYR	Former Yugoslav Republic of		
HDM	Highway Development and Management Model	TTFSE I	Trade and Transport Facilitation in Southeast Europe
ICR	Implementation Completion and Results Report	USD	United States Dollars
		WB	World Bank
		WWTF	Waste Water Treatment Facility

Vice President:	Philippe Le Houérou
Country Director:	Gerard A. Byam (Acting)
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FORMER YUGOSLAV REPUBLIC OF MACEDONIA
Second Trade And Transport Facilitation Project

CONTENTS

FORMER YUGOSLAV REPUBLIC OF MACEDONIA
SECOND TRADE AND TRANSPORT FACILITATION PROJECT

DATA SHEET

A. Basic Information

Country:	Macedonia, former Yugoslav Republic of	Project Name:	Second Trade and Transport Facilitation Project
Project ID:	P091723	L/C/TF Number(s):	IBRD-48590
ICR Date:	12/17/2012	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	GOVERNMENT OF REPUBLIC OF MACEDONIA
Original Total Commitment:	USD 20.00M	Disbursed Amount:	USD 20.52M
Revised Amount:	USD 20.00M		
Environmental Category: B			
Implementing Agencies: Agency for State Roads			
Cofinanciers and Other External Partners:			

B. Key Dates

Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	12/09/2004	Effectiveness:	12/17/2007	12/17/2007
Appraisal:	04/06/2007	Restructuring(s):		05/07/2010 12/02/2010 06/24/2011 03/16/2012
Approval:	05/29/2007	Mid-term Review:		
		Closing:	09/30/2011	06/30/2012

C. Ratings Summary

C.1 Performance Rating by ICR

Outcomes:	Satisfactory
Risk to Development Outcome:	Low or Negligible
Bank Performance:	Satisfactory
Borrower Performance:	Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)			
Bank	**Ratings**	**Borrower**	**Ratings**
Quality at Entry:	Moderately Satisfactory	Government:	Moderately Satisfactory
Quality of Supervision:	Highly Satisfactory	Implementing Agency/Agencies:	Satisfactory
Overall Bank Performance:	Satisfactory	**Overall Borrower Performance:**	Moderately Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators			
Implementation Performance	**Indicators**	**QAG Assessments (if any)**	**Rating**
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	Yes	Quality of Supervision (QSA):	None
DO rating before Closing/Inactive status:	Moderately Satisfactory		

D. Sector and Theme Codes

	Original	**Actual**
Sector Code (as % of total Bank financing)		
Central government administration	11	11
Railways	9	9
Roads and highways	80	80
Theme Code (as % of total Bank financing)		
Regional integration	33	33
Trade facilitation and market access	67	67

E. Bank Staff

Positions	**At ICR**	**At Approval**
Vice President:	Philippe H. Le Houerou	Shigeo Katsu
Country Director:	Gerard A. Byam	Orsalia Kalantzopoulos
Sector Manager:	Juan Gaviria	Motoo Konishi
Project Team Leader:	Liljana Sekerinska	Paulus A. Guitink
ICR Team Leader:	Elizabeth C. Wang	
ICR Primary Author:	Elizabeth C. Wang	

F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document)
Facilitate the movement of trade between the Borrower and neighboring countries in South East Europe, through removal of selected border-zone bottlenecks, and improving the efficiency and quality of road and rail services along Trans-European Transport corridor X in fYR Macedonia.

Revised Project Development Objectives (as approved by original approving authority)

(a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Percentage of reduction in border crossing waiting time for cars and buses per lane at Blace BCP			
Value quantitative or Qualitative)	Entrance - 6 veh/hr ; exit - 5 veh/hr	Reduction by 75% of baseline - Entrance - 24veh/hr; exit - 20veh/hr		Entrance - 24 veh/hr ; exit - 31 veh/hr, target achieved
Date achieved	10/23/2008	01/01/2011		06/30/2012
Comments (incl. % achievement)	Baseline values for vehicle waiting time were 10 min/veh at entrance and 12 min/veh at exit. Achieved values were 2.5min/veh at entrance & 1.9min/veh at exit. Reductions in waiting time for vehicle were 75% for vehicle at entrance & 84% at exit. Target achieved.			
Indicator 2 :	Elimination of freight train processing delays additional to the scheduled 90 minutes processing time at rail Corridor X border stations.			
Value quantitative or Qualitative)	450 minutes	90 minutes		90 minutes
Date achieved	02/01/2007	01/01/2011		06/30/2012
Comments (incl. % achievement)	Telecommunication system installed along rail corridor X works well and has also been utilized by neighboring railways in Kosovo and Serbia. The trade facilitation aspect of railway operation has been strengthened and is evidenced in the joint border operations between the railways in Serbia and Kosovo. The freight train processing time at the border has been reduced to the scheduled 90 minutes. Target met			

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Completion of physical works for upgrading of 7.3 km section to motorway standards.			
Value (quantitative or Qualitative)	only one mixed carriageway	Two carriage-ways (two lane motorway) in each direction.		Two carriageways in each direction
Date achieved	02/01/2007	12/31/2009		06/30/2012
Comments (incl. % achievement)	The motorway is fully operational, all drainage and road safety related measures identified in the Supervision Consultant snag lists have been implemented, 100% achieved. All land acquisition cases have been resolved.			
Indicator 2 :	Improved accessibility to Tabanovce border zone by full segregation of directional traffic, vehicle types, as well as local traffic			
Value (quantitative or Qualitative)	Works not started	Completed		Works completed
Date achieved	02/01/2007	12/31/2009		06/30/2012
Comments (incl. % achievement)	Achieved results beyond improved accessibility and travel time and costs. The upgraded road allows all border agencies (customs, phyto-sanitary, veterinarian agency) to be located in one place for export processing to be carried, saving traders and transporters time and costs. 100% achieved. Import freight now only makes one stop at the terminal (instead of a minimal of two previously) and export freight can now pass the border directly without any stops (instead of one additional stop previously).			
Indicator 3 :	Percentage of completed physical works for border crossing restructuring			
Value (quantitative or Qualitative)	Works not started	100% completed		Works at 97.6% completed. Furnishing completed
Date achieved	02/11/2007	01/01/2009		06/30/2012
Comments (incl. % achievement)	Asphalting of 200 square meter of the existing border crossing lane and installation of the control cabin still have to be completed. 97.6% of works completed			
Indicator 4 :	Detailed implementation and operational plan for new toll system			
Value (quantitative or Qualitative)	N/A	Study completed		study defining new toll system completed
Date achieved	02/01/2007	02/17/2012		06/30/2012
Comments (incl. % achievement)	Government will fund implementation of recommendations from own resources. 100% achieved			
Indicator 5 :	Leakage of potential toll revenue collection reduced			
Value	larger than 40%	10% or less		

(quantitative or Qualitative)				
Date achieved	12/31/2006	12/31/2011		
Comments (incl. % achievement)	Indicator was dropped as a part of May 2010 restructuring			
Indicator 6 :	Modern railways telecommunication system connecting with Serbia, Greece, Kosovo, Tabanovce, Skopje, Volkovo and Gevgelija			
Value (quantitative or Qualitative)	System only partially installed and not functional	Completed		System operational at national level
Date achieved	02/01/2007	02/17/2012		06/30/2012
Comments (incl. % achievement)	Modern telecommunication system allows joint railway border operations, already agreed with Kosova and Serbia. Modern system is also used by neighboring railways. Target met			
Indicator 7 :	Procedures, protocols, and technology to share relevant data and information agreed upon by Customs and Railways and Interface established			
Value (quantitative or Qualitative)	System does not exist	System fully functional		System fully functional
Date achieved	02/01/2007	02/17/2012		06/30/2012
Comments (incl. % achievement)	Protocols for data exchange with new Customs system established. Railways can exchange data electronically with Customs			

G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	03/28/2008	Satisfactory	Satisfactory	0.31
2	11/06/2008	Satisfactory	Satisfactory	0.31
3	05/11/2009	Moderately Unsatisfactory	Moderately Unsatisfactory	3.36
4	05/13/2010	Satisfactory	Satisfactory	8.50
5	02/14/2011	Satisfactory	Moderately Satisfactory	11.60
6	08/10/2011	Satisfactory	Moderately Satisfactory	16.01
7	04/09/2012	Moderately Satisfactory	Moderately Satisfactory	20.52
8	06/25/2012	Moderately Satisfactory	Moderately Satisfactory	20.52

H. Restructuring (if any)

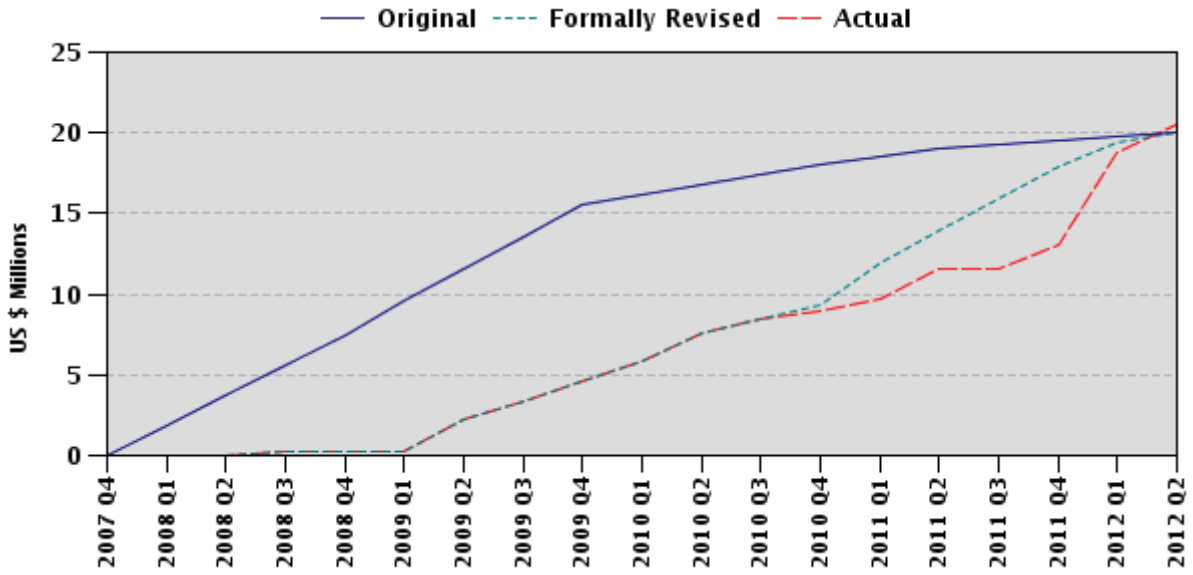
Restructuring Date(s)	Board Approved	ISR Ratings at Restructuring	Amount Disbursed at	Reason for Restructuring & Key Changes Made

	PDO Change	DO	IP	Restructuring in USD millions	
05/07/2010	Y	MU	MU	8.50	(i) increased financing of expenditure from 78% to 100% (ii) reduced scope of components 3&4 (iii)revised RAP& Loan Agreement
12/02/2010	N	S	S	10.30	(i) reallocation of expenditures category (ii) adjustment of disbursement table to show the correct amount of eligible expenditure
06/24/2011	N	S	MS	13.04	(i) extend project closing date by 6 months
03/16/2012		S	MS	20.52	(i) extend project closing date by 3 months

If PDO and/or Key Outcome Targets were formally revised (approved by the original approving body) enter ratings below:

	Outcome Ratings
Against Original PDO/Targets	Satisfactory
Against Formally Revised PDO/Targets	Satisfactory
Overall (weighted) rating	Satisfactory

I. Disbursement Profile



1. Project Context, Development Objectives and Design

1.1 Context at Appraisal

During Project preparation, the central objective for Macedonia was EU membership. In December 2005, the European Council granted candidate status to the country and the expectation was that a decision by EU to start accession negotiations would come relatively soon. The improvements in transport links and trade facilitation were important steps toward meeting membership criteria. During this period, Macedonia was still recovering from the disintegration of Yugoslavia into a number of new states with the breakdown of traditional links between economic units located in the South Eastern Europe region. Macedonia had to establish trading relationships with new countries and expand its markets to new regions, especially the EU.

Macedonia is a landlocked country located at the crossroads of transport Corridor X[1], and the less frequented west-east regional transport Corridor VIII (Durres –Tirana – Skopje – Sofia - Burgas/Varna). Corridor X forms the backbone of Western Balkan transport infrastructure, connecting Bosnia, Croatia, Macedonia, Kosovo and Serbia with Western Europe, Greece (deep-sea port of Thessaloniki), Turkey and Central Asia. This north-south transport link in Macedonia connects Nis and Skopje and other South East European countries to the Greek EU port at Thessaloniki. This is also the main access point for Kosovo through the Blace Border Crossing Point (BCP) which connects to Corridor X in Skopje. Thus, high priority was placed on the improvement of the physical and operational conditions in road and rail along the Nis-Skopje-Thessaloniki section of Corridor X. The potential benefits expected were a reduction in transport costs and other trade related transaction costs such as customs and other border agency processing.

The Project titled Second Trade and Transport Facilitation Project (TTF 2) was a scale up from the Trade and Transport Facilitation in Southeast Europe (TTFSE I) project which closed in December 2005[2]. TTFSE I for Macedonia was a US$14.5 million project to reduce non-tariff costs to trade and transport and to reduce smuggling and corruption at border crossings. TTFSE I was a part of a regional program aimed to strengthen and modernize the customs administrations and other border control agencies in Albania, Bosnia, Bulgaria, Croatia, Macedonia, and Romania. Serbia, Montenegro and Moldova later joined the program bringing the total to eight countries. In the Implementation Completion and Results Report (ICR), TTFSE I was rated satisfactory with substantial institutional development impact as the performance of Macedonia's border agencies improved significantly, reducing border crossing times, increasing customs efficiency and revenue collection, and supporting customs integrity.

TTFSE I mostly supported technical assistance for reform and funded limited infrastructure improvements – mainly upgrading border crossing facilities. TTF 2 had an investment focus upgrading a road segment on Corridor X, promoting the electronic inter-agency and cross border exchange of trade data, and strengthening the functioning of key transport corridors. The Project activities were oriented towards compliance with EU pre-accession requirements. The activities reflected the commitments agreed in the Memorandum of Understanding for the development of the core transport network between the European Commission and the Western Balkan countries

[1] Corridor X = Belgrade – Nis – BCP Tabanovce – Skopje – BCP Bogorodica – Thesaloniki and branch Xd= Pristina – BCP Blace - Skopje
[2] ICR Report No. 35869, May 25, 2006

(Luxemburg, June 2004). In its Progress Report for 2006, the EC noted that Macedonia made reasonable progress in the area of transport networks, especially through its participation in the Southeast Europe Transport Observatory and the development of its core regional transport network, especially Corridor X[3].

1.2 Original Project Development Objectives (PDO) and Key Indicators (as approved)

The Project's objective was to facilitate the movement of trade between the Borrower and neighboring countries in South East Europe, through removal of selected border-zone bottlenecks, and improving the efficiency and quality of road and rail services along Trans-European transport corridor X in fYR Macedonia[4].

Achievement of the PDO was to be confirmed by using the following key indicators:

(i) Percentage of reduction in border-crossing waiting time for cars and buses per lane at the Blace Border Crossing Point (BCP);
(ii) Elimination of freight train processing delays additional to the scheduled 90 minutes processing time at rail Corridor X border stations.

Intermediate outcome indicators were:

(i) Completion of Physical works for upgrading of 7.3 km section to motorway standards, reduced queuing of trucks and improving traffic safety in the Tabanovce border zone by full segregation of directional traffic, vehicle types, as well as local traffic;
(ii) Percentage of completed physical works for border crossing restructuring;
(iii) Percentage of improved throughput for cars and buses per lane at border crossing Blace (Veh/hr);
(iv) Detailed implementation and operational plan for new toll system;
(v) Leakage of potential toll revenue collection reduced[5];
(vi) Modern railways telecommunication system connecting with Serbia, Greece, Kosovo, Tabanovce, Skopje, Volkovo and Gevgelija;
(vii) Procedures, protocols, and technology to share relevant data and information agreed upon by Customs and Railways and Interface established.

1.3 Revised PDO (as approved by the original approving authority) and Key Indicators, and reasons/justification.

[3] The Project also supported the recommendation of the 2005 Networks for Peace and Development which posited that for South Eastern Europe, there needed to be better integration of national networks to foster regional cooperation between the EU and its neighbors, as well as among the neighboring countries themselves.
[4] Annex 3 (Results Framework) of the PAD was incorporated into the Minutes of Negotiation as Attachment 5 so there are no discrepancies in the performance indicators. As to the PDO, the Loan Agreement has two slight differences in the statement of PDO. In the Loan Agreement: (i) border-zone *infrastructure* bottlenecks and (ii) *on the territory of the Borrower* instead of in fYR Macedonia. The italics are in the Loan Agreement. The discrepancies are not material.
[5] This indicator was dropped as a result of the May 2010 Restructuring.

The PDO was not revised but one intermediate indicator was dropped during the May 2010 Restructuring when Component 3 was substantially reduced in scope. This component originally consisted of two parts. The first was the development of the specifications for modern electronic tolling equipment. The study for this part was completed. The second consisted of the physical provision and installation of modern electronic tolling equipment. This second part was cancelled due to the Government's decision in 2009 to proceed with the toll modernization on Corridor X as a part of a larger motorway concessioning program. The reduction in the scope for Component 3 meant that the key performance indicator (vi) *"significant leakages of toll revenue collection, facilitated by automated vehicle counts and classifications"* was dropped.

1.4 Main Beneficiaries

The main beneficiaries are exporters, traders and road users including residents of other South East Europe (SEE) countries. The reduction of non-tariff constraints lowers transport and trade transaction costs, and consequently, causes the reduction of the economic distance to markets. Freight transporters benefited from the improved efficiency at the Macedonia Railways and Customs Administrations by the upgrading of telecommunication and data transfer. Macedonia's manufacturers benefitted from the installation by Customs of new software facilitating the processing of international and domestic trade and transport documentation, which also enhances trade and competitiveness. The upgrading of the section of the road Corridor X between Border Crossing Point (BCP) of Tabanovce – Kumanovo benefit cross border road users between Serbia and Macedonia; the Tabanovce BCP operates now 24/7. The secondary beneficiaries are the local communities along the upgraded road. They now have better access to the Corridor and improved connectivity to employment, trade, education, and social opportunities. The upgrading of the passenger terminal at the Blace BCP benefits passenger traffic between Kosovo and Macedonia. The secondary beneficiaries are the border personnel because of improved working conditions in Blace.

1.5 Original Components

The Project loan amounted to €15.0 million – equivalent to US$20.0 million[6] – and was expected to fund the following five components:

Component 1: Upgrading road corridor X, the section from BCP of Tabanovce to Kumanovo, to motorway standards (€10.7 million)
The component supported the construction of a new one-directional carriageway with a width of 11 meters, parallel to the existing road, separated from it by a 4-meter median. The existing parallel road was made one-directional, and widened from what was 7.5 meters to 11 meters. The total length of the upgraded section is 7.3km. The detailed designs dated from 1995 following German DIN standards[7] for 4-lane motorways. The design included provisions for traffic management in the approach to the Tabanovce border crossing station, eliminating mixed queuing of trucks, buses, and passenger vehicles, as well as mitigating traffic accident risks resulting from queuing vehicles. The component included the consultancy contract for the supervision of construction.

Component 2: Upgrading the passenger terminal at the Blace BCP with Kosovo (€1.7 million).

[6] Because of exchange rate fluctuation, the US dollar amount disbursed in (higher) than the US$20.0 million approved. See Annex 1 for detail.
[7] Deutsches Institut fur Normaung

This component funded the construction of necessary facilities for the customs, border police and other related agencies at the border for vehicles. It removed the temporary facilities, replaced them with permanent control, inspection, and administration structures. The capacity of the passenger border crossing was increased from 2x2 to 2x3 lanes, with a separate inspection lane for buses. The component included the consultancy contract for the supervision of civil works.

Component 3: Modernizing the Road Toll collection System (€4.5 million).
The component would retrofit the toll stations along Corridor X with new equipment that would allow for both cash and non-cash (electronic) payments. At the time of Project preparation, the toll collection system was a cash system with substantial leakages of potential toll revenues. This component supported technical assistance to develop the specifications for the toll equipment that met the system's requirements, as well as preparation of the procurement documents for the purchase of such modern electronic tolling equipment. The component also funded the purchase of the new toll system.

Component 4: Support completion of telecommunication system modernization along rail Corridor X and support harmonization of freight data software applications by Railways and Customs (€3.1 million)
There were two inter-related subcomponents: one subcomponent supported the Macedonian Railways (MZ) in the completion of a modernized railway telecommunication system that would allow the use of electronic train management applications along rail corridor X, including the provision of essential software modules. The other subcomponent supported the Macedonia Customs Administration (MCA) in the modernization of hardware, system, equipment, and software applications that would allow electronic rail freight data processing using data from the selected Railways software application through an interface with the MCA information systems. MCA and MZ freight data sharing would speed up the processing and electronic recording of freight customs declarations, etc.

Component 5: Project implementation support (€0.4 million)
This component covered the usual goods and services required to support the successful Project implementation such as audit services; project management, financial management, procurement, technical services, training and incremental operating costs. The project was implemented by staff of ASR, MZ and MCA (i.e. civil servants), so there were no PIU related consultant expenses.

1.6 Revised Components

In the Level 2 Restructurings in May and in December of 2010, the scope of the components was revised and funds reallocated. The percentage of expenditures to be financed from the loan was increased from 78% to 100%. The provision and installation of modern electronic tolling equipment under Component 3 was removed as per the Government's request, as the Government intended to include toll equipment installation as part of a larger motorway concession scheme outside of the Project. The procurement of information technology equipment and the procurement of software for data exchange between MZ and MCA under Component 4 were removed because it became unnecessary as Customs had migrated to a web based system. This reduction in scope for Component 4 did not require a change in project performance indicators. The financing was reallocated as indicated below:

Project Component	Original Financing EUR (millions)	Revised Financing[8] EUR (millions)
1. Upgrading of Road Corridor X Tabanovce – Kumanovo to Motorway Standard	7.10	11.79
2. Reconstruction of Blace Border Crossing Point	1.40	2.00
3. Modernization of Road Toll Collection System	3.50	0.02
4. Rail Corridor X Telecommunication and Software Improvement	2.60	1.09
5. Project Implementation Support	0.40	0.10
Total Project Costs	**15.00[9]**	**15.00**

1.7 Other Significant Changes

Besides the revisions in the Project components and funding percentage, the May 2010 Restructuring also amended the Resettlement Action Plan The revised RAP provides for compensation to be made to all affected people through: (i) the Agency for State Roads (ASR) with a special account into which it deposits in full the money determined as required and (ii) for the Macedonia Customs Administration, a dedicated budget line or, where compensation amount determined by the courts, the Treasury as Customs is a unit of the Ministry of Finance. The Loan Agreement was revised to reflect an updated approach to land acquisition. In addition, there were two additional Level 2 Restructurings approved in June 2011 and March 2012 which extended the Closing Date in total by nine months from September 30, 2011 to June 30, 2012.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

The Project had a long gestation. However, the background analysis for Bank involvement was sound and was a continuation of the Bank's involvement in the sector. The PCN Review took place in December 2004, while the appraisal was more than two years later in April 2007 with Board Approval in May 2007. The extended preparation time for this Project might have resulted from the fact that the task team was preparing a regional program to follow up on the first Trade and Transport Facilitation in Southeast Europe[10]. As per management recommendation at the

[8] The results of the restructurings from May and December 2010. There were four Level 2 restructurings approved by the Country Director. The results of the May and December 2010 restructurings are described in Section 1.6. June 2011 Restructuring extended the closing date from September 30, 2011 by six month to March 31, 2012 and the March 2012 Restructuring extended the closing date from March 31, 2012 to June 30, 2012.

[9] The total Project cost was €20, of which the Bank loan originally financed 78%. After the May 2010 Restructuring, the percentage of expenditures financed from the loan was increased to 100%.

[10] The PCN for the second TTFSE program took place in March 2005, soon after the concept for this Project was approved The original TTFSE program was focused on road transport and Customs. The proposed second TTFSE program was to be opened to all eight TTFSE countries, expanding to Kosovo and Turkey and would cover other

PCN, the task team also explored the concept of a horizontal Adaptable Program Loan (APL)[11]. These efforts might have diverted time and attention from processing this Project. There was also a question of commitment from the counterparties. Changes in the Government in 2006 improved the environment for moving the Project forward. A QER review was undertaken in November 2006 to ensure the project design was consistent with the concept approved at PCN review. The comments from QER peer reviewers were thorough[12].

The Project funded needed investments which would facilitate movement of trade. The investments matched the objectives. The design of the Project did not change much from identification to Board even though the preparation was long. In the early stage of project preparation[13], the team conducted a workshop in Skopje with the participation of the main stakeholders: Customs, Ministry of Transport, Ministry of Economy, border agencies, the private sector and the donor community. The workshop reached a consensus on the need for the Project which would build on the results of the first Trade and Transport Facilitation and concentrate on corridor development and strengthen the border agency cooperation. This consensus building strengthened the commitment of the government officials involved. With the changes in the Government in 2006, the progress of Project preparation was rapid.

The design was slightly complex with two components for roads, a component for rail and customs, and a component for customs – all implemented by the respective counterparts. This complexity was understandable as trade facilitation is a multi-faceted issue and as Macedonia had a small lending program, a transport project had to cover many areas. The rationale for tying together the Project components was the development of Corridor X; the design was within the rubric of trade facilitation with an emphasis on transport infrastructure. The focus of the Project was to improve transit and trade along Corridor X by: (i) streamlining rail border crossing procedures and rail information systems, (ii) removing remaining bottlenecks in Corridor X road infrastructure and optimizing the road toll collection systems, and (iii) improving freight information flows along Corridor X, building on the integrated border management strategy of fYR Macedonia. The Project also implemented some of the recommendations from a Bank study titled "A Framework for the Development of the Transport System in South East Europe"[14]. This study was a piece of insightful analytic work which enhanced the Project's design. The study recommended, among other things, a corridor approach to transport development[15] and development of integrated border management principles.

The main issue with the Quality at Entry was the due diligence undertaken on resettlement. A senior social specialist was involved in project preparation. In the Decision Meeting minutes, the

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transport modes such as rail, extend the pilot sites to other BCPs and introduce the program to new areas such as global security requirements.

[11] An APL would have provided more flexibility by allowing a sequential entry of potential TTFSE II countries into the program. However, the horizontal APL concept was abandoned because of the different states of readiness of Western Balkan countries and the accession of Bulgaria and Romania to the EU in 2007 would have made determination of scope, value, and the timeframe of participation in a regional APL speculative. The team noted in the Decision Meeting minutes that a key constraint was trade and transport facilitation activities not included in country programs with no slots or preparation budget available for stand-alone trade and transport facilitation projects.

[12] The team might have been able to incorporate more of the suggestions from QER reviewers were it not for the compressed time frame between QER and Board approval.

[13] Identification Mission, Aide Memoire, October 2004.

[14] *Reducing the 'Economic Distance' to Market* – A Framework for the Development of the Transport System in South East Europe, December 2004.

[15] The Bank has a Euro 275.2 million project upgrading sections of Corridor X in Serbia, supporting traffic safety and institutional development.

Lead Environmental Specialist confirmed that all safeguard requirements including resettlement and land acquisition issues had been satisfactorily addressed for appraisal. QAG did not review the Quality at Entry.

Land acquisition was an issue that received heightened attention by the team during preparation. The ISDS and the Resettlement Action Plan addressed the land acquisitions needed for Component 1 in the motorway upgrade in some detail. A total of 102 households were expected to lose part of their land holdings due to the road expansion. No residence was affected. Upfront work on expropriation was completed and a census of affected persons was taken. On the other hand, land acquisition for Component 2 for the Blace BCP was convoluted. During the pre-appraisal mission in December 2006, the team was informed that contrary to information previously received, "the land ownership at Blace BCP, about 50% of the land affected by the proposed border crossing project site is actually privately owned."[16] The team stated that "expropriation process in the border zone bears a high risk of delays in implementation and disbursement plans for the Blace component, which was envisioned for the first year of project implementation." The mission noted that similar land expropriation experienced under TTFSE I for the Tabanovce border crossing modernization resulted in implementation delay. This view was shared by the Ministry of Finance. The team provided the Government with various options, among which was to omit this component from the project. There were a number of email exchanges exploring options to minimize the need for land expropriation at Blace BCP. A few weeks before negotiations, the Government confirmed that neither construction nor operation of the Blace BCP would require land acquisition/expropriation[17]. This understanding was reflected in the PAD[18]. Negotiations for the Project proceeded on this basis. Anyway, land acquisition at Blace became an issue at implementation.

The risks identified in the PAD did not materialize partly because two of the five risks were related to the modernization of the toll collection system which was dropped from the Project during implementation. The land acquisition risk was not identified as a risk maybe because substantial work on social safeguards for Component 1 and land acquisition for Component 2 was not considered.

2.2 Implementation

The PDO objectives were straightforward, realistic and responsive to the Borrower's needs. The implementation of the project activities resulted in meeting the Project performance indicators without much difficulty. Project implementation was undertaken by ASR, MZ and MCA separately with their own staff. This implementation arrangement enhanced ownership and supported knowledge transfer; however, it required a higher level of implementation support from the Bank team. For example, each entity conducted its own procurement, with involvement from the Project Coordination Unit within ASR. ASR coordinated the activities for FM and reporting to the Bank. Project Management was at some point rated MU because ASR project staff was

[16] Pre-Appraisal Mission, Aide Memoire, December 11-28, 2006.
[17] Attached to email dated April 11, 2007 was a letter from the Ministry of Transport and Communication assuring the Bank that there was no land acquisition issue at Blace. See also email dated January 11, 2007.
[18] Annex 10, para. 7 of the PAD stated that "No land acquisition is required [for modernizing the Blace passenger border crossing] since all proposed construction activities will take place within the boundaries of the actual state owned facility. A small piece of land in the middle of the existing border crossing facility will be purchased from the actual owner on a voluntary basis. Currently, the border crossing agency has a long term lease to use this land, but the Ministry of Transport has confirmed plans to purchase it from the owner before commencing the construction."

overloaded. However, ASR in general did a commendable job in coordinating project activities with Customs and Railways. As noted in the Decision Meeting minutes and the risk matrix in the PAD, this implementation arrangement posed risk. It has worked well because of the efforts of the counterparts and the Bank supervision team.

Project design improved during implementation:

(i) For Component 1, road upgrading. The original road design was from 1995. During implementation, there were many design improvements to align the road geometrics to new standards, utilize new technology and more significantly to incorporate inputs from local communities. The design changes partly explained the 18 percent price increase on the civil works compared to the contract price. During implementation, a consulting study not originally planned was funded updating motorway road signs to be consistent with EU standards. The new road sign designs will be installed for the rest of the Corridor.

(ii) For Component 4, two pieces of software for Customs were added: (a) the Inward Processing System[19] and (b) the Integrated Information System[20]. These software investments resulted in faster completion of customs procedures, better fiscal collection and decreased corruption possibilities and overall improvement of conditions for doing cross border trade. For the Inward Processing System, procedures that used to take weeks are now processed in a matter of days. Status of application is accessible via the internet and location of the bottleneck identified. The Integrated Information System is already used by more than 52,500 users with more than 118,500 custom documents/payments computed using the system. In the EC Progress Report, these Customs software were cited as contributions to lowering costs to private operators, improving processing times by Customs and engendering transparency and governance. One piece of software was added for Railways, the integrated financial and human resources management. This would improve financial management and operation performance for the railways as the labor and operations are now linked. This would allow Railways to identify the people involved in each assignment and to better manage its human resources and contain costs.

(iii) Measures to mitigate environmental impact also improved during implementation. This is discussed in Section 2.4

Project delays were not excessive for civil works heavy project

The Project closing date was extended by nine months in total from September 30, 2011 to June 30, 2012. The extension of closing date was within reason and the implementation issues that arose were not unusual for a project with substantial civil works activities. The implementation of Component 1 encountered delays from slow mobilization, lack of essential resources to complete construction[21], delay due to design changes and budget constraints of the Borrower[22].

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[19] The Inward Processing System includes automatic customs confirmation on the quantities of exported finished goods against the imported materials used as input for export. Processes which were carried out manually were completely paper-based and could take weeks, are now paperless and processed within a few working days. This not only improves the efficiency of the customs processing but also reduces corruption opportunities and increases accountability. The Inward Processing System is particularly beneficial to the textile and steel industries.

[20] This software was the development of an integrated information system. The upgrade has: (i) improved processing time from 7 minutes to currently 2 minutes, (ii) improved tax collection, (iii) improved operational effectiveness of the customs administration, (iv) increased security of information and (v) increased transparency of Customs operation.

[21] Such as Shutters for the New Jersey Barriers.

The implementation period coincided with a time of economic crisis so the lack of counterpart funding delayed works in some instance. In the 2010 restructuring, the funding from the loan was increased to 100% of the expenditure thus eliminating the need for counterpart funds. Delay in civil works was also due to land acquisition issues as construction could not start until land acquisition was completed. The RAP and Loan Agreement were later revised to allow expropriation to proceed even though the Court was still adjudicating the land acquisition so long as adequate funds for the land purchase were set aside in the ASR budget. At the time of Project closure, there were 4 to 5 cases pending but they have now been adjudicated. Under Macedonia law, once the Court makes an award, the compensation payment from the state budget is automatic. The delays in payment of compensation were a serious safeguard violation which were corrected in time and detracted slightly from the very positive outcome. (See discussion in Section 2.4.)

Similarly the implementation of Component 2 was delayed because while the Bank received assurance during project preparation from the Government[23] that there was no need for land acquisition, at Project implementation it was determined that 27 parcels of land would have to be acquired[24]. At Mid Term Review in mid-2009, the bidding documents for the Blace BCP were still not issued because of unresolved land acquisition issue. Civil works on this Component were able to proceed because of a change in the law and in the Bank social safeguard practices mentioned above. For the Blace BCP improvement, the Project funded activities which provided visible and obvious improvements in Blace operations (i.e., segregation of private vehicle and bus traffic, facility for buses, improved working conditions for border staff and accessibility to restrooms and other conveniences such as currency exchange for passengers). At closure, Component 2 was 97.6 percent completed and the extension to the border crossing which houses the additional lanes, the bus control facility and the administration building are operational. However, the rehabilitation of the 200 meters of the old BCP road segment is still not completed as of the finalization of this ICR. The asphalting of the 200 m^2 is not costly and would not take much time. The contractor's failure to complete is due to contractual issues on other projects the contactor has with the Government. Until the other issues are solved, there is little Customs could do other than paying another contractor to complete the asphalting.

Component 3 (modernizing road toll collection) met the original performance indicator.

The Project included modernization of toll collection system as a project component because it was found[25] that annual toll collection 'leakages" were between 30 percent and 65 percent of potential revenue which amounted to €7 million annually. Toll revenues are a principal means by which the Government recoups its road investments, funds maintenance and gains from transit traffic[26]. Any investment on Corridor X road had to address the toll revenue dimension. The Government has utilized the study funded by this Component to develop bidding documents for

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[22] In 2010, funding from the loan was increased to 100% of the expenditure. The implementation period was also a time of economic crisis so the lack of counterpart funding delayed works in some instance.
[23] In a letter from the Minister of Transport and Communication to Country Manager dated April 10, 2007.
[24] The reason provided was that the Housing Authority which at the time was responsible for the border crossing facilities was mistaken. The Customs Authority only took over the responsibility for the border crossing facilities when the law changed in 2008.
[25] Toll collection was cross referenced to traffic counts.
[26] Currently it takes between 1-1/2 hour to 2 hours to drive through Macedonia on Corridor X. Once the Corridor is completely upgraded, the time is about 1-1/4 hour. Therefore toll revenue is an essential way for Macedonia to capture some of the benefits of being a transit country.

toll modernization options[27]. Based on the findings of the study, EBRD is assisting the Government to concession Corridor X which would include toll equipment upgrade. The Government in the meantime has improved the toll collection by hiring new toll collectors and installing automatic vehicle counters which corroborate the toll collections. In 2007, tolls were collected from 13 million vehicles while in 2011, the figure improved to about 25 million vehicles. Additional payment options (aside from cash) have been introduced. Traffic police does random checks on whether car driver has toll receipt. There was also a law change eliminating toll exemptions from 30 plus categories to just 4 exemption categories. While the indicator for toll leakages was dropped as a result of 2010 Restructuring, this indicator has essentially been achieved.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

The results framework measured the movement of trade, the first objective, but less so on the improvement of road and rail services, the second objective. The counterparts had the capacity to monitor as the indicators were specific to the Project. The key PDO indicators measured border crossing waiting time for vehicles at Blace road BCP (Component 2), and freight processing delays at the rail Corridor X border stations (Component 4). These indicators measured improvement in trade facilitation. The M&E indicators were used to improve Project performance. The intermediate indicators measured the performance of the four project components. Given the disparate nature of the components, there was no PDO indicator that tied the four components together. Component 1 (the road upgrade), at 79 percent of project cost, was the most significant activity in terms of financing, yet there was no PDO indicator. An indicator using the International Roughness Index could easily measure the improvement of road conditions for road users and thus the quality of road services. The M&E design could have been better . M&E during implementation was rated MU at some point as the data towards achievement of target had not been fully updated. This was rectified relatively promptly. Customs also provided the baseline data for Component 2.

2.4 Safeguard and Fiduciary Compliance

Safeguard Compliance is rated 'Moderately Unsatisfactory'

World Bank safeguards specialists participating in preparation and supervision missions. A detailed safeguard review was completed during Mid Term Review. The civil works were carried out in compliance with the provisions of the Environmental Management Plan.

The Project was an environmental category "B" project. The environmental compliance did not have major issues during implementation. Several improvements were made to the original EIA and EMP. For Component 1, the original EIA recommended sound barriers for noise mitigation along the upgraded motorway. Based on technical findings, consultation and villagers' preference, double glazed windows and air-conditioning for 70 homes were selected as the

[27] EBRD is working with the Government on the modernization of maintenance and toll collection and looking to involve the private sector. ASR has about 70 staff. Road maintenance and the collection of tolls are contracted out to Macedonia Pat, a public enterprise with about 1,600 staff. The toll revenue in 2011 was about €18 million; while the maintenance expenses were about €15 million of which a large component is labor cost.

preferred option. For Component 2, the EIA mentioned the need to expand the existing waste treatment unit at the Blace BCP. Customs suggested that a new unit be installed. The EIA was revised and an EMP drafted. These improvements involved more effort from both the Client and the Bank team. At the time of finalization of this Report, these two environmental mitigation measures are close to completion.

Land acquisition was a recurrent issue during Project preparation and implementation. Land acquisition was anticipated for Component 1, the road upgrade. There were about 102 affected owners involving about 294 parcels of land. A Resettlement Action Plan was disclosed and consultations held during project preparation. In March 2009, the Bank team discovered that compensation for land acquisition for Component 1 was not paid to all landowners prior to start of works by the contractor (as some landowners initiated court cases to increase compensation amounts), contrary to the provisions of the RAP and the Loan Agreement. The Bank sent a Warning of Suspension of Disbursement for the part of the Loan related to the road upgrade. This issue was resolved a few months later when the Bank and the Government agreed that the RAP and Loan Agreement would be modified to reflect Bank policy effective after this Project was approved. Works were allowed to proceed if the availability of funds for compensation payment was assured. The local law was also changed. The implementing entity for Component 1, ASR, had the capacity to implement social safeguard. At the time of this Report, all land acquisition cases have been adjudicated.

Land acquisition for Component 2, the Blace BCP, was minor but unanticipated. The RAP was revised during Implementation to include Blace. The resolution of land acquisition at Blace delayed the start of civil works for more than two years. More important, the possibility of land acquisition at Blace was glossed over in the rush to get to Project negotiations.

Fiduciary Compliance is rated as 'Satisfactory'.

Fiduciary Compliance is rated satisfactory although FM had been rated by the team as moderately satisfactory because the accounting was completed on Excel spreadsheet and proper FM software was not used. However, during implementation of the Project, the FM function was well-staffed by an experienced full time specialist who was familiar with Bank FM and disbursement procedures. Financial and audit reports under the Project were submitted generally on time. The auditors issued unqualified opinions on the project financial statements for the audited period of FY 2008, 2009, 2010 and 2011. It should be noted that ASR has plans to update its FM system as a part of introducing an enterprise network system, financed through another Bank operation. Procurement has been satisfactory. It should be noted that IT procurement could be difficult to implement under Bank procedures as the Terms of Reference cannot be so technically specific as to limit vendors but not too general as to not meet the requirements. The capacity of the counterparts supported by the Bank's IT procurement specialist have accomplished the procurement without issues.

2.5 Post Completion Operation/Next Phase

TTF 2 is a successful project. ASR has hired the consultants that worked on Component 1 as permanent staff. The capacity ASR gained from this operation will be applied in the next phase of the Corridor X road upgrade which just started in September 2012 and is financed by EBRD, EIB, EU and Government. After this, the entire road Corridor X in Macedonia would be at motorway standard. As mentioned, EBRD is assisting the Government to prepare Corridor X for

concessioning; the private sector besides toll collection would have operations and maintenance obligations. Blace BCP is operating smoothly. When Bank transport team members travelled recently from Kosovo via Macedonia to Belgrade, they confirmed that border crossing at Blace was efficient as noted during the ICR field trip. The other project activities are already integrated into various counterparts' operations. The benefits of the software investments are obvious and would be maintained and improved as the counterparts have competent IT departments.

During this time of fiscal constraints and economic turmoil, it is essential to improve Macedonia's competitiveness through cost efficient investments that promote growth. Corridor X is the country's most important transport link and is a resource to be leveraged. Among the possibilities are: (i) rehabilitation of national roads that link into Corridor X with a focus on improving access to market for agricultural products, outputs from automotive, garment and footwear industries and other employment generating sectors,. (ii) development of agricultural collection points with road links to facilitate small farmers to sell to high income markets, and (iii) initiate dialogue on trade facilitation with the Government of Greece to solve transit issues on the Greek side as improving Corridor X has to be a regional effort.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

The Project's objectives remain very relevant to Macedonia. The circumstances for Macedonia have not changed since Project preparation. The CPS for fYR of Macedonia for FY 11- 14 stated that the country's future growth and development will depend fundamentally on the pace of EU accession. One of the main objectives is faster growth by improving competitiveness. Efforts include reducing bottlenecks in the business environment and infrastructure. The Project's objective of removing bottlenecks on Corridor X remains relevant as this Corridor is transport link for Southeastern Europe with Western Europe, the seaport in Greece and Turkey. The Project's objectives were to (i) facilitate the movement of trade and (ii) improve the efficiency and quality of road and rail services. The design of the results framework had deficiencies. While the indicators measured well the first objective, i.e., the movement of trade, no indicator was included to measure the increase in efficiency and quality of the road and rail services. After a project restructuring, one of the intermediate indicators, i.e., the installation of toll collection equipment was dropped after the Government decided to pursue a private financed option. Dropping one of seven intermediate indicators did not impact the relevance of the design.

The Project activities directly support trade and results are significant in terms of timesaving and improved competitiveness. Corridor X is one of the Pan European corridors which is of high priority for EU transport investments. The implementation arrangement was relevant as it was consistent with Project design; the road agency, Railways and Customs separately implementing their specific component. The implementation support provided by the team while labor intensive transferred knowledge and enhanced capacity in the various beneficiary organizations.

The high importance of the Project's objective and design has also been highlighted in the First Programmatic Competitiveness DPL for Macedonia presented to the Board in November 2012[28].

[28] Program Document, Report No. 67989-MK.

One pillar of the DPL is to improve the efficiency of trade logistics services and build upon the achievements in trade facilitation under the Project and is focusing on further improvements on border processing times.

3.2 Achievement of Project Development Objectives.

The achievement of the PDO was rated as 'Satisfactory'.

PDO indicators and the intermediate outcome indicators were all fully met. The civil works at the Blace BCP while not fully completed, did not impact the achievement of the indicators. See Data Sheet for details. Moreover, the activities of the Project contributed to the achievement of the PDO in ways that were not measured in the Results Framework. For the first PDO, the facilitation of trade: (i) the motorway upgrade segregated freight traffic near the Tabanovce BCP and established a road link to the border processing terminal where all border agencies (customs, phyto-sanitary, veterinarian agency) are now located, saving traders and transporters time and costs. Import freight now only makes one stop at terminal and export freight can now pass the border directly without any stops; (ii) the new telecommunication system in railways has led to initiatives for joint operation of border railway stations with Serbia and Kosovo; and (iii) the software upgrades at Customs simplified customs processing with efficiency gains that dwarfed the modest financial investment. For the second PDO, the Project did not incorporate measurement of design for improvement in efficiency and quality road and rail services. However, these are some of the key achievements: (i) the Project's road and rail investments generated significant benefits including at least USD440,000[29], (ii) a dual carriageway, with a separate medium, significantly improved safety, (iii) the road signs have been modernized and are consistent with EU standards and will be implemented to the rest of the Corridor, (iv) the revised motorway design improved access and safety for the local population and (v) the conditions of the road have improved as the quality of the ride is smooth. While the evaluation of the PDO would have merited an Highly Satisfactory evaluation, the lack of measurement for efficiency and quality of road and rail services was a factor to finally rate this as Satisfactory.

3.3 Efficiency

The Efficiency of the Project was rated as 'Satisfactory'.

The Project's efficiency in this ICR was analyzed using the same methodology as at Appraisal. Efficiency in achieving the PDO in terms of EIRR is at 12.5% taking into consideration Component 1 for the road upgrade and Component 4 for the purchase of the rail corridor communication equipment. It must be said that the benefit of the Project is much more than the road users' costs saving resulting from the motorway upgrade and the revenues from leasing the excess capacity on the fiber optic cables. The other benefits of the Project including the time savings at the Blace BCP[30] and at Tabanovce BCP[31] and for the freight train processing[32] and the efficiencies in Customs processing due to software upgrades would, if measured, substantially improve the EIRR of the Project. Unfortunately, these efficiency gains are difficult to

[29] See Annex 3 on Economic Analysis.
[30] This was a PDO indicator. The timesaving for vehicles at the Blace BCP dropped from 10 minutes per vehicle at entrance to 2.5 minutes and 12 minutes at exit to 1.9 minutes.
[31] Refer to Section 3.2 for details.
[32] This was a PDO indicator. Freight train processing has dropped from 450 minutes to the scheduled 90 minutes.

substantiate except anecdotally. Even so, the ex post EIRR of 12.5% is within the range of acceptability.

The ex-ante economic analysis of the project: *NPV @ 12% was € 131.6 million and EIRR was 144.28%.* The analysis evaluated separately three project components because each component captured varying types of benefits and had different expected economic life. The evaluation did not take into account the Blace passenger terminal component, as the required data for evaluating benefits could not be obtained. Table 1 presents the ex-ante economic analysis results.

Table 1: Ex-ante Economic Analysis Results

Component	Cost (2007 million Euro)	EIRR (%)
1. Upgrade BCP to Tabanovce-Kumanovo road to motorway standards	10.7	12.3
2. Upgrade passenger terminal at Blace border	1.7	
3. Modernize road toll collection system	4.5	190.8
4. Support railways and customs telecommunication system modernization	3.1	81.3
Overall	20.0	144.3

As shown, the economic return for the road upgrade has always been on the low side at 12.3%, while the return on improvement on the toll collection system was substantial.

In the ex-post analysis the road upgrade (Component 1) and the purchase of the rail corridor communication equipment (Component 4) were evaluated. Economic analysis was not calculated for the Blace upgrade (Component 2). For Component 3, installation of toll equipment was dropped, although toll collection improved from 13 million vehicles in 2007 to 25 million vehicles in 2011. The road upgrade analysis used the actual construction costs which were 18 percent higher than the appraisal estimate and 10 percent higher than the contract amount and the actual traffic growth rate from 2008 to 2012 which was 5 percent higher than the one estimated at appraisal. As noted previously, much of the construction cost increase was the result of design revisions which improved access, reduce environmental and social costs and updated the design based on new standards. The traffic growth might have been even higher but for the economic crisis in Greece during this period. The ex-post economic analysis shows that the EIRR of Component 1 decreases to 11.40 percent compared to the appraisal estimate of 12.3 percent.

The rail corridor communication optical network is used for connectivity needs to connect the tele-commands systems, video surveillance, IP telephony, and IT network. The benefits of its usage include connections to remote systems and relief from expenses for telecommunication services. The other benefit is that the free capacity of the optical network is leased to telecom operators and other renters. The ex-post evaluation of the purchase of the rail corridor communication equipment yields an EIRR of 21.0 percent considering the initial investment of €1.79 million and revenues realized annually from the lease/rent of part of the excess capacity on the fiber optics cable at approximately €400,000 per year. Table 2 presents the economic evaluation results of the overall project. The ex-post overall project EIRR is 12.5 percent and the actual total NPV is €0.44 million.

Table 2: Overall Project Economic Evaluation Results

Component	Cost[33] (million €)	EIRR (%)	NPV (million €)
Upgrade BCP to Tabanovce-Kumanovo road to motorway standards	13.81	11.4	-0.42
Rail corridor communication	1.79	21.0	0.86
Total	15.60	12.5	0.44

3.4 Justification of Overall Outcome Rating

Rating: Satisfactory

This Project has delivered on the results as all indicators for the Project (PDO and Intermediate) were met. The results achieved in meeting the PDO were beyond the targets for the indicators. One intermediate indicator was dropped as a result of a 2010 Restructuring. However, the outcome rating was assessed as satisfactory before and after the Restructuring. The EIRR on investments that were measurable was above 12 percent. In addition, the Project improved during implementation the revisions in road design and the development of software for Customs. While a new toll system was dropped, the Government made a concerted effort to improve toll collection on the existing equipment and steps are now underway to upgrade the toll system on the entire Corridor X. The communication and IT upgrades for Railways and Customs were not costly activities, however, their impact on efficiency and transparency has proved to be substantial based on feedback from manufacturers and private companies. Blace BCP still has minor civil works outstanding. However, the processing of vehicles at Blace BCP is efficient so the PDO indicator related to Blace has been met.

3.5 Overarching Themes, Other Outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

The Project was not designed from the perspective of poverty alleviation and social development. However, the revisions of the motorway design incorporating consultations with communities added important mobility, access, and social features that resulted in unanticipated secondary benefits. It also raised the awareness in ASR of the relevance of stakeholders' consultation on road design which is not required for Bank's safeguard purposes.

(b) Institutional Change/Strengthening

The technical support provided to the staff of the beneficiary organizations that implemented the project has provided direct capacity building for these organizations. The software solutions are IT investments that promote institutional change. For instance, in the Inward Processing System, all procedures are web based, the approval process takes a few days and the status of the approval can be checked via the internet. This openness of information has increased transparency, facilitated trade and reduced the possibility of corruption. The system also freed up the Customs staff from paper work to more analytic assessment of submissions. The introduction of integrated

[33] The Project was denominated in Euros while the Bank system recorded in USD as presented in Annex 1.

financial and human resource management software at MZ will facilitate a more efficient deployment of staff, better costing and operation management will strengthen financial management of MZ. The road signal study, besides improving traffic safety on the project road segment, will contribute to better integration of road safety in road design and operation as the recommendations of the study are being introduced to the rest of the corridor and other major roads in Macedonia.

(c) Other Unintended Outcomes and Impacts (positive/negative)

The Project funded the installation of fiber optic cables for MZ. There are surplus fiber optic capacities which are made available on a remunerative basis to communication companies. This has resulted in the development of competitive communication services in Macedonia. The demonstrative efforts of success MIS implementation in MZ have encouraged others government entities such as ASR to adapt modern information systems. These are some of the unintended positive outcomes. The Macedonian freight companies have benefitted from the improved efficiency of customs processing and road improvements. There are more than 2000 road freight companies based in Macedonia. They compete for business all over Europe.

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

A beneficiary survey was not carried out.

4. Assessment of Risk to Development Outcome

Rating: Low

The risk to Development Outcome is low as the benefits of the investments are already apparent and the feedbacks from beneficiaries have been positive. Proper maintenance for the road upgrade is essential to achieve the expected benefits. ASR, the road agency, receives at least 20 percent of the excise tax on petrol so there is a source of revenue other than annual budget allocation. If Corridor X is concessioned, the risk of inadequate maintenance would be reduced. The MZ and MCA have technical departments that will continue supporting the implementation of the software and IT solutions. Proper upkeep of the Blace BCP is not much of a risk.

5. Assessment of Bank and Borrower Performance

5.1 Bank Performance

(a) Bank Performance in Ensuring Quality at Entry

Rating: Moderately Satisfactory.

The Quality at Entry is rated as moderately satisfactory. The Project components were well chosen after a stakeholders' workshop and were thus demand driven and the counterparties were committed to the Project supported activities. Overall the Project was well conceived – a corridor concept with an infrastructure investment focus. The road design which was from 1995 could have benefitted from some updating during project preparation. However, the rating is most

impacted by the land acquisition needs for Blace which was not identified at Project preparation. This has resulted in subsequent implementation delays. The Bank overrelied on the Government's representation of the situation at the Blace BCP. The Bank should have done its own due diligence. The PCN review, the QER and the Decision Meeting all delved into relevant Project issues. Quality assurance at entry was appropriate.

(b) Quality at Supervision

Rating: Highly Satisfactory.

The Project started with a number of negative features. The original road upgrade design was dated. During implementation, the design improved: replacing an overpass with a butterfly junction which improved access for nearby villages, heightening an underpass to allow for a school bus to transport students from both sides of a village, improving drainage to prevent flooding, moving a junction by a few hundred meters to reduce land acquisition and lower the impact of pollution and, lastly, building a road spur from the main road to the customs facilities to divert freight traffic and relieve congestion at the Tabanovce BCP. There was a road sign study and new road signs were installed. Many of the benefits arising from Component 1 were due to the actions of the Supervision team. Land acquisition both for the road upgrade and for the Blace BCP, if handled improperly, could have resulted in reputational damage to the Bank. The Loan covenant violation for road upgrade was efficiently resolved. The social safeguards documentation was revised to include Blace. Response from the Bank team was quick but no short cut was taken.

Besides addressing inherent problems, the Supervision team was proactive. The IT investments and the new environmental mitigations were added in the latter part of Project implementation. These actions contributed to the Project's positive results. There was no real problem with implementation except for delays which were beyond the Bank's control. The supervision team included specialists in road engineering, rail, environment and social safeguards, and IT procurement. The technical expertise was evident as the team improved many technical aspects of the project. The Mid Term Review was comprehensive, the aide memoires and ISRs were, in general, very detailed and there was active project management as reflected in the four restructurings. The management of the Project from the Skopje office, in the latter part of the supervision period, provided more timely and hands on assistance to the Borrower.

The counterparts (road agency, Railways, Customs) were very appreciative of the Bank support throughout Implementation. For this and the reasons cited above, the Quality at Supervision is rated Highly Satisfactory.

(c)Justification of Rating for Overall Bank Performance

Rating: Satisfactory.

The Satisfactory rating for overall Bank performance resulted from: (i) a moderately satisfactory rating for the quality at entry; and (ii) a highly satisfactory rating for the Project supervision that improved the project components and provided substantial technical support to the Government.

5.2 Borrower Performance

(a) Government Performance

Rating: Moderately Satisfactory

The rating of the Government's performance is impacted chiefly by the inaccuracies regarding land acquisition at the Blace BCP. This has resulted in substantial delay in the implementation of Component 2. Otherwise, the Government has been responsive in handling issues as they arise – such as the compliance with RAP on Component 1. The revision of law in toll collection and the police action against toll collectors demonstrated that the Government was committed to reforming the tolling regime. At times, the difficulty in securing counterpart funding has resulted in delays. However, it is understandable given the economic situation and fiscal constraints during the implementation period. The success of this Project is due in large part to an enabling environment engendered by the Government that promotes accountability, transparency and institutional reform.

(b) Implementation Agency or Agencies Performance

Rating: Satisfactory

The performance of ASR is satisfactory. The violation of the social safeguards covenant on land acquisition was because of the contractor which was unintentional and quickly resolved. ASR actively worked to improve the project design and performed well its coordinating function in project implementation. The civil works, EMP and RAP were all implemented satisfactorily. MZ performance is highly satisfactory. MZ's technology department conceptualized the software and IT needs and drafted the ToRs which in some countries would require substantial Bank inputs. ASR and MZ worked with the Bank as partners. The staff assigned to implement the Project is very capable.

However, these two agencies' ratings are impacted somewhat by the performance of MCA. MCA assumed responsibilities for border crossing facilities from the Housing Authority. While they worked hard to implement Component 2, the Blace BCP was delayed and civil works were not fully completed at Project Close. MCA's headquarter staff implementation of the software is highly satisfactory. The feedback from the private sector users was very positive.

(c) Justification of Rating for Overall Borrower Performance

Rating: Moderately Satisfactory

The overall Borrower performance was rated as 'moderately satisfactory' because of the moderately satisfactory Government performance and the satisfactory Implementing Agencies performance.

6. Lessons Learned

The Bank's due diligence on all project aspects is essential even when there is time pressure for project delivery. Reliance on representation is not an excuse. The land acquisition issue at Blace resulted in time delay but in the end did not impact the Project's outcome. However, a similar situation on a large scale project which had not been resolved and remedied very soon could have a much more negative outcome including reputational risk to the Bank.

In trade facilitation, some essential investments are not costly. The impact of these investments on institutional reform, however, could be immense. The various software and IT activities are minor investments compared to the civil works. These investments, however, require disproportionate efforts from the Bank in technical and procurement support. Although it is not

the case in Macedonia, the failure rate of IT investments in transport projects tends to be high. One reason for success of this Project is that MZ and MCA both have a high level of IT literacy. For instance, they both have technical departments which designed the software specifications. These were client-driven processes. The lesson is that software and IT activities can be transformational for an organization. However the Bank has to be willing to invest the time for implementation support and the counterparty needs to have a basic level of IT competence.

Consultations on road design are not always undertaken to produce a better design. In this Project, community inputs have resulted in a better designed investment for the road upgrade. The revision in the motorway design after consultation added social development features for the Project and wider stakeholders' support.

Lastly, the Project's implementation arrangement has some duplication of efforts. However, the utilization of public sector staff in project implementation instead of a PIU structure resulted in much better capacity strengthening and project ownership. Under such arrangement, training for implementation staff is crucial. In the future, the Bank should agree with the Government on a package of training at the start of the Project and at Mid Term Review.

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners

(a) Borrower/implementing agencies.

(b) Co-financiers

There is no co-financier.

(c) Other partners and stakeholders.

Annex 1. Project Costs and Financing

(a) Project Cost by Component (in USD Million equivalent)

Components	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Upgrading section Tabanovce – Kumanovo of Trans-European Transport Road Corridor X, to Motorway Standards	13.11	18.15	138.43
Improvement of Passenger Border-Crossing at Blace	2.08	2.42	116.25
Modernization of the Road Toll Collection System	5.52	0.00	0.00
Installation of Railways Communication System	3.80	1.79	47.20
Project Implementation Support	0.49	0.03	6.05
Total Baseline Cost	25.00	22.39	89.56
Physical Contingencies	0.00	0.00	0.00
Price Contingencies	0.00	0.00	0.00
Total Project Costs	25.00	22.39	89.56
Front-end fee PPF	0.00	0.00	.00
Front-end fee IBRD	0.00	0.00	.00
Total Financing Required	25.00	22.39	89.56

(b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Borrower		5.00	2.12	42.4
International Bank for Reconstruction and Development		20.00	20.27	101.35

Annex 2. Outputs by Component

Component/ Subcomponent	Expected Outputs (from PAD/ Original Implementation Plan)	Actual Delivered Output	Remarks
Component 1: Upgrading road Corridor X, the section from BCP of Tabanovce to Kumanovo to motorway standards			
(i)Civil works to upgrade Road section	Construction of a new one directional carriageway parallel to existing road	Additional design elements were added during implementation e.g. designs for two new interchanges, new road traffic design, new drainage systems. After stakeholders' consultation, noise mitigation measure was revised.	Design improvements provided better access, incorporated view of villagers, noise mitigation measures reflected finding of stakeholders consultation. The actual cost was 18 percent higher than the appraisal estimates and 10 percent higher than the contract amount. At the time of closing, noise mitigation activity was being implemented.
(ii) Supervision of Civil works			
Component 2: Upgrading the passenger terminal at the Blace border crossing point with Kosovo			
(i)Construction of necessary facilities for Customs, Border police and other related agencies. Purchase of furniture for the facilities.	Improve the processing capacity of Blace passenger BCP and the working conditions for the personnel.	At Project closing, 97.6 percent of the works were completed Asphalting of 200 m2 of the old section of the border crossing was not completed and Installation of new control cabins to take place after the asphalting	Completion of the old section of the border crossing would double the processing capacity at the BCP. During the ICR fieldtrip, the Blace BCP even though with only 3 lanes operating was functioning efficiently. The new facilities significantly improved the working conditions.
(ii)Supervision of Civil works			

Component 3 – Modernizing Road Toll Collection System			
TA for preparation of bidding and development of specs for tolling equipment	New tolling systems installed on Corridor X	The technical and functional specification for the toll system was completed. Project funds for the equipment was reallocated after Project was restructured	Govt decided to concession the toll operations for Corridor X This effort is on-going
Provision & installation of tolling equipment	Dropped		
Component 4 – Installation of Railways Communication Systems			
For the Railways Procurement of (i)fiber optics cable with installation parts, (ii) multiplex equipment, and (iii) equipment to service and maintain the System	accelerate passengers and goods flows	Outputs were all delivered	During implementation new equipment and systems were added. All rail centers on Corridor X were connected with optic cable. This enabled flow of information and traffic operations and other technological operations. This also allowed connection with Kosovo and Greek railways at the border and implementation of common border stations of railway administration.
Purchase of integrated financial software	Improve processing time, operational effectiveness	System delivered	This subcomponent was added after Restructuring.
For the Customs Administration, procurement of IT equipment and software to harmonized rail communication and data collection system for freight transport	Allow the sharing of data and information by Customs and Railways	Component dropped after Restructuring. Customs Administration moved towards a web based system so this subcomponent is not needed.	

on railways.			
Development of Integrated Information System	Improved efficiency and transparency in Customs.	System was completed in September 2011 – holds more than 450,000 documents and used by 1000 internal users and 3000 external users.	Added after Restructuring. The upgrade improved operation and administrative capacity at Customs and was noted by the EC 2011 Progress Report as an achievement.
A new inward processing system	Electronic management of all inward processing activities	System delivered and in use. Processes which were carried out manually and completely paper based and took days are now completely paperless and processed within one working day	Subcomponent added after Restructuring. Substantial improvement in efficiency in customs processing. Particularly to the textile and steel industries. Private sector feed backs are very positive.

Annex 3. Economic and Financial Analysis

The ex-ante economic analysis of the project evaluated separately three project components because each component captures varying types of benefits and has different expected economic life. The components evaluated were the road-to-motorway upgrade (54% of project costs), road toll collection system (23% of project costs) and railways telecommunication system (15% of project costs). The evaluation did not take into account the Blace passenger terminal component (8% of project costs), as required data for evaluating benefits could not be obtained. The overall Economic Internal Rate of Return (EIRR) of the project was estimated at 144.3 percent. Table 1 presents the ex-ante economic analysis results.

Table 1: Ex-ante Economic Analysis Results

Component	Cost (2007 million Euro)	EIRR (%)
1. Upgrade BCP to Tabanovce-Kumanovo road to motorway standards	10.7	12.3
2. Upgrade passenger terminal at Blace border	1.7	

3. Modernize road toll collection system	4.5	190.8
4. Support railways and customs telecommunication system modernization	3.1	81.3
Overall	20.0	144.3

The ex-post economic analysis of the project evaluated the upgrade of the BCP to Tabanovce-Kumanovo road to motorway standards (Component 1) for which actual project costs and traffic data is available, and the procurement of the rail corridor communication equipment (Component 4). The ex-post economic analysis of Components 3 was not performed because the provision and installation of modern electronic tolling equipment under Component 3 was removed of the project. Component 4 reduced in scope considering that the procurement of information technology equipment and the procurement of software for data exchange between MZ and MCA were removed.

The ex-post economic analysis of the upgrade of the BCP to Tabanovce-Kumanovo road was done following the same methodology and model used on the ex-ante analysis. Road user benefits (vehicle operation, travel time and accident costs reduction) were evaluated using the Highway Development and Management Model (HDM-4), which computes road agency and road user costs over an evaluation period for the with and without project scenarios. The ex-post economic analysis considered actual construction costs and traffic growth rate.

The Project upgraded a 7.6 km road section on Corridor X to motorway standard improving ride quality and traffic capacity. The project was appraised in 2007 and the construction contract was signed in August 2008, with a start date of September 2008. The expected contract end date was April 2010, but the contract ended in June 2012. The estimated project costs at appraisal was 10.7 million Euros in 2007 prices, the contract amount is 11.7 million Euros in 2008 prices, and the sum of the actual payments from 2008 to 2012 is 13.28 million Euros. Forty three percent of the payments occurred in 2011. Table 2 presents the actual construction payments.

Table 2: Actual Construction Payments (million Euro)

2008	2009	2010	2011	2012	Total
1.76	3.41	2.07	5.66	0.39	13.28
13%	26%	16%	43%	3%	100%

Table 3 presents the estimated project costs, contract amount and sum of payments, expressed in 2012 million Euros. The actual costs are 18 percent higher than the appraisal estimates and 10 percent higher than the contract amount.

Table 3: Construction Costs (2012 million Euro)

Appraisal Estimate	Contract Amount	Actual Cost	Actual per Appraisal	Actual per Contract
11.66	12.53	13.81	1.18	1.10

The ex-ante economic analysis considered that that the annual traffic growth rate averages 7.0 percent over the evaluation period (25 years), being defined at 8.0 percent per year for the initial forecasted period and 5.0 percent towards the end. Traffic counts on the BCP to Tabanovce-Kumanovo road are available from 2008 to 2012, which show that the current 2012 traffic is 4,873 vehicles per day and traffic has increased from 2008 to 2012 at 8.4 percent per year. Thus,

the actual annual traffic growth is 5 percent higher than the one estimated at appraisal. Table 4 presents the average annual daily traffic on the project road.

Table 4: Average Annual Daily Traffic (vehicles per day)

2008	2009	2010	2011	2012
3,524	4,029	6,327	4,053	4,873

Table 5 presents the current traffic composition, which shows that cars and pickups account for 77 percent of the traffic of the project road.

Table 5: Current Traffic Composition (percent)

Cars	Pickups	Small Bus	Medium Bus	Large Bus	Small Truck	Medium Truck	Heavy Truck	Articulated Truck
72.00	5.22	7.56	7.30	1.21	1.92	0.64	0.50	3.65

Considering an increase of 18 percent on the construction costs and a 5 percent increase in the traffic growth rate from 2008 to 2012, the ex-post economic analysis shows that the EIRR of the component decreases to 11.40 percent compared to the appraisal estimate of 12.25 percent. The ex-post evaluation indicates that this component is marginally economically justified at a discount rate of 12 percent. Table 6 presents the economic evaluation results.

Table 6: Economic Evaluation Results

Appraisal Estimate		Ex-post Analysis	
EIRR (%)	NPV at 12% (million Euro)	EIRR (%)	NPV at 12% (million Euro)
12.25	0.16	11.40	-0.42

The rail corridor communication optical network is used for connectivity needs to connect the tele-commands systems, video surveillance, IP telephony, IT network. The benefits of its usage are: connecting to remote systems, relief from expenses for connecting locations on the territory of the Republic of Macedonia (services from telecommunications provider). The other benefit is that the free capacity of the optical network is leased to telecom operators and other renters (VIP, Blizoo, Neotel, MR Transport and others). Revenues realized on annually from the lease/rent of part of the network capacity are in amount of 24,000,000.00 MKD's or approximately 400 000 Euros annually. Considering the initial investment of 1.79 Euro million and benefits of 400,000 Euros per year for 15 years, the EIRR of this investment is 21 percent and the NPV is 0.86 Euro million. Table 7 presents the economic evaluation results of the overall project. The ex-post overall project EIRR is 12.5 percent and the actual total NPV is 0.44 Euro million.

Table 7: Overall Project Economic Evaluation Results

Component	Cost (million Euro)	EIRR (%)	NPV (million Euro)
Upgrade BCP to Tabanovce-Kumanovo road to motorway standards	13.81	11.4	-0.42
Rail corridor communication	1.79	21.0	0.86
Total	15.60	12.5	0.44

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
Aleksandar Crnomarkovic	Financial Management Specialist	ECSO3	FM
Anca Dumitrescu	Sr Transport Specialist	AFTTR	
Bekim Imeri	Social Scientist	ECSSO	Social
Craig Neal	Sr IT Specialist	ECSPE	
Jasminka Sopova	Program Assistant	ECSSD	Adm Assistant
Julia Tomova	Junior Professional Associate	ECSSD	
Kirsten Burghardt-Propst	Counsel	LEGEC	
Liljana Sekerinska	Transport Specialist	ECSTR	
L. Panneer Selvam	Environmental Safeguards Specialist	ECSSD	
Marie Antoinette Laygo	Program Assistant	ECSSD	Adm Assistant
Paulus A. Guitink	Senior Transport Specialist	ECSSD	TTL for preparation
Radhika Srinivasan	Sr Social Scientist	ECSSD	
Ross Pavis	Operations Officer	ECSSD	
Zarko Bogoev	Operations Officer	ECSSD	
Supervision/ICR			
Aleksandar Crnomarkovic	Financial Management Specialist	ECSO3	FM
Andreas Schliessler	Sr Transport Economist	ECSTR	TTL - supervision
Anneliese Viorela Voinea	Financial Management Analyst	ECSO3	FM
Antonia G. Viyachka	Procurement Specialist	ECSO2	Procurement
Arcadii Capcelea	Senior Environmental Specialist	ECSEN	Environment
Artan Guxho	Senior Infrastructure Specialist	ECSTR	Engineer
Bekim Imeri	Social Scientist	ECSSO	Social
Coral Daphne M. Bird	Temporary	ECSSD	Adm Assistant
David Stephen Rudge	Highway Engineer	ECSTR	Engineer
George A. Banjo	Sr Transport Specialist	ECSTR	TTL - supervision
Gulana Enar Hajiyeva	Environmental Specialist	ECSEN	Environment
Zarko Bogoev	Operations Officer	ECSS2	
Liljana Sekerinska	Transport Specialist	ECSTR	TTL - supervision
Luan Aliu	Program Assistant	ECCMK	
Majed El-Bayya	Lead Procurement Specialist	ECSO2	Procurement
Marie Antoinette Laygo	Program Assistant	ECSSD	Adm Assistant
Nikola Kerleta	Procurement Specialist	ECSO2	
Paulus A. Guitink	Senior Transport Specialist	ECSSD	TTL - preparation
Ross S. Pavis	Senior Operations Officer	AFTDE	
Stein Lundebye	Road Safety Specialist		
Stephen Muzira	Transport Engineer	LCSTR	

Vasile Nicolae Olievschi	Senior Railway Specialist	TWITR	

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY05	30	61.78
FY06	51	83.43
FY07	71	237.84
Total:	152	383.05
Supervision/ICR		
FY07		1.00
FY08	26	58.95
FY09	31	96.63
FY10	33	120.34
FY11	38	97.59
FY12	35	115.87
Total:	163	490.38

Annex 5. Beneficiary Survey Results

Not required

Annex 6. Stakeholder Workshop Report and Results

Not required

Annex 7. Borrower's ICR

GENERAL INFORMATION

The overall objective of the Project was to facilitate the movement of trade between Republic of Macedonia and neighboring countries in South East Europe, through the removal of selected border-zone bottlenecks, and improving the efficiency and quality of road and rail services along Trans-European Transport corridor X in R Macedonia and in particular roads component was to support the following:

- Upgrading road corridor X section BCP of Tabanovce-Kumanovo to motorway standards;
- Upgrading Blace border crossing Point (BCP);
- Modernizing the Road Toll Collection System;
- Installation of modern telecommunication system on rail Corridor X;
- Project implementation support

The project closing date was extended twice (for a total of nine months) to allow completion of all project activities and to enable the project to fully meet the development objective.

Restructuring was carried out at the Mid-Term Review, in order to reduce the scope of the Road tolling component and to increase the percentage of the Bank's financing from 78% to 100%. The freed up resources were reallocated to Components 1 and 2. Also, the Resettlement Action Plan was revised in order to take into consideration the Bank practice for the establishment of escrow accounts/budget lines for land acquisition compensation.

The Project's road improvement component was focused on upgrading a 7.62 km road section from BCP Tabanovce to Kumanovo to motorway standards. This section forms part of the Trans-European Transport Corridor X.

Component 2 included the modernization of the border crossing point (BCP) Blace. This is a passenger border crossing between Macedonia and Kosovo which until the project operated using temporary facilities for border control, didn't allow conditions for segregation of traffic and sufficient control.

The modernization of the road toll collection system (component 3) originally was focused on developing of specifications for the equipment that meets the system requirements, preparation of the procurement documents for such modern electronic tolling equipment, based on open competition requirements, as well as procurement of new equipment that allows for both cash and non-cash (electronic) payments. Following the Government's decision to concession the toll operation on Corridor X, it was agreed that road tolling under the project will focus on the preparation of technical and functional specifications for the toll system. This was completed satisfactory.

The fourth component included several activities in railways and Customs. The biggest one referred to the introduction of a modern telecommunication system for railways along Corridor X. During project life, activities to strengthen electronic clearance of Customs documents were added.

Project implementation support originally included the goods and services required to support the successful implementation of the Project: (i) audit services; (ii) project management, financial

management, and procurement; (iii) technical services required for preparation and supervision of Project components; (v) any training necessary for the completion of these tasks; and (vi) incremental operating costs.

ACHIEVEMENT OF OBJECTIVES

COMPONENT 1 – Upgrading Section of Trans-European Transport Corridor X to Motorway Standards

Civil works BCP Tabanovce-Kumanovo - The component includes construction of a new one-directional carriageway with a width of 11meters, parallel to the existing road, separated from it by a 4-meter median. The existing parallel road is now one-directional, and is widened from the actual 7.5 meters to 11 meters in accordance with the prepared design for rehabilitation. The investment included two sub-components: (i) construction of the additional lanes, and (ii) supervision of construction. The upgrading to motorway standards required acquisition of agricultural land that was successfully executed. No physical resettlement of people or demolition of permanent structures occurred or was necessary.

During implementation, additional design elements have been prepared (e.g. design for rehabilitation, design for two new interchanges, new road traffic design etc). All of these optimized the impact of the modernization road as they allowed: improved accessibility of local people to motorway and other roads, strengthened protection from flooding, EU compatible road signs etc. Namely, during implementation, it was established that the Tabanovce Interchange will have to be relocated from the village of Tabanovce to new chainage of 1+449 towards the border crossing. The necessity was because of the village of the Tabanovce and customs that plan to construct customs terminal that was to be connected to the new motorway. Another new Interchange Recica was established and constructed on the location were the overpass was foreseen in the original design. The reason is the connection of the village of Recica and Konjare to the motorway E-75. Two new drainage systems have been constructed after the flood in 2009 that flooded all the household residents along the motorway. ASR had a working relationship with the neighboring villages and tried to maximize the gains for the local population from the construction of the motorway. For example, milled asphalt was all placed and compacted in the village of Tabanovce, Gorno Kojnare and Kosturnik to improve the quality of their local roads.

The only remaining activity which is to be implemented by ASR with its national budget funds is the implementation of noise mitigation measures. Initially, the design included the installation of concrete noise barriers. However, those barriers do not exist anymore, so ASR did new noise measurements on the motorway and protections for noise in the future. These suggested that other measures can be considered. Therefore, ASR engaged a consultant to look into available noise mitigation measures and organize an inclusive consultation process before deciding on the type of noise mitigation measure. ASR has completed satisfactorily the consultations with the population and should implement the measures during 2012.

The motorway is open to traffic and now provides a safer, more convenient and more cost-effective transport connection. It is a very relevant connection, because it leads to the border crossing with Serbia, and serves freight being transported to the markets in the EU. The operation of Customs Clearance of Goods Section at the border crossing Tabanovce was started at the beginning of 2012 practically opening a new possibility for the export-oriented sector. Until now, the border crossing Tabanovce operated only for transit formalities and passenger traffic. The

introduction of export clearance, functioning 24 hours, every day, including weekends and holidays, free of terminal charge will ensure great advantages for the economic operators. The continuous efforts of the Macedonian Government to improve the business climate, to provide for faster and improved export procedures are defined in the Government Project "Regulatory Guillotine". This enables approximation towards the completion of the Regulatory Guillotine II measure, stipulating for a possibility for 24/7 export clearance at least 1 border crossing with each neighbouring country. This was one additional outcome of the new motorway.

COMPONENT 2 - Upgrading the passenger terminal at the Blace border crossing point with Kosovo

The component upgrading of passenger border crossing point Blace to Kosovo includes the removal of temporary facilities, replacing them with permanent control, inspection, and administrative structures. The aim is to enlarge the capacity of the passenger border crossing by increasing the facility from 2x2 to 2x3 lanes, adding a separate bus inspection lane for buses entering Macedonia from Kosovo. The component is comprised of two sub-components:

- construction of necessary facilities for the customs, border police and other related agencies at the border, and
- supervision of the civil works.

The Contract for construction of Border Crossing Blace was signed in March, 2010 and was awarded to GD Granit AD from Skopje, Macedonia for a value of **101,569,489.88 MKD or 1.7 mil. EUR** equivalent. The Contract for supervision of the construction was signed in March, 2010 and was awarded to IRD Engineering & Euro Consult for a value of **5,374,021 MKD**, or **0.09 mil. EUR** equivalent.

The construction currently is at 97.6 percent with works remaining on the old section of the border crossing (asphalting of 200 m2) and installation of the new control cabins which should take place immediately after the asphalting. Otherwise, the works completed have been satisfactory. Customs now has a modern, well-functioning section of the border crossing, with a new administrative building, bus control building, new furniture for border staff and also restrooms for passengers.

It is notable that the working conditions are significantly improved. Newlly constructed administrative buildings are with high quality, according to the European standards. The offices are equipped with new furniture, new toilets, modern high quality heating system. Single window system provides significantly better conditions for performing the everyday activities, for all services acting at the border crossing point, such as Ministry of Interior, Phytosanitary Direcorate, Food Agency, Post Office, assuring companies etc.

The control of the vehicles is facilitated, with possibility to carry out control in a separate building with single purpose to conduct a detailed examination of all kinds of vehicles.

During the control of buses in the building, the passengers are allowed to be present during the control, protected by the atmospheric conditions.

The additional contents of the building include modern offices for additional services in freight forwarding and assurance matters.

At this moment only one side of the border crossing point is functional, but the flow of vehicles is facilitated thanks to the improved working conditions, whish resulted in increased security and reduced waiting time during the documents control, especially for intra-regional traffic in morning and evening peak hours. The last measurements conducted in June, showed the following results: the average time for processing at entry is 2.5 minutes (i.e., approx. 24 vehicles/hour), and on exit the time is 1.9minutes (i.e. approx. 31 vehicles per hour).

The Customs Administration also decided to install a new **waste water treatment facility (WWTF)** for the BCP to further increase its capacity. This will be financed by the Customs Admisntiration. The Customs Adminsitration still prepared technical specifications which were considered appropriate by the Bank. The procurement for the WWTF was completed. The WWTF is expected to be operational in autumn 2012.

COMPONENT 3 – Modernizing the Road Toll Collection System

The modernization of the road toll collection system (component 3) originally was focused on preparing the specifications for the new equipment, as well as the procurement of modern electronic tolling equipment, to be installed in each traffic lane at toll stations, linked with automatic vehicle classification and traffic counting equipment, as well as the new equipment that allows for both cash and non-cash (electronic) payments, in order to contribute in reduction of leakages in toll revenue collection. During the period of Mid-term review of the Project, the Government decided to concession the toll operation on Corridor X. It was agreed that project funds for procurement of modern electronic tolling equipment can be reallocated. The road tolling under the project focused only on technical and functional specifications for the toll system. This was completed satisfactory, in 2008 by BCEOM as part of the Project.

COMPONENT 4 - Installation of Railways Communication System

TTFSE2 Project for modernization of border crossings and acceleration of the passengers and goods flow is fully and very successfully completed within railways part. On the basis of the requirements defined in the loan terms of reference was established a list of necessary means and equipment procurements which were planned for realization of defined requirements.

The contents of this report are the use, justification of equipment and means that were purchased under loan fourth component, i.e. in the part for railways.
• Short review of the Report for every sub-component of the 4-th component.
• Use of the equipment and means.

Key Project requirements in the part for railways:
Development component: The main project objective was to allow a faster flow of passengers and goods at the border crossing points where Macedonian railways operate, to improve the telecommunication network, to increase the productivity and efficiency of railway traffic in relation with the other traffic stakeholders, to enhance operations services. The goal which was set before the Project implementation beginning was completely realized.

Macedonian Railways Infrastructure has got a modern integrated telecommunication system. The components making parts of this project are completely realized. Each component as a part of one whole has contributed in completion of the integrated TC system.

The Project structure was in compliance with the set terms of reference which explains the planned requirements in details. The project consists of four independent sub-components.

The first sub-component is related to the purchase of passive equipment, fiber optic cable and suspension equipment.

The second sub-component is related to purchase of active equipment and installation, multiplex equipment.

The third sub-component is related to purchase of means for servicing and maintenance of TC network, service vehicles, digger machine for ditches, measuring instruments.

The fourth sub-component is related to purchase of integrated financial software.
The component for purchase of equipment and systems was entirely performed in accordance with the planned goal.

During the realization of the project, the program was extended by new equipment and systems necessary for completion of TC system. The extensions were in function of upgrading of planned means and systems and allowing of TC network resources use.

The results of all realized purchases in the component 4 are successful and over the expectations. The future expectations are related to the upgrading and development of already installed systems, software and means.

The results of certain purchases in this component make part of this Report and they are shown by valid indicators. Sub-components which make part of Component 4 were timely performed and according to the plan of purchases of MZI.

1. The purchase of an optic cable and suspension equipment was in the framework of the planned budget. The budget was enough to cover completely the current need. The purchased optic cable in the length of 140 km with joints and suspension equipment was installed on the part of Corridor 10 – border with Greece. Purchasing the passive part of the planned integrated TC network has completed the connection of all border crossings (Tabanovce, Blace and Gevgelija). All centers were also connected on Corridor 10, customs offices on the railway network and main organization units. This sub-component has completed the physic optic network which total length now is of 360 km. The connection of all points included in function of the traffic organization ensures a possibility for a faster flow of information.
2. The purchase of the multiplex equipment was realized in the framework of the planned budget. This equipment is the active part of the integrated telecommunication optic network. The equipment was installed and put into operation according to the planned dynamic of the project realization. This optic network has enabled to ensure flow of every kind of information. This has allowed fulfilling the main goal of this project part, i.e. providing network infrastructure for a faster flow of any kind of information necessary for acceleration of the passengers and goods flow.
3. The purchase of means for integrated telecommunicion network maintenance such as service vehicles, small digger machine for ditches and measuring instruments have allowed to improve and enhance the Service for interventions. They ensure better workers mobility, more quick reaction in the maintenance, access to the hard accessible places on the railway line. Their enhancement contributes to the reduction of the interventions time and a smaller interruption in the flow of information which have direct impact on the flow through the borders.

4. The purchase of integrated software for financial operations and human resources allows a completion of the softwares implementation in MZI. The software for railway infrastructure management system (RIMS), energy management information system (EMIS) and the other software to be implemented shall computerize in whole the railways.

The benefits of component 4 in the part for railways and customs are attained. The network connects all locations and offices through which are assured traffic procedures. All important official places of the transport company are also connected. The integrated optic network allows transmitting any type of software. The border stations are connected between themselves and the network allows a quick transfer of all necessary data for traffic operations and other technological operations. Through the integrated TC network, the transport company transmits data from border stations to the Central station in Skopje. One of the goals was the implementation of interface software needed for connection of two processing technological softwares of the Transport Company and customs. But because of the non-realization of the customs part project this goal was not fulfilled. Regardless of this, the goal of the integrated TC network is completely fulfilled. Currently, through it the transfer of existing softwares is done, and in this manner was allowed more quick and sure transmission. Indirectly this decreases the retention time of the trains at the borders. Except for the goals set for the TTFSE2 Project the integrated TC network contributes in completion of the requirements established in the RRP Projects, Railway Reforms Project.

This network allowed putting into operation the CTC system, the section of connecting of the remote stations with the Centre in Skopje-Trubarevo. The system for IP telephony was upgraded and MZI was covered by telephonic communication at all service places on corridor 10, including also all borders. Connecting of all service places has allowed to be integrated and implemented all softwares on whole territory. In this manner the IT system of Railways is integrated with the central server and working stations in all remote service places.

The network provides a fully functional implementation of both softwares purchased through the RRP-RIMS Project and the integrated financial software. Both softwares have central bases installed in centre in Skopje. The communication with the working stations that are installed throughout the territory of the Macedonian Railways network is online. This enables also to rationalize the jobs, economical and efficient operation.

The integrated optic network enables a total electronic (digital) exchange of information on the total Macedonian railways network. This leads to the quicker data exchange and decreasing the formal procedures at the borders and customs terminals.

The velocity of the flow, the configuration of all local networks and installation in one central network provide significant possibilities in the further use.
ITC network has provided the following benefits:

1. Connection of all service places
2. Connection with some customs offices
3. Connection with foreign railways at border crossings (Kosovo, Greece)
4. Quick flow of every kind of information (data, spoken information, video)
5. Launching of initiative and implementation of common border stations of railway administrations (Tabanovce common operating station between Serbia and Macedonia, the establishment of common station Kosovo-Macedonia (General Jankovic) is in course, two optic networks Kosovo-Macedonia are connected.
6. The station of Tabanovce is common operating station for the two railway administrations. The network connects the two railways, and the exchange of all data is

performed electronically. In this manner the time of formalities is maximum shortened from the railway aspect.

7. The establishment of same procedure of common operating station between Kosovo and Macedonia is in course.

8. In February 2012, the customs office 4 started working with unique code 1014 for submission of documents, located at railway station Tovarna in Skopje. The customs office will perform the customs duties in freight transportation, i.e. import-export customs clearing as well as transit of goods transported by railways, and in this manner the procedures and competences performed until now in customs office in Trubarevo 1030 will be in competence of the new customs office Skopje 4.

The benefits of this solution are quick and efficient completion of the customs procedure because the station Tovarna possesses ideal conditions for customs inspection of the goods transported by railway and truck traffic, possesses crane for unloading of goods transported by containers, warehouse, parking for more of 100 freight vehicles, ideal traffic solutions and it is located near of the headquarters of Customs Skopje.

It is foreseen the new customs office to be in the future competent for an intermodal customs supervision, that means performing the import-export procedures as well as transit operations in railway freight and truck transportation with infrastructure solutions of customs terminal.

Development of Integrated Information System

This activity is financed with the reallocation of 50.000 Euro from the component 3, agreed between the Bank and the Government in December 2010, following the signature of the LA amendment signed on December 15th 2010, which provided funds for financing of this activity.

Contract was signed in April, 2011 and was awarded to SRC - Skopje for a value of **3,074,355. 00 MKD or 0.05 mil. EUR** equivalent.

The contract for the upgrade of the Integrated Information System (IIS) **was successfully completed (September 26, 2011)** and the upgraded IIS is operational. The upgrade has: (i) improved processing time, which currently stands at 2 minutes (earlier processing time was 7 minutes), (ii) improved administrative tax collection, (iii) improved operational effectiveness of the customs administration, (iv) increased security of information managed through the system and (v) increased transparency of this aspect of Customs operation. Together these improvements lead to faster completion of customs procedures, better fiscal collection and also decreased corruption possibilities, overall improving the conditions for doing cross-border trade in Macedonia.

From a functionality point, some of the most important additions that were brought as part of this project were: the electronic records register for classified cases, electronic management of administrative taxes, solution for natural and legal person fines management and employment lawsuits management.

The documentary database currently holds more than 450,000 documents and the system is used by 1000 internal users and more than 300 external economic operators which are managed and controlled by more than 170 configured workflow procedures. All of this suggests that valuable improvements have been made to the system.

The relevance of this upgrade for the improved operational and administrative capacity was noted

by the 2011 Progress Report of the European Commission published October 12, 2011, which overall marked the continued progress in the customs area.

Development of application for processing of requests for inward processing

This activity is also financed with the reallocation of 50.000 Euro from the component 3, provided with the amendment to the TTFSE 2 Project signed on December 15th 2010. Customs started the preparation of the bid document in January 2011. Contract was signed in August, 2011 and was awarded to VISTA - Skopje for a value **of 2,907,580.00 MKD or 0,05 million EUR** equivalent. The originally Contract Completion date is 15th March 2012. Due to the need for additional time for achieving operational acceptance, the Contract was amended up to May 31st 2012.

The system is particularly beneficial to the textile and steel industry, as it introduced electronic management of all inward processing activities. This includes automatic customs confirmation on the quantities of exported finished goods against the imported materials used as input for export. Processes which were carried out manually were completely paper-based and took days, are to be completed paperless, within one working day. This not only improves the efficiency of the customs processing, but also reduces corruption opportunities and increases accountability.

The sub-component - an interface with the MCA information systems. MCA and MZ freight data sharing has speeded up the processing and electronic recording of freight customs declarations, etc.

The elimination of freight train processing delays and achieving the scheduled 90 minutes for freight train processing has been achieved.

The main benefit is the more efficient processing of international trade and transport documentation, which enhances transparency of transactions and reduces duplications and overlaps.

This reduces rail traffic congestion and increases competitiveness of rail freight transport. In addition, by reducing congestion the Project created conducive conditions to attract rail cargo traffic, which otherwise would be either foregone or directed to more expensive alternative maritime or inland corridors. This transit traffic generates an economic surplus for the country through increased year-round economic direct and indirect activity.

ASSESSMENT OF BANK AND BORROWER PERFORMANCE

The project has been implemented by a Project Coordination Unit (PCU), which formed part of the Agency for State Roads (ASR). The Project Coordinator was the Director of the ASR, who was also a member of the Project Steering Committee, established to facilitate coordination and cooperation between the various agencies during implementation of the project. Vice Prime minister and Minister of Finance chairs the Project Steering Committee, which also includes the Minister of Transport and Communications, the Director General of ASR, the Director General of the Public Enterprise for Housing (PEH), the Director General of MZ and the Director General of the MCA, and a representative of the Ministry of Finance.

The Agency for State Roads is an agency with experience in the implementation of projects and had sole responsibility for coordinating the Project; two different Government agencies i.e. Macedonian Customs Administration and Macedonian Railways were included in the implementation of different components. Good cooperation within agencies, between various agencies within the country, and cross-border agency cooperation, was essential for accomplishing the objectives of improving trade and transport flows along main transport corridors. Customs is the key agency for cargo processing and management of border crossing facilities, many other stakeholders were involved, such as Border Police, Ministry of Transport, phyto-sanitary inspection, etc. These agencies regularly met within the framework of EU promoted Integrated Border Management as an independent State Commission for border management.

The three agencies that implemented the Project are very appreciative of the help, work and advice given by the Bank's staff during the implementation of the project.

In the transport sector the Bank identified the most efficient way to facilitate the movement of trade between the Borrower and neighboring countries in South East Europe, through the removal of selected border-zone bottlenecks, and improving the efficiency and quality of road and rail services along Trans-European Transport corridor X in Republic of Macedonia, improve the main border crossing between Republic of Macedonia and Kosovo, support harmonization of rail freight data requirements between railways and customs, and improve telecommunications infrastructure to facilitate freight information flows and advance train information along rail Corridor X.

The contribution and work of the Task Managers and their supervision missions, have contributed greatly to the final success and achievements of the project.

LESSONS LEARNED

In general it is important to strengthen public administration capacities at all levels in order to ensure sustainability of the activities and enhance full ownership on behalf of the beneficiary institutions through stronger participation along the project cycle.

The past experience implementing the World Bank projects has shown the need of:

a) allocation of dedicated administrative staff engaged on permanent basis to work on the project, thus improving staff capacity and providing a sustainability of the project activities;
b) well defined objectives and activities throughout the life cycle of the project;
c) flexibility and readiness to adopt the project activities applying methodologies to deliver results in line with the latest development in the relevant field;
d) coordination and cooperation with other ongoing or upcoming projects; and
e) the involvement and commitment of high-level strategic decision making management defining the project, as well as permanent monitoring and follow-up of the project, are important and essential for success and sustainability of the project results.

Strong commitment from senior management and various final beneficiaries remains crucial for the overall implementation of the project activities.

OUTPUTS BY COMPONENT

component	outputs
Component 1	Completed Motorway Tabanovce-Kumanovo with full segregation of traffic.
Component 2	Completed widening of Blace BCP. Built new administrative building. Furnished BCP. Built new bus control facility. Built new passenger facilities. Rehabilitation of old BCP section ongoing.
Component 3	Completed study on toll modernization.
Component 4	Installed fiber-optic telecommunication system along rail corridor X. Purchased service vehicles and equipment for corridor X rail maintenance of telecommunication system. Upgraded software IIS. Upgraded system for inward processing.

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

Not Applicable.

Annex 9. List of Supporting Documents

1. Aide Memoires, Back-to-Office Reports, and Implementation Status Reports.
2. Project Appraisal Document (37971-MK)
3. Loan Agreement and the Amendment (Loan Number 4859-MK)
4. Implementation Completion and Results Reports (ICR 35869 and ICR 1573)
5. Restructuring Report. (54055-MK)
6. Mid Term Review, May 2009
7. *Reducing the Economic Distance to Market* – A Framework for the Development of Transport System in Southeast Europe. December 2004.
8. Country Partnership Strategy for FYR of Macedonia for FY11-FY14 September 2010 (Report No. 54928-MK)
9. FYR Macedonia Partnership, Country Program Snapshot, Apri1 2012
10. Resettlement Action Plan


THE CITY OF SKOPJE
Skopje serves as the Municipality Capital for each of these Municipalities.
SUTO ORIZARI
BUTEL
GJORCE PETROV
GAZI BABA
CHAIR
SARAJ
KARPOSH
SKOPJE
AERODROM
CENTAR
KISELA VODA
KOSOVO
SERBIA
BULGARIA
GREECE
ALBANIA
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21°E
22°E
23°E
42°N
41°N
To Pristina
To Nis
To Pernik
To Blagoevgrad
To Petrich
To Thessaloniki
To Elbasan
To Korçë
To Kozáni
Pelinci
Staro Nagorichane
Rankovce
Kriva Palanka
Kumanovo
Lipkovo
Chucher-Sandevo
Vratnica
Tearce
Jegunovce
Tetovo
Zheino
Bogovinje
Brvenica
SKOPJE
Arachinovo
Ilinden
Sopiste
Petrovec
Studenichani
Zelenikovo
Vardar
Kratovo
Osogovske Mts.
Probištip
Makedonska Kamenica
Delčevo
Bregalnica
Kočani
Obleshevo (Cheshinovo)
Sveti Nikole
Vinica
Zrnovci
Karbinci
Lozovo
Štip
Maleševske Mts.
Pehcevo
Berovo
Radoviš
Veles
Chaska
Mt. Korab (2,753 m)
Vrapchishte
Gostivar
Rostusha (Mavrovo & Rostusha)
Zajas
Oslomej
Debar
Kičevo
Makedonski Brod
Centar Župa
Drugovo
Vraneshtica
Plasnica
Crni Drim
Dolneni
Kruševo
Prilep
Krivogashtani
Belchishta (Debarca)
Sopotnica
Vevcani
Demir Hisar
Struga
Ohrid
Lake Ohrid
Resen
Mogila
Novaci
Bitola
Lake Prespa
Medzitlija
Nidže Mtn.
Crna
Gradsko
Rosoman
Negotino
Kavadarci
Konche
Vasilevo
Strumica
Bosilovo
Demir Kapija
Novo Selo
Valandovo
Star Dojran (Dojran)
Lake Dojran
Bogdanci
Gevgelija
0 10 20 30 Kilometers
0 5 10 15 20 Miles
FORMER YUGOSLAV REPUBLIC OF
MACEDONIA
SELECTED CITIES AND TOWNS
MUNICIPALITY CAPITALS*
NATIONAL CAPITAL
THE CITY OF SKOPJE
RIVERS
MAIN ROADS
RAILROADS
MUNICIPAL BOUNDARIES
INTERNATIONAL BOUNDARIES
*In most cases, the names of the municipalities are identical to their capitals. Where they differ, the municipality is shown in green italic.
FYR MACEDONIA
JULY 2009
IBRD 33438R2