

**PROGRAM-FOR-RESULTS INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No: PIDA0132469

Program Name	Enhancing Infrastructure Efficiency and Sustainability
Region	Europe and Central Asia
Country	Serbia
Sector	Transport and Energy
Lending Instrument	Program for Results
Program ID	P163760
<i>{If Add. Fin.}</i> Parent Program ID	
Borrower(s)	Republic of Serbia
Implementing Agency	Public Enterprise Roads of Serbia (PERS) and Public Investment Management Office (PIMO)
Date PID Prepared	<i>23 September, 2017</i>
Estimated Date of Appraisal Completion	<i>25 September, 2017</i>
Estimated Date of Board Approval	<i>November 2, 2017</i>
Concept Review Decision	The Chair authorized the team to proceed with appraisal, with a loan amount of Euro 100 million .
Other Decision <i>{Optional}</i>	

I A. Country Context

1. The Republic of Serbia is an upper middle income country with a Gross National Income per capita of US\$5,041 and a population of 7.1 million. After an average annual growth of 5.9 percent during the decade before the 2008 global financial crisis, economic growth stalled, reversing some of the progress made in earlier years. Average real growth dropped to close to zero as the economy experienced three recessions from 2009 to 2014. Public debt doubled to 76 percent of GDP between 2009 and 2015. At the same time, the stock of public guarantees, mainly to state owned enterprises (SOEs) and public enterprises, rose from below 3 percent of GDP in 2008 to 7.2 percent by the end of 2015. Subsidies, high levels of public sector employment, inefficient human resource management and weaknesses in financial management all contributed to Serbia's fiscal challenges. In 2014, the Government of Serbia (GoS) adopted an ambitious fiscal consolidation and structural reform program. The program is supported by a 36-month Standby Arrangement with the International Monetary Fund (IMF). In the short term, the program focuses on the control of aggregate wage and pension expenditures, improvements in tax administration, and reductions in subsidies to state owned enterprises. As a result of these measures, general government deficit in 2015 was 3.7 percent of GDP and in 2016 went further down to reach 1.4 percent of GDP.

2. As a result of the global financial crisis, poverty peaked at 15.1 percent in 2010 but then dropped to 13.6 percent in 2016 due to the recent economic recovery and labor market trends. In addition to improvement of public finances, Serbia has made progress towards its European Union (EU) membership. The prospects for EU accession are providing an important impetus for reforms in the Serbian public sector. In November 2007, Serbia initiated a Stabilization and Association Agreement with the EU and in 2012, Serbia was granted EU candidate status. Since the formal start of accession negotiations in 2014, progress is moving largely on its predicted trajectory. As of July 2017, Serbia

opened 10 out of 35 chapters of the EU's *acquis communautaire*. Serbia has set a self-declared objective of being ready to enter the EU by 2020.

B. Multi-sectoral and Institutional Context

3. Infrastructure in Serbia remains largely outdated due to decades of under-maintenance and underinvestment. These aging infrastructure systems, including in the transport and building sectors, have resulted in substantial loss of economic productivity, reduced safety and often higher budgetary outlays. The deteriorating infrastructure has been identified as a critical factor that increasingly weighs heavily on budget resources, threatens the delivery of critical services necessary to support growth, and discourages private sector investment.

4. Inadequate performance by the public sector and the limited use of modern technologies and methods in Serbia have adversely impacted the management of infrastructure and contributed to the deterioration in its quality. Public sector performance in Serbia is ranked 132nd by the 2016-17 Global Competitiveness Index (GCI), significantly worse than Serbia's overall competitiveness ranking of 94. Serbia also ranks low in the availability of the latest technologies (107th) and in the government's procurement of advanced technology (110th). Taken in aggregate, these indicators clearly show that improving and modernizing public sector management of infrastructure, Serbia's most valuable asset base, could have significant impacts on enhancing the efficiency of expenditures in the sector and in improving quality.

5. GoS recognizes the need to modernize the management of its infrastructure sector and has requested World Bank support in two infrastructure sectors with high asset values: roads and buildings. The aim is to improve the quality of maintenance practices for national roads and refocus the programs on outcomes rather than budgetary inputs. For buildings, this aim is institutional and operational support for a national, large scale program to renovate the public social building stock and increase its energy efficiency and safety. As such, this Program-for-Results would continue the WB's involvement in the infrastructure sector by improving the management of the transport and energy infrastructure and service delivery while seeking concurrent enhancements in public institutional capacity and long-term sustainability of the sectors.

6. GoS sent a strong signal for its desire to improve infrastructure management in two key sectors by creating a single budget line for a multi-sectoral project. This shows that the intention of the government to elevate the focus from isolated energy efficiency or road maintenance efforts to improving infrastructure management systems. A PforR supports this effort by including institutional building actions in the public administration principles and by providing technical assistance in the implementation of more innovative practices.

7. *Transport sector:* The road network in Serbia is a major asset that extends for about 38,600 kilometers of which a little over one third are national roads and two thirds are local roads. While limitations in financial resources and stability of financing are two major reasons for the condition of the network, institutional arrangements for road management also contribute to the unsatisfactory outcomes in the sector. The poor quality of roads manifests itself in high vehicle operating costs and inadequate road safety, and reduces Serbia's overall trade competitiveness.

8. PERS, as the entity responsible for national road management, has recognized that improving the condition and reliability of the road network requires: (1) addressing the maintenance backlog which has resulted in massive needs for rehabilitation, (2) modernizing maintenance management and ensuring sufficient funds for preserving road assets, including the use of performance-based maintenance contracts¹, (3) strengthening the institutional arrangements for the road sector and (4) increasing the

¹ Under the performance-based maintenance contract (PBMC) approach to road maintenance, the contractor assumes responsibility for managing the condition of the road assets to ensure that a pre-set level of performance is achieved. The road owner specifies what needs to be achieved rather than how to achieve it. This incentivizes the

resilience of the road network. The World Bank is supporting the GoS in all four areas. PERS maintains and rehabilitates the National Road Network (14,894 km). The main revenue source for these activities is a closed tolling system on the national highways. This is supplemented by discretionary financial support from the general budget and loans from International Financial Institutions (IFIs). Prior to 2012, PERS used to receive 20 percent of the excise tax on fuel but did not receive any additional budgetary support. On balance, the current discretionary budgetary support is lower than what PERS used to receive from the excise tax.

9. *Energy Sector:* Serbia remains an energy and carbon intensive country. While the energy intensity has declined by 19.2 percent since 2005, it is still four times higher than the average for EU-28 countries (486.1 vs. 120.4 kgoe/€1,000). To address the challenges related to its high energy and carbon intensity, the GoS has made energy efficiency a cornerstone of its energy strategy. It has adopted the Law on Efficient Use of Energy in 2013 to provide the legal basis for energy efficiency measures under its National Energy Efficiency Action Plan (NEEAP). In line with the obligations of the Energy Community to comply with the Directive 2012/27/EU on energy efficiency, the GoS adopted the 3rd NEEAP (2016-2018) with the target to reduce final energy consumption by 9 percent by 2018 (based on their 2008 baseline consumption levels). Serbia is also a signatory to the Paris Agreement and submitted their Nationally Determined Contribution (NDC), whereby the country declared a target of greenhouse gas (GHG) emission reduction by 9.8 percent by 2030 compared to 1990 emission levels.

10. The building sector (residential, public and commercial) continues to dominate energy consumption, representing 45 percent of final energy use. With some 245 million square meters (m²) of gross floor area, comprising an estimated 2.2 million residential buildings and 15,000 public facilities², Serbia's building stock is large. About 15 percent of this stock was built between 1918 and 1941 or earlier, and about 32 percent was constructed between 1945 and 1970—making about half of the building stock over 50 years old. About 41 percent of the public building area (~11 million m²) are in the education sector, 14 percent (4 million m²) in the health sector and the remaining 44 percent (~1,641, 4 million m²) in administrative and other public buildings³. There is no official breakdown of central and municipal government buildings; however, MCTI estimates there are about 230 central government buildings. The age of the building stock, combined with obsolete construction practices that did not include energy efficiency elements, decades of under-maintenance and chronic underinvestment, result in a need for massive investments to upgrade these facilities to meet modern requirements for safety, energy efficiency and modern usage standards. Although energy consumption in public buildings represents only about 4 percent of the total consumption, energy savings and corresponding GHG reductions in this sector can have a catalytic effect by developing the market and leading by example. As some municipalities within Serbia are located within moderate to high risk areas for earthquakes, current regulations require that technical designs that call for works that may impact the structural stability and integrity of the building must include seismic calculations to ensure the building's resilience. The World Bank is providing capacity building under a parallel Disaster Risk Management Technical Assistance Program

contractors to adopt measures that improve the condition of the road asset for the duration of the contract rather than ad-hoc repairs. In return for the delivery of an agreed level of performance, the contractor receives a schedule of payments. The PBMC approach provides a financial incentive for the contractor to focus on achieving the performance standards. It also incentivizes the contractor to be innovative and minimize waste because the payments are based on a set level of performance rather than the value of inputs used.

² Available statistical data on the existing building stock is incomplete, particularly for the public and commercial sectors. These figures are based on a World Bank study *Options for the Implementation of an Energy Efficiency Program in the Public Buildings Sector in Serbia* (November 2013), relying on data from SORS, central government and public utilities, and on ENSI 2012, *Energy Efficiency in Buildings in the Contracting Parties of the Energy Community*, Study for the Energy Community, Draft Final Report 1.02.2012.

³ These include: central and municipal government administrative buildings, libraries, museums, courts, prisons, sports halls, etc.

with PIMO to help conduct a seismic vulnerability assessment of buildings likely to be most impacted by earthquakes.

11. Several barriers for energy efficiency have prevented scale-up. Current planning documents in education, healthcare and social protection sectors usually do not include statistics on age and physical condition of the facilities, nor do they make any assessment of the financial resources needed for reconstruction or regular maintenance. Although managers and directors of the facilities prepare annual budget plans to include some of these investments, budgetary constraints often only allow for relatively modest repairs and minor maintenance works. To date, annual budget allocations at federal and municipal level have been grossly insufficient to address the backlog of required investments. In addition, several policy, financial, institutional and informational impediments have discouraged investment in energy efficiency in public buildings in Serbia.

C. Relationship to the CPF and Rationale for Use of Program-for-Results Instrument

12. *Infrastructure is one of the six areas identified in the Country Partnership Framework (CPF) for FY 2016 - 2020.* Better regional connectivity through infrastructure development is essential to boost investment and growth in Serbia. The WBG has been heavily engaged in infrastructure development, both through investment support to highway and national road construction, improvements in road and rail sector management systems and support to energy sector reforms and rehabilitation. The CPF notes that improved efficiency in spending, better quality maintenance of infrastructure, and improved prioritization of public investments need to be pursued. Furthermore, the CPF notes that engagement in infrastructure development will be continued in close coordination and cooperation with other international bodies (i.e., IFIs and the EU).

II. PROGRAM DESCRIPTION

A. Government programs

13. Serbia has pursued a comprehensive reform agenda including public enterprises and SOEs, and improving the business climate. It has made significant progress on fiscal consolidation in part due to the ongoing expenditure control. The government has embarked on institutional reform programs toward fiscal sustainability and improving public services. Among the key priorities are reforming the public administration, and strengthening public investment management. Ongoing reforms of SOEs especially in the mining, energy, and transportation sectors are intended to minimize fiscal risks and place viable companies on a pace of financial sustainability.

14. Towards enhancing infrastructure management, GoS has created a single budget line in its 2017 Budget for a multi-sectoral project to improve the efficiency, quality and sustainability of infrastructure systems. The focus of the government programs has been the road sector and the building sector, two sectors with large asset bases. Modernizing public sector management in these sectors could have significant impacts on enhancing the efficiency of expenditures and on further controlling costs. The sections below therefore focus on the government programs in roads and energy efficiency for public buildings

15. *Transport:* The government program is the routine and periodic maintenance of 14,894 km of category 1 and 2 National roads under the management of Public Enterprise Roads of Serbia (PERS) annually. The government program is implemented under the government's Road Development and Maintenance Strategy, which is harmonized with the Strategy for Development of Railway, Road, Water, Air and Intermodal Transport in the Republic of Serbia.

16. Modernization of maintenance management is a clear priority for PERS. This is the focus of the transport part of this Program loan. PERS is taking steps to modernize maintenance management. The

current framework has been in place since the mid-2000s when the regional maintenance companies were privatized. The shortcoming of the first reform is that there has been no introduction of competitive bidding for maintenance works. All the maintenance companies still operate in the same “region” for which they were responsible before privatization through annual extensions of their contract. PERS’s contract model for road maintenance was developed in 1992 and is based on unit rates set by PERS. Competitive bidding for maintenance contracts is not being used.

17. *In the Energy sector:* In recognition of the pressing need to rehabilitate the public building stock, the Government approved the Program for Reconstruction and Improvement of State-Owned Public Facilities (hereafter referred to as the “government program”) in April 2016, revised October 2016. The government designated Public Investment Management Office (PIMO) to implement the government program. The main aspects of the government program are summarized below:

- A. *Government program scope.* The government program is open-ended and covers all municipal-level social buildings (including education, healthcare and social protection facilities) in need of reconstruction. Works covered under the program include improvements of the building envelope (roof, windows, doors and wall insulation), internal equipment (lighting, fuel switching such as coal/oil to pellets/wood chips, solar hot water heaters) as well as some non-EE measures (structural reinforcement, sanitary repairs, rewiring, painting, etc.). According to PIMO estimates, 70-80 percent of the works to be undertaken can be categorized as EE improvement measures.
- B. *Implementation model.* The program is administered by PIMO. While the program relies largely on a decentralized implementation model with municipalities responsible for procurement and management, PIMO retains a critical role for final approvals and technical oversight. Municipalities select buildings from education, healthcare and social protection sectors and prioritize them based on the urgency of the need for renovation and lack of access to financing from other programs. They are responsible for the costs associated with the technical designs, bidding documents, construction supervision and commissioning; the Program bears 100 percent of the costs for the renovation works.
- C. *Eligibility and selection.* A call for proposals was issued by PIMO in May 2016 to all municipalities requesting them to provide a list of priority buildings for participation in the government program, based on criteria set by PIMO. These include state of building, economic justification, degree of urgency of repairs, number of facility users, and project implementation readiness. The criteria also seek to ensure fair distribution of resources throughout the country and give priority to underdeveloped municipalities.
- D. *Technical aspects.* As required under current regulations, all buildings to be renovated must have technical designs including an EE elaboration to meet basic building code parameters (e.g., fire safety, operational permits). The government program seeks to reach Class C for all buildings, except those for which it is uneconomic or other constraints to do so (e.g., restrictions on façade work due to cultural heritage preservation), in which case they are committed to achieving at least two classes higher than the baseline (i.e., from Class F to Class D).
- E. *Status.* To date, 234 buildings have been officially approved by the government for renovation under the government program, based on municipal priorities, satisfaction of the eligibility criteria set by PIMO, and review by a Working Group (WG) comprising representatives of key ministries. About 30 are already under construction or completed, 50 are in the works tendering phase and the rest are finalizing their designs.

18. It is evident that the need for improved management and enhanced efficiency is essential for both of these infrastructure sectors that account for a significant proportion of Serbia’s capital assets.

B. Program Development Objective/s (PDO) and key results

19. The Project Development Objective is to improve the management and sustainability of select public infrastructure by strengthening government capacity and systems, upgrading assets and increasing expenditure efficiency.

20. For the transport component, the goal of the government is to support the substantial implementation of *Performance Based Maintenance Contracting (PBMC)* by 2020. This transition from traditional maintenance to PBMC will bring better planning, contracting and fiscal discipline in the Public Enterprise Roads of Serbia. For the energy component, the Program will support the government's *Program for Reconstruction and Improvement of State-Owned Public Facilities* by improving energy efficiency and safety in renovated public buildings, and strengthening the implementation capacity for the program.

21. Key Program results indicators would include:

For the transport sector:

- 1) Enhanced motorist satisfaction through better pavement condition.
- 2) Implementation of the Service Level Agreement (SLA) between the MCTI and the Public Enterprise Roads of Serbia (PERS) defining agreed maintenance service levels and the commensurate financing to ensure financial sustainability of the maintenance programs.

For the energy sector:

- 3) Projected lifetime energy savings (core) in renovated buildings.
- 4) Number of renovated buildings that meet Serbia's Class C energy performance (or at least two classes higher than the baseline) and receive a final acceptance report.

C. PforR Program Scope

22. The Bank's program focuses on improving management practices in the road and building sectors by supporting nation-wide government programs in these two areas.

23. As described in the table below, the Bank's support in transport focuses on improving road maintenance management practices gradually introducing modern concepts and shifting the focus from inputs to outcomes. It culminates with the implementation of PBMC for 5000 km of the national road network. This does not include an additional 3000 km of network, that is being prepared for tender under the auspices of EU Delegation to Serbia under PBMC. The tendering of the 3000 km is a DLI under the Bank supported RRSP. The PforR operation builds on this initiative and seeks to institutionalize the PBMC practice in Serbia.

Table 1. Proposed Path towards Performance Based Maintenance Contracts in Serbia

Year 1 2017-18	Traditional Maintenance	<p>► Bank Support: Maintenance of 1000 km using existing maintenance procedures. The contracts executed would ensure, as a minimum, that during the Project implementation period no potholes remains open, no edge break occurs between the pavement and the shoulders and that all horizontal marking and vertical signs are adequately restored, in order to comply with the most critical road safety requirements. The continuing maintenance will ensure system preservation and structural sustainability of the network's state of repair. This will help change the mindset of PERS from a traditional approach based on payments for inputs to one that considers outcomes.</p>
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Year 2 2018-19	Transition Year: Enhanced Maintenance (Traditional Maintenance + Performance standards)	<ul style="list-style-type: none"> ▶ Bank Support: Preparation and signature of the Service Level Agreement (SLA) to ensure long term financial predictability and sustainability to address maintenance needs in Serbia. ▶ Bank Support to PERS to maintain 2000 km of network using enhanced maintenance (Traditional maintenance + Performance Standards). The contracts executed will ensure a clear set of performance standards, that would result in increased efficiency in maintenance operations and a predictable state of repair to ensure enhanced motorist satisfaction. ▶ PBMC tendered and contracts awarded for an additional 5000 km.⁴
Year 3 2019-20	Substantial Implementation of the Performance Based Maintenance (PBMC)	<ul style="list-style-type: none"> ▶ Bank Support: Maintenance of 5000 km of national network using PBMC. These contracts will be for a duration of three (3) years, where bank support will be limited to the first year of implementation (where the sustainability of future years funding will be defined by the Service Level Agreement signed between PERS and the MCTI). The quality and service levels will also be defined by the SLA.

24. The progression to, and institutionalization of, a full-fledged performance-based maintenance program is founded upon three key elements – a Service Level Agreement (SLA) between MCTI and PERS, Rolling Business Plans and Asset Management Plans. These three components interlink to each other very closely and establish the terms of involvement for each of the agencies or organizations that have a role in road maintenance.

25. **Service Level Agreement.** A SLA will be a multi annual infrastructure contract between the GoS and PERS. The SLA will be the centerpiece for the GoS’ policy towards the sustainable financing of public road network. It will define the level of GoS’s support for the activities of maintenance, rehabilitation and upgrades of national roads.

26. **Rolling Business Plans.** PERS will develop a Rolling Business Plan to address SLA commitments. The business plan will be a key in-house planning and business management tool to help achieve the agreed SLA targets. The funding levels for the period 2018-2020 will be set by MCTI and the Ministry of Finance (MoF). In turn, PERS will be directly responsible for a number of key decisions that impact its operational and financial performance.

27. **Asset Management Plan.** An asset management plan will provide information about how PERS will integrate management, financial, economic and engineering practices to utilize its physical assets. The asset management plan will have the objective to provide the users with the optimal level of infrastructure service and in the most cost-effective manner. Asset management thinking will challenge managers to optimize output, by achieving the best or most appropriate trade-off between competing factors such as performance, cost, and risk.

28. **Energy:** Based on the more than 1,500 buildings that have already been proposed, the government program could absorb significant resources; the Bank team estimates it may require more than €300 million to renovate all of them. After the first call for proposals issued in May 2016, PIMO received 523 applications and developed a shortlist of 234 eligible buildings after review by the WG; the list was subsequently approved by the government. The eligible buildings were spread amongst 109 municipalities (out of a total of 174). As of today, the government program has committed its available budget but, because the government program is open-ended, it may expand the program with additional calls for proposals in future years and seek additional financing from the Bank and others. Therefore, the Bank has defined its Program for the purposes of its Program-for-Results loan as the first phase of the government program, namely the 234 buildings currently approved by the government from the initial call for proposals. There is no geographic boundary as these buildings are located throughout the country and the Program is expected to be implemented over a 3-year period.

⁴ PBMCs for 3,000 km are currently being tendered. The 5,000 km are in addition to the 3,000 km.

29. Under the Program, municipalities must submit project proposals in compliance with eligibility criteria and present requested information regarding rehabilitation and reconstruction measures. PIMO has advised municipalities to define priorities based on the degree of the dilapidation of the buildings, number of users, and estimated investment. PIMO processes and systematizes received applications and submits the list of proposed projects for review to a Working Group (WG) formed by the government with representatives of key ministries. After review, the WG shortlists selected projects and submits the list through PIMO to the government for approval. Under the Program, the rehabilitation and improvement of the public buildings should consider that all users and beneficiaries, children, disabled and elderly people, have unobstructed access, easy movement and appropriate working conditions in accordance with latest standards and technical requirements in their respective sectors. Issues related to energy efficiency, safety (structural and fire) and proper functioning (full lighting, heating, etc. per national norms) are also integral to the Program.

D. Disbursement Linked Indicators and Verification Protocols

30. Disbursements under the Program will be triggered by the achievement of key results or disbursement-linked indicators (DLIs) contributing to the PDO. Key considerations were taken into account in their selection: (i) DLIs signal and monitor critical milestones for the achievement of the PDO; (ii) they provide incentives to reward performance by ensuring transparency and economic efficiency; and (iii) they address specific risks or constraints to achieving the results, including long-term sustainability of the program and monitoring and evaluation.

Table 2. Disbursement Linked Indicators

<i>Indicator</i>	<i>Disbursement Amount</i>	<i>Description of Indicators</i>	<i>Completion Deadline</i>
<p><u>DLI1</u></p> <p>▶ PERS Completes maintenance of 1000 km of national network</p>	€15 million	<p>▶ PERS maintains 1000 km of its network in accordance with the contractual specifications. The contracts executed would ensure, as a minimum, that during the Project implementation period no potholes remains open, no edge break occurs between the pavement and the shoulders and that all horizontal marking and vertical signs are adequately restored, in order to comply with the most critical road safety requirements</p>	Dec 2018
<p><u>DLI2</u></p> <p>▶ Service Level Agreement (SLA) between PERS and MCTI is signed.</p> <p>▶ PERS Adopts its 3-year Business Plan.</p> <p>▶ PERS Completes maintenance of 2000 km of its network using enhanced maintenance contract.</p>	€20 million	<p>▶ Funding and Service Levels agreed on (between PERS and MCTI) as part of the Service Level Agreement is used as the basis for the PERS's 3-year business plan.</p> <p>▶ PERS governing body adopts the 3-year business.</p> <p>▶ PERS maintains 2000 km of its network in accordance with the Enhanced Maintenance contractual specifications. The contracts executed would include a clear set of performance standards, that would result in increased efficiency in maintenance operations and predictable state of repair to ensure an enhanced motorist satisfaction.</p>	Dec 2019

<p><u>DLI3</u></p> <ul style="list-style-type: none"> ▶ 5000 km of the national road network managed by PERS is maintained using PBMC ▶ Adoption of the asset management plan for PERS 	€25 million	<ul style="list-style-type: none"> ▶ PERS' contracted maintenance with PBMC contractors covers at least 5000 km of Serbian National Road System. The system condition standards will meet the service levels as agreed between PERS and MCTI as part of the Service Level Agreement (SLA) ▶ PERS governing body adopts its asset management plan 	Dec 2020
<p><u>DLI4</u></p> <ul style="list-style-type: none"> ▶ Preparation and adoption of Program Operations Manual by PIMO 	€3 million	<ul style="list-style-type: none"> ▶ An independent verification entity will confirm that PIMO management has adopted a POM, acceptable to the Bank 	October 31, 2017
<p><u>DLI5</u></p> <ul style="list-style-type: none"> ▶ Government adoption of medium-term public building renovation strategy 	€5 million	<ul style="list-style-type: none"> ▶ An independent verification entity will confirm that the government has adopted the strategy 	June 30, 2019
<p><u>DLI6</u></p> <ul style="list-style-type: none"> ▶ Design and operationalization of consolidated monitoring and evaluation system 	€2 million	<ul style="list-style-type: none"> ▶ Report by independent auditor for the development and issuance of a program progress report that includes the agreed parameters from the M&E system 	December 31, 2018
<p><u>DLI7</u></p> <ul style="list-style-type: none"> ▶ Renovated and commissioned buildings that meet Class C (or two classes higher than the baseline) and have a final acceptance report 	€30 million	<ul style="list-style-type: none"> ▶ Report by independent auditor that the acceptance reports and energy performance certificates have been signed and issued and all invoices paid ▶ This DLI will be scalable, with €5 million for each batch of 39 buildings; partial disbursement will be allowed on a proportional basis 	Biannual reporting

IV. Environmental and Social Effects

31. The Environmental and Social Systems Assessment (ESSA) for the PforR concluded that there are no significant gaps between the core principles of the Program for Results and the Regulatory and Policy Framework of Environmental Management System in Serbia. Further, the process of approximation of the national environmental legislation to EU environmental *acquis* is well on its way. However, previous implementation non-compliances reported by key stakeholders document gaps in implementation of the Framework. The key areas for improvement under the Program include: (i) waste management practices, (ii) use of natural resources, and (iii) environmental and energy efficiency monitoring systems.

32. *Program Benefits.* The Program will have significant direct and indirect environmental benefits, such as: (i) a reduction of greenhouse gas emissions, CO₂ in particular, which can contribute to slowing down climate change globally; (ii) improvement of ambient air quality of the municipalities affected by Program implementation; (iii) reduction of the amount of waste generated as a result of combustion of solid and liquid fuels; (iv) improvement of community connectivity (v) improved access to local and

regional markets; (vi) improvement of road safety in municipalities affected by the Program; and (vii) creation of preconditions for quicker, more balanced and sustainable development of the affected municipalities.

33. *Assessment of Environmental and Social System.* Environmental aspects of the Program are regulated through two separate processes – environmental permitting and implementation of specific environmentally-related regulation. Any potential environmental risks are addressed and regulated by spatial and specific construction/technical legal acts as well as general environmental regulations and specific field-related acts. Being an EU candidate country, Serbian environmental regulation is advanced, well defined but only partially harmonized with the EU acquis. Processes of rehabilitation of the infrastructure that is subject of the Program, beside technical requirements standards and norms, are regulated by the requirements of the Law on Planning and Construction that, among others, regulates the conditions and manner of spatial planning, use of construction land and building of facilities; monitoring and inspection. The Law on planning and construction includes the field of energy efficiency in the building of facilities. General environmental and sustainability stipulations in Serbia related to conservation and use of environmental assets as well as the conditions and procedures of environmental impact assessments – are defined in the Law on Environmental Protection (LEP). The main objectives of LEP are sustainable management; preservation of the natural balance; integrity, diversity and quality of natural resources; and prevention, control, reduction and remediation of all forms of pollution to environment. Specific Program related environmental risks are addressed within the large number of laws, among which the most important are: the Law on Environmental Impact Assessment; the Law on Waste Management; the Law on Chemicals; the Law on Air Protection; the Law on Waters; the Law on Protection from Environmental Noise; the Rulebook on classification of motor vehicles and trailers, and their traffic technical specifications; and the Law on Occupational Health and Safety. The environmental risks are also regulated through a set of national strategies, rules, procedures and limits set forth in several national strategies and sub-legislation.

34. *Identified risks.* The methodology used in the assessment of environmental impact risks was similar to those typically used in ISO 14001 standard implementation. Based on that, environmental risk assessments for impacts of the supported programs are assessed against impact severity, duration of exposure to impact, reversibility of impact, likelihood of occurrence and size of impacted area. The screening identified a range of potential negative environmental impacts, which are typical for the energy civil works and construction activities, that could potentially arise during the Program implementation. These impacts are related to Air quality; Water quality; Soils; Landscape; Mineral Resources and Raw Materials; Wastes (including toxic and hazardous ones); Hazardous substances; Noise and vibrations; Health and Safety.

35. *Mitigation measures.* Most of the rehabilitation works, that consist majority of the Program, currently do not require construction permits or EIAs according to national legislation. The environmental monitoring system in these situations relies on capacities of implementing agencies that are assessed as inadequate or strong in respect to application of policies, procedures and practices within the Program's implementing agencies. To address these issues, a set of mitigation measures is built in the PforR and targeted to PERS, PIMO and local municipalities that will participate in the Program. Mitigation measures in PERS are – (i) training of staff in environmental management tailored to Program's needs; (ii) ensuring there is a dedicated environmental manager position to work exclusively under the Program; (iii) design of the environmental management guidelines for environmental impact monitoring for PERS; (iv) preparing a standard environmental management and monitoring guidelines for PERS-engaged contractors on road rehabilitation works; (v) preparing a standard/generic Waste Management Plan for road rehabilitation activities; (vi) adopting a rule that written approval of the environmental compliance report is obligatory precondition for the execution of the final payment of contractors. In PIMO and local-self-governments the measures include – (i) employment of an environmental manager for the Program-related works; (ii) development of the internal environmental management and monitoring procedures

within PIMO, applicable to Program-funded activities; (iii) executing environmental-risks related training to PIMO staff, supervising engineers and environmental manager to enable efficient and effective environmental supervision and compliance; (iv) preparing internal guidelines for the environmental management and monitoring of Program-related activities/projects - tailored for the needs of the environmental manager, site and supervising engineers; (v) preparing a standard environmental management and monitoring guidelines for contractors; (vi) preparing a standard/generic waste management plan for the contractors related to Program-funded activities; (vii) adopting a rule that written approval of the environmental compliance report is obligatory precondition for the execution of the final payment of contractors.

Social

36. The transport component will finance road maintenance activities. Maintenance in this context is defined as routine, periodic (minor repairs, limited resurfacing, limited reconstruction of drainage and pavement), that would be done in the existing Right of Way, hence expropriation of land is not anticipated. The program will exclude financing that will cause land take, such as extension or widening of the roads or any other reconstruction that might lead to land acquisition. In addition, there is neither evidence of squatters living or using the vicinity of roads under the competency of the PERS nor practice of illegal small vendors selling products. Temporary land take for storage of the heavy machinery is not an issue because the contractors use public land in most of the cases or rent pieces of land for storages. Because of the nature of the works – road maintenance whereby in different regions regional firms are providing the maintenance works and the retrofitting of the public buildings – the labor comes from the locality or micro region and thus there is no need for establishment of the labor camps. So, there will be no issues with labor influx as well. PBMC will incorporate standard World Bank Environmental, Social, Health and Safety clauses requiring the contractors to apply the workers code of conduct. The social assessment will solicit feedback by the users, to be disaggregated and further analyzed by gender variables to capture feedback and issues based on gender and improvement of consultation process such as local self-government related to the maintenance works by the PERS and with this the program will further strengthen and improve the positive outcomes from new approach, Performance Based, contracting for the maintenance.

37. Investments in the energy component of the program envisage energy efficiency retrofits in public social buildings, e.g., schools, pre-schools, social care and service centers, health clinics and retirement homes. The program is limited to structural and energy efficiency investments and, as such, there are no economic activities, neither legal nor illegal, that will be adversely affected by the program investments or activities. Thus, there are no relevant social risks with the program. Rather, the program will have positive social impacts. It will lead to improved social development outcomes due to the upgrading of social buildings, extending their operating lifetimes and quality. The social assessment recommends that measures are taken to properly capture and document the social development outcomes so they can be further used by PIMO to support its program monitoring, reporting and evaluation functions. The recommended measures include activities such as: documenting and carrying periodic i.e. annual social surveys to measure user's satisfaction and assess the scale of beneficiaries disaggregated by gender; adopting the social design program as part of overall program M&E database that can be searched by different variables. In addition, it is recommended that these surveys are further analyzed by gender variables to capture feedback and issues based on gender that would be addressed as the program advances or with other programs as necessary. The possibilities to do social monitoring will allow to capture social impacts in Local Self-Government level as well in aggregate level and with this to strengthen even more the worthens and usefulness of the program beyond the energy cost savings.

38. Communities and individuals who believe that they are adversely affected as a result of a Bank supported PforR operation, as defined by the applicable policy and procedures, may submit complaints to the existing program grievance redress mechanism or the Bank's Grievance Redress Service (GRS). The

GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaint to the Bank's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

Tentative financing

Source:	(\$m.)
Borrower/Recipient	129,400,000
PERS Toll Revenue	515,950,000
IBRD	118,610,000
IDA	
Others (specify)	
	Total 763,960,000

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