Report Number: ICRR0022099

1. Project Data

Project ID	Project Name
P148023	Road Rehabilitation
Country	**Practice Area(Lead)**
North Macedonia	Transport

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
IBRD-84200	30-Sep-2019	56,641,457.13
Bank Approval Date	**Closing Date (Actual)**	
23-Sep-2014	30-Sep-2019	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	70,980,000.00	0.00
Revised Commitment	70,980,000.00	0.00
Actual	56,641,457.13	0.00

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2. Project Objectives and Components

a. Objectives

The objectives of the Project were: (i) to enhance the connectivity of selected national and regional roads, primarily to Corridors X and VIII; and (ii) to improve the Borrower's capacity for road safety and climate resilience (Loan Agreement dated October 21, 2014, Schedule 1, page 5).
The PDOs in the PAD were the same as that in the Loan Agreement.

b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Will a split evaluation be undertaken?

No

d. Components

The project had two components:

1: Road Civil Works (Appraisal cost: EUR57.76 million. Actual cost: EUR46.67 million, which was 80 percent of the approved cost.)

Component 1 intended to support road rehabilitation, technical audits, and land slide remediation.

2: Institutional Strengthening and Project Management (Appraisal cost: EUR3.44 million. Actual cost: EUR3.63 million, which was 105 percent of the approved cost.)

Component 2 intended to support project management, road safety technical assistance, road asset management, a five-year strategic program preparation, and impact analysis.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost: At appraisal, the original cost estimate was EUR61.33 million (US$83.72 million) (PAD, para 24, PAD Datasheet). At ICR submission, the actual cost was EUR51.69 million (US$56.64 million) (ICR, page 51, page 2) (84.3 percent of the appraised amount in EUR). The cost reduction was due to the exchange rate fluctuation in US dollars against Euros (ICR, para 41), as well as the exemption from the value added tax (VAT) of 18 percent based on the amendment to the Law on Loan Guarantee that was official on January 22, 2015 (ICR, page 10).

Financing: At appraisal, expected financing sources were: EUR52 million (US$70.98 million) from the IBRD and EUR9.33 million (US$12.74 million) for VAT from the Borrower (PAD, Table 2, page 8; PAD Datasheet). At ICR submission, the project was financed with around EUR51.69 million (US$56.64 million) from the IBRD (99.4 percent of the planned amount from the IBRD) with no contribution from the Borrower due to the above reasons (ICR, page 51; page 2).

Dates: The project was approved on September 23, 2014, and became effective on December 22, 2014. The Mid-Term Review (MTR) was completed on October 31, 2016. The project was closed on September 30, 2019, on the original closing date.

Restructuring: There was no restructuring.

3. Relevance of Objectives

Rationale

Country and Sector Context. The Republic of North Macedonia is a small landlocked country with the GDP of US$10.2 billion in 2013, of which exports accounted for 54 percent (ICR, para 1). The country relied upon the Trans-European transport network, such as Corridor X from Austria to Turkey and Corridor VIII from Albania to the Black Sea ports in Bulgaria. The main challenges were the economic distance to markets and the high costs of transportation caused by the degraded Corridor X and the delays for crossing borders. The country's exports were dependent on roads, as 93 percent of freight in the first two quarters of 2013 was transported via roads (ICR, para 2). The lack of market access was one of the drivers of poverty. Around 40 percent of the population lived in rural areas, of which two thirds were poor (ICR, para 1). An enhanced transport network was expected to improve market access of the rural population, contributing to the country's poverty alleviation.

Relevance to Bank Assistance Strategies. At appraisal, the project was aligned with the draft Country Partnership Strategy (CPS) for FY15-18, supporting Pillar 1: Growth and Competitiveness by rehabilitating roads, as well as the overarching country goal of increasing economic growth and creating employment by investing in transport infrastructure for the two trade corridors. In line with the CPS, the project also intended to improve the road asset management system in Public Enterprise for State Roads (PESR). Moreover, the project adjusted road engineering to better withstand heavier snow and rainfall, contributing to climate change adaptation as recommended by the CPS. At project closing, the project was highly relevant to the Country Partnership Framework (CPF) for 19-23, as the PDOs were integrated as the two sub-objectives of Objective 1: Improve Connectivity and Access to Markets.

Relevance to Government Strategies. The project aligned with the National Transport Strategy (2007-17), which prioritized the improvement of regional and national road connectivity to enhance the efficient use of Corridors X and VIII. The project also contributed to the promotion of road safety outlined in the National Strategy for Improvement of the Road Traffic Safety (2009-14).

Previous Sector Experience. The Bank had a long-term engagement in the country's road sector and PESR, including the construction of a new motorway section under the Second Trade and Transport Facilitation Project and the investment in the regional and local road infrastructure and the introduction of a foundation of a road asset management system (RAMS) under the Regional and Local Roads Program Support Project (RLRPSP). Building on the achievements of the RLRPSP, the project aimed to expand the cooperation with PESR by strengthening its investment planning and financial management capacity. During implementation, the RAMS was expected to establish a comprehensive database for the country's road network and support PESR to manage its capital investment budgets sustainably.

Institutional Capacity and Realism. The Borrower, PESR, had an abundant prior experience and a cooperative relationship with the Bank in implementing projects funded by the Bank. The capacity of PESR to prepare, implement, and supervise road contracts had been strengthened throughout the preceding projects described above. Financial sustainability of PESR's operations was regularly monitored by the Bank as an integral element of the RLRPSP project. The Bank team had a realistic understanding on PESR's capabilities through the long-term engagement, accurately measuring the readiness of PESR to

adopt the transformative concepts such as introducing the concept of climate resilience and road safety through the use of RAMS and output-based contracting.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To enhance the connectivity of selected national and regional roads, primarily to Corridors X and VIII

Rationale

Theory of Change of Objective 1: Rehabilitating roads, improving black spots, conducting technical audits, and installing land slide remediations were intended to improve the roads. The roads would be improved both in terms of quantity (kilometers of the rehabilitated roads) and the quality (condition of the rehabilitated roads). These outputs would lead to reductions in travel time and vehicle operating costs, enhancing connectivity of selected national and regional roads to the corridors.

Outputs:

Key outputs of Objective 1 were as follows:

- 280 kilometers of national and regional roads linking to Corridors X and VIII were rehabilitated, exceeding the target of 112 kilometers (250 percent of the original target; ICR, para 27).
- 87 percent of the roads were in good or fair condition, compared to the baseline of 64 percent and the target of 74 percent (118 percent of the original target; ICR, para 27). The condition of road network was assessed by PESR by using standard road asset management practices and the road roughness index (IRI). The breakdown of the result was: 22 percent in very good, 40 percent in good, and 25 percent in fair condition (The TTL/ICR team's response to IEG's questionnaire).
- Based on the road safety audit recommendations, the rehabilitation of eight black spots and the road safety enhancement interventions in 12 roads were conducted (ICR, para 31). Following the World Road Association (PIARC)'s methodology, the road safety audit assessed aspects including road function; cross section; alignment; intersections; public and private services, rest areas and public transport; vulnerable road users; traffic signs, markings and lighting; roadside features, and passive safety installations (The TTL/ICR team's response to IEG's questionnaire). Implemented measures included vertical and horizontal signaling; traffic calming measures; guardrails; slope protection against rock fall; introduction of elevated pedestrian crossings and segregation of pedestrians (Ibid).
- The design and reconstruction of 11 critical land-slide prone locations along the network were completed.

- Direct project beneficiaries were 123,461, compared to the baseline of 118,410 and the target of 125,000 (99 percent of the original target; ICR, para 36). Of the direct project beneficiaries, 49 percent was female, meeting the target of 49 percent (ICR, page 32).

Outcomes:

The achievements of relevant PDO outcome indicators were as follows:

- As measured by the RAMS, travel time for passenger cars on the rehabilitated roads was reduced by 12.5 percent, exceeding the target of 10 percent (ICR, para 28).
- As measured by the RAMS, Vehicle Operating Costs (VOC) for heavy trucks on the rehabilitated roads were reduced from the baseline of EUR0.79 to EUR0.69 per vehicle-kilometer, fully meeting the target of EUR0.69 per vehicle-kilometer (ICR, Table 3, page 12). The reduction of VOC was achieved even though there was an increase in the cost of fuel from EUR0.5 in 2016 to EUR0.65 in 2018 (ICR, para 28).
- According to the ex-post beneficiary survey, 84.5 percent of beneficiaries expressed satisfaction with condition of the project roads, compared to the baseline of 50 percent and the target of 70 percent (121 percent of the original target). The beneficiary survey observed that the comfort and duration of travel were greatly improved, especially among daily commuters, workers, students, and youth (ICR, para 30; Final report of beneficiary survey and impact evaluation, Figure 6, page 30). The beneficiary survey was aimed to assess beneficiary perceptions and expectations, as well as the livelihood outcomes, covering all road sections in 11 municipalities that were rehabilitated and collecting responses from 25 experts and 281 project beneficiaries who were frequent users of the rehabilitated roads and people living in its vicinity (The TTL/ICR team's response to IEG's questionnaire; Final report of beneficiary survey and impact evaluation by BAR E.C.E. provided by the TTL/ICR team).
- 68 percent of women perceived the rehabilitation of roads as having a positive impact on local economic development, according to the ex-post beneficiary survey (ICR, para 46). The same survey showed that female respondents were more satisfied with the increased access to public transport services followed by the improvements in road conditions.

- However, the beneficiary survey showed notable differences regarding the level of satisfaction with the local road infrastructure among respondent groups in different gender, age groups, and education levels. Women, elders, and people not completed primary education tended to have lower satisfaction levels (Final report of beneficiary survey and impact evaluation).

The rehabilitated roads reduced the travel time and the VOC, which enhanced the connectivity of the roads to the corridors in terms of the quantity as described in the TOC above. In terms of the quality of the enhancement, the beneficiaries in general expressed satisfaction with condition of the project roads, while there were noticeable differences in satisfaction levels among respondents grouped by gender, ages, and education levels. Overall, the achievement of Objective 1 is rated substantial.

Rating
Substantial

OBJECTIVE 2

Objective

To improve the Borrower's capacity for road safety and climate resilience

Rationale

Theory of Change of Objective 2: Providing technical assistance on road safety was intended to support preparing road safety design audit guidelines and conducting a road safety survey for the road network. Advancing the Road Asset Management System (RAMS) with the availability of all relevant data and staff skilled to apply the system to define quality criteria for the roads and preparing a 5-year strategic program were intended to support preparing climate resilience design guidelines and a 5-year rolling program for national and regional roads preservation works. The outputs would lead to the incorporation of guidelines and recommendations into road projects and internal designs, contributing to the improved capacity of PESR for road safety and climate resilience.

Critical assumptions included: (1) PESR's previous and ongoing experiences with the Bank-financed projects would prepare it to include road safety and climate resilience into their operations; (2) Potential leadership change in PESR would not affect the progress of project activities and the political commitment to the project; and (3) Capacity and resources were adequate for maintaining the roads and the RAMS after project closing. The critical assumption (3) was unrealistic as there were gaps with the capacity and performance of the maintenance company in charge of road maintenance.

Outputs:

Key outputs of Objective 2 were as follows:

- Guidelines for road safety design audit and climate resilience design were prepared.
- 4,000 kilometers of road network were surveyed for road safety through the International Road Assessment Programme (iRAP) survey, compared to the baseline of 500 kilometers and meeting the target of 4,000 kilometers (100 percent of the original target). The data about the road safety provided by the iRAP survey was additional input in the RAMS enabling PESR to consider road safety needs in prioritizing maintenance works.
- A five-year rolling program for national and regional roads preservation works was prepared based on the RAMS, which incorporated road safety and climate resilience aspects. The RAMS was expanded by combining the network safety data from the iRAP survey and the climate risks data, which enabled PESR to analyze flooding and landslide risks in the system.
- 70 traffic counters were installed for all national roads on the network and 10 mobile traffic counters were made available, to benefit the five-year strategic program in the future.
- Annual performance report was prepared and published by PESR.

Outcomes:

The achievements of relevant PDO outcome indicators were as follows:

- 100 percent of PESR's road projects incorporated road safety audit recommendations, meeting the target. The road safety audit was preformed after the first round of 11 roads with a length of 166 kilometers were rehabilitated, thus the recommended measures were implemented as a separate activity under the project. For the second round of roads, the audit recommendations were

incorporated into the designs of the rehabilitation works. Based on the audit recommendations, vertical and horizontal signaling; traffic calming measures; guardrails; slope protection against rock fall; introduction of elevated pedestrian crossings and segregation of pedestrians were implemented, as described for the achievement of Objective 1. These contributed to adopting new speed management techniques on roads following the best practices in the European Union.

- According to the ex-post beneficiary survey, 70 percent of beneficiaries expressed that rehabilitation of project roads increased road safety (ICR, para 31). Beneficiaries who perceived safety as below average decreased from 57.6 percent to 29 percent before and after the rehabilitation (Ibid).
- According to the Ministry of Interior, the numbers of human damages from road crushes in eight major cities (i.e. Skopje, Bitola, Veles, Kumanovo, Ohrid, Strumica, Tetovo, and Stip) decreased from 150 for fatalities and 3752 for injuries in 2016 to109 and 3124 in 2019, respectively (The TTL/ICR team's response to IEG's questionnaire). While the data for 2020 was not available due to the country's state of emergency to address the COVID-19 crisis, the black spots in Robovo and Vranista villages had no fatalities since the rehabilitations under the project until April 6, 2020, according to the Ministry of Interior (Ibid). These data on the incidence of human damages supplemented and supported the beneficiaries' perceptions on the increase in road safety measured by the beneficiary survey; however, to what extent the project activities contributed to the decrease in the numbers of human damages was not fully measurable with the available data.
- The Climate Resilience Design Guidelines was prepared and integrated by PESR in their internal design process for construction and rehabilitation of roads in the future, meeting the target.

PESR's Capacity for Road Safety:

PESR's capacity for road safety was improved by the advancement of RAMS and the installation of road asset management equipment such as the traffic counters. The RAMS also monitored the overweight trucks on the network, helping PESR to record the axle weights and gross vehicle weights in order to develop and implement a weigh-in-motion (WIM) system in key transit points of the road network.

PESR's Capacity for Climate Resilience:

PESR improved the capacity for climate resilience by developing the Climate Resilience Design Guidelines with the data collected by the RAMS and adopting it to their internal design process for the future road works. The climate risks data inputted in the RAMS enabled PESR to analyze flooding and landslide risks in the system. However, to adequately analyze to what extent PESR actually used the system and equipment introduced by the project and to what extent the climate resilience of the road networks was strengthened, more evidence would be needed, when data is available in the future.

In sum, PESR's capacity for road safety and climate resilience was improved in line of the stated objective, while direct outcome-level evidence on climate resilience capacity was not yet available. On balance, the achievement of Objective 2 is rated substantial.

Rating
Substantial

OVERALL EFFICACY

Rationale

The achievement of Objective 1 was substantial, as the reduction in the travel time and the VOC improved connectivity of the roads to the corridors. The achievement of Objective 2 was substantial on balance, as the incorporation of guidelines and recommendations based on data collected by the RAMS into road projects and internal designs improved capacity of PESR for road safety, but with limited direct evidence on its capacity on climate resilience. Overall, the Efficacy is rated substantial.

Overall Efficacy Rating

Substantial

5. Efficiency

Economic Analysis: At appraisal, the economic internal rate of return (EIRR) was 30.9 percent with the Net Present Value (NPV) of 9.7 million Euros, for the three roads included in the first-year program under Component 1: Civil Works with the estimated length of 36.7 kilometers out of the 112 kilometers of the all planned program (ICR, Table 1, page 40 and page 43; The TTL/ICR team's response to IEG's questionnaire). The EIRR at appraisal was calculated for the estimated construction cost of 10.12 million Euros, which covered 16.5 percent of the total project cost of 61.33 million Euros (ICR, Table 1, page 40; PAD, Table 6, page 28). At project closing, the EIRR of the three roads with the actual length of 36.1 kilometers was 30.2 percent with the NPV of 12.8 million Euros (ICR, Table 2, page 40 and page 43). The EIRR at project closing was calculated for the actual construction cost of 9.91 million Euros, which covered 19.2 percent of the total project cost of 51.69 million Euros (ICR, Table 1, page 40 and page 51).

Both economic analysis at appraisal and at project closing used the same methodology and assumptions, considering a period of 20 years at a discount rate of 10 percent. Using three selected roads, the economic benefits were calculated based on savings in road maintenance costs, savings in travel time and savings in vehicle operating cost (VOC) due to the improved road conditions as well as growth in traffic volume.

The EIRR and the NPV at project closing for the main three roads of around 36 kilometers were in line with the appraisal estimates, which were higher than the sector average. On the other hand, when the calculation of the EIRR was expanded to consider the regional roads and to cover the twenty roads of 243.9 kilometers out of the actually rehabilitated roads of 280 kilometers, the EIRR decreased by 7.6 percentage points from 30.2 percent to 22.6 percent.

Aspects of Design and Implementation that Influenced Efficiency: The project had no restructurings and closed on the original closing date. It lowered the administrative costs by using only 119 staff weeks (ICR, para 42) with adequate mix of skills, compared to the original estimate of 185 staff weeks (PAD, page 46). Moreover, the project became effective in just 2 months after signing of the loan agreement, contributing to accelerate the project implementation in early years. Implementation of civil works advanced quickly during the first half of project due to PESR's strong implementation readiness at entry with designs and bidding documents prepared ahead of time. On the other hand, rehabilitation of Phase 2 roads and retrofits of black spots were delayed due to the political turmoil and prolonged elections, the initiation of the output-based contracting, and the late

submission of the environmental compliance documents. These delays did not affect the overall implementation of project activities.

The EIRR and the NPV of the main three roads at project closing were comparable with these at appraisal; however, the notable decrease in the EIRR at project closing with the twenty roads, including regional ones, weakened the economic justification of the project. All the project activities were completed within the original timeframe and budget. Cost control of the civil works was good despite the delay in the procurement of the second round of roads and did not delay the achievement of the PDOs. The project rehabilitated longer roads than they planned for. In sum, overall, the Efficiency is rated substantial.

Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	30.90	16.50 ☐ Not Applicable
ICR Estimate	✓	30.20	19.20 ☐ Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The project's objective is highly relevant to the strategies of the World Bank and the Government both at appraisal and at closing. The Efficacy in achieving the development objectives is rated as substantial based on the evidence on improved connectivity as well as improved institutional capacity on road safety albeit the evidence regarding institutional capacity on climate resilience was indirect. Efficiency is rated substantial based on the project's EIRRs and NPVs with no administrative or operational bottlenecks. Based on these three sub-ratings, the project's overall outcome is rated satisfactory.

a. Outcome Rating

Satisfactory

7. Risk to Development Outcome

There were following risks to the sustainability of the achieved results:

1. Fiduciary risks for maintenance of the roads: The contracts with the road maintenance company, Makedonija Pat, did not include periodic maintenance of the rehabilitated segments. Combined with this, the weak capacity of Makedonija Pat would pose a risk for the sustainability of the outcomes. During project implementation, routine maintenance was not adequately conducted due to the insufficient cooperation between PESR and the maintenance supervision teams on quality assurance. To mitigate the risk, PESR increased the financing for maintenance of the rehabilitated roads in annual programs. Moreover, the RAMS established under the Project was expected to support PESR to develop realistic maintenance plans, check the status of paved roads, and supervise the performance of Makedonija Pat.

2. Financial and technical risks for maintenance of the RAMS: The regular data collection for the RAMS would not be sustained if adequate resources in terms of technical staff and financing would not be secured. To mitigate the risk, PESR made efforts to retain the full-time specialized staff to work on the RAMS. Moreover, PESR continued implementing the program for network data collection, which presented detailed timelines and resource requirements to periodically collect data on roughness, deflections and surface distress. PESR also made investments in the RAMS to include data on all bridges in the country, showing their commitment to the system.

8. Assessment of Bank Performance

a. Quality-at-Entry

The Project was designed to link regional and national roads to the main trade corridors and expand the use of the RAMS to adopt climate resilience and road safety considerations, aligning with the Government's priorities and building upon the achievements of the preceding project. Regarding the technical aspects, PESR prepared detailed designs and bidding documents for the first-year program of roads beforehand, aiming to accelerate implementation. The technical analysis at entry was proved to be accurate as all the project components were completed within the original budget and timeframe. The project secured political commitment to introduce a transformative change to PESR, installing evidence-based tools such as the RAMS to improve its approach on road maintenance and investment. On the other hand, the design could have better incorporated: (1) maintenance arrangements with road maintenance company Public Enterprise, Makedonija Pat, to mitigate the risk to sustainability of the project; and (2) an analysis on establishing a permanent system to enforce axle load limits to improve road safety.

On balance, strategic and technical aspects were well considered, while the sustainability risks would have been mitigated by more comprehensive and detailed arrangements at project entry. On this basis, the Quality of Entry is rated satisfactory.

Quality-at-Entry Rating

Satisfactory

b. Quality of supervision

According to the ICR (para 82), the continuity in supervision was ensured throughout the project, as the same Task Team Leader (TTL) provided oversight throughout the project duration. The majority of the team members was based in the region, enabling the Bank team to provide support swiftly and frequently. A full-fledged supervision mission was conducted biannually, supplemented by shorter missions in between to address specific issues. During implementation, the Bank team provided guidance to PESR to improve compliance to the safeguard policies, the speed of procurement preparation, and the reporting of performance monitoring. Moreover, the Bank team proactively supported the country to improve road safety. For example, the Bank team provided support for strengthening capacity of PESR staff on road safety, conducting a road safety capacity review, and improving the road safety management. There were factors outside the control of the Bank or PESR, such as a prolonged political turmoil and long election cycles that brought changes in the management of PESR. Notwithstanding the challenges, PESR team implemented the project activities on time with the help of the Bank's guidance and supervision.

The Bank team's supervision enabled the project to complete its activities with no extensions or additional financing even during the political disturbance. On this basis, the Quality of Supervision is rated satisfactory.

Quality of Supervision Rating
Satisfactory

Overall Bank Performance Rating
Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design
The objectives were clearly specified, which enabled the results framework to be well structured. The PDO and intermediate results (IR) indicators, as well as their data collection methods, were appropriately and realistically designed. No indicator was revised during implementation. The Theory of Change in the ICR illustrated causal relationships of the project activities and the outcomes. On the other hand, the key indicators were not measurable prior to the completion of civil works.

b. M&E Implementation
M&E data was collected through the beneficiary surveys, the RAMS, and the semi-annual reporting from PESR staff. No M&E specialist was placed in the PMU due to the lack of local specialists. This had a negligible impact on M&E implementation, as none of the indicators needed periodic monitoring and could not be fully measured before completion of civil works and road safety improvements. The delays in reporting and its insufficient quality negatively, specifically, the delay in implementing the RAMS, which was the main source of data, had affected M&E implementation. In addition, monitoring of the beneficiary related indicators was hindered by the delay in the beneficiary surveys due to the lack of market interest. Despite of these challenges, the status against indicators were routinely reported in the ISRs throughout

the project duration. M&E tools such as the RAMS and the International Road Assessment Programme (iRAP) survey were used effectively in the absence of M&E specialist.

c. M&E Utilization

PESR used the RAMS to collect data on the overweight trucks on the road network, which were causing premature road damages and road safety risks. The data on the axle weights and gross vehicle weights informed the development of a weigh-in-motion (WIM) system, which was implemented by PESR together with the Ministry of Interior and the State Transport Inspectorate. Furthermore, the implementation of the WIM would be enhanced by the ITS component under the ongoing Regional Trade and Transport Facilitation project.

M&E Quality Rating

Substantial

10. Other Issues

a. Safeguards

At appraisal, the project was in Environmental Category B, triggering the safeguard on Environmental Assessment (OP/BP 4.01). PESR prepared the Environmental and Social Assessment and Management Framework (ESAMF), which focused on the road rehabilitation to identify the relevant environmental risks and present a roadmap for developing the Environmental Assessments and Management Plans (EAMPs).

The Unit for Environmental Protection and Social Aspects in PESR lacked sufficient staffing at the initial stage of the project, especially because the unit staff had to make up for the insufficient oversight of environmental safeguards by the supervision engineers. Following the Bank team's recommendations, PESR increased the number of environmental specialists in the Unit from one to three. Overall safeguards rating in the latest ISR was moderately satisfactory, according to Operations Portal. Citizen engagement practices and the grievance redress mechanism were appropriately conducted throughout the project duration.

No social safeguard was triggered as the Project's interventions focused on the rehabilitation. PESR modified the technical designs or the geographical coverage to avoid dealing with the land access and the land acquisition as much as possible, such as the cases of the Debar-Boshkov section and the Tetovo-Popova Shapka section.

b. Fiduciary Compliance

Financial Management: The arrangements for financial management were appropriate throughout the project duration, including the staffing arrangements at PESR and the internal control system. Disbursement was handled with accuracy and timeliness. The Interim Financial Reports (IFRs) provided reliable information to the Bank quarterly. The financial audit of the project was replaced by the audit for

the entity's financial statements, as it was considered to have provided sufficient details about the project transactions (ICR, para 77).

Procurement: The procurement of the first round of civil works was not sufficiently participated by the bidders. To resolve the procurement difficulty, the Bank team provided guidance on the mitigation measures. The procurement team in PESR improved their capacities through gaining knowledge and experience on the Bank's procurement procedures and guidelines. Their strengthened capacities were reflected in the improved quality of procurement and technical documents overtime. The Project introduced output-based contracting in the second-half of the project duration only after the RAMS was fully implemented by PESR, in order to avoid any potential delays that might have caused by the additional workload.

c. Unintended impacts (Positive or Negative)

The activities to strengthen the capacity of PESR had a spillover effect to expand the capacity of the private sector and engineering school of the University, as their services for design and construction of civil works were essential for PESR. For instance, the private sector and academia participated in the training to integrate climate resilience and road safety into design and construction process. Their accumulated knowledge and capacity would be useful to conduct the maintenance of the roads in the future. Moreover, the improved network supported the emerging sectors such as agribusiness and tourism.

d. Other

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11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Satisfactory	
Quality of M&E	Substantial	Substantial	
Quality of ICR	---	Substantial	

12. Lessons

The following two lessons in the ICR stood out as important and relevant to other projects in the road sector and are presented here with some editing.

1. Output and performance-based contracting could be introduced successfully after adequate implementation and internalization of the Road Asset Management System (RAMS); this would provide the road agencies with the means to collect data needed to carry out such

contracts. Under the project, the decision to introduce output-based contracting only after adequate implementation and internalization of RAMS by PESR allowed it to use a fully functional RAMS to obtain accurate data on the road network to avoid any serious delays in procurement and the project failing to achieve its objectives due to a premature introduction of output-based contracting.

2. The RAMS can help a road agency make strategic decisions to improve financial sustainability of the road sector and fiscal management, under close collaboration among key government agencies. The adoption of the RAMS concurrently happened with the time when the government sought for innovative financing measures which might not be fully financially feasible. PESR used the RAMS to rationalize the investments in road safety and climate resilience with close collaboration and exchange of data among key government agencies. Strategic decision making in a sector level supported by the RAMS further benefits the whole economy, by contributing to an improved fiscal management.
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13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provides a good overview of the project with concise texts structured around the project development objective that support the ratings. The ICR includes a clear figure describing the project's results chain and critical assumptions. Moreover, the ICR is candid to present the key factors that affected implementation and outcome as well as the risks to development outcomes. The lessons are useful, which are based on the specific experiences and findings for the project. Regarding the quality of the evidence and of the analysis, the ICR could have been more comprehensive to provide an analysis on disaggregated data of evidence and detailed explanations on methodologies of surveys, and outcome level data on capacity building outcomes in order to strengthen their arguments on achievements of objectives. In sum, overall, the quality of the ICR is rated substantial.

a. Quality of ICR Rating

Substantial