

Document of
The World Bank

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Report No: PAD3281

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT PAPER

ON A

PROPOSED ADDITIONAL LOAN

IN THE AMOUNT OF EUR 21 MILLION
(US\$ 22.9 MILLION EQUIVALENT)

TO THE

REPUBLIC OF SERBIA

FOR A

Serbia - Real Estate Management Project Additional Financing

October 31, 2019

Urban, Resilience And Land Global Practice
Europe And Central Asia Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective Sept 30, 2019)

Currency Unit = Euros (EUR)

SDR 1 = US\$1.36331

US\$ 1 = EUR 0.91562514

FISCAL YEAR

January 1 - December 31

Regional Vice President: Cyril E Muller

Country Director: Linda Van Gelder

Global Practice Director: Sameh Naguib Wahba Tadros

Practice Manager: Jorge A. Munoz

Task Team Leader(s): Olivera Jordanovic, Aanchal Anand

ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
AGROS	Active Geodetic Reference Network of the Republic of Serbia
CPF	Country Partnership Framework
DB	Doing Business
EU	European Union
EUR	Euro
GoS	Government of Serbia
GRS	Grievance Redress Service
ICT	Information Communications Technology
INSPIRE	Infrastructure for Spatial Information in Europe
IRR	Internal Rate of Return
ISREC	Integrated System for Real Estate Cadastre
LCO	Local Cadastre Office
M&E	Monitoring and Evaluation
MCTI	Ministry of Construction, Transport and Infrastructure
MFD	Maximizing Finance for Development
NPV	Net Present Value
NSDI	National Spatial Data Infrastructure
OP	Operational Policy
OSS	One-Stop-Shop
PAD	Project Appraisal Document
PDO	Project Development Objective
PIU	Project Implementation Unit
POM	Project Operational Manual
PPSD	Project Procurement Strategy Document
SPR	Sales Price Registry
REC	Real Estate Cadastre
REM	Real Estate Management
RGA	Republic Geodetic Authority
SCD	Systematic Country Diagnostic
USD	United States Dollar

Serbia

Real Estate Management Project Additional Financing

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BASIC INFORMATION – PARENT (Serbia - Real Estate Management Project - P147050)

Country Serbia	Product Line IBRD/IDA	Team Leader(s) Olivera Jordanovic		
Project ID P147050	Financing Instrument Investment Project Financing	Resp CC SURLN (9355)	Req CC ECCWB (7001)	Practice Area (Lead) Urban, Resilience and Land

Implementing Agency: Republic Geodetic Authority, Ministry of Construction Transport and Infrastructure

Is this a regionally tagged project?	
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Bank/IFC Collaboration
No

Approval Date 16-Mar-2015	Closing Date 31-Dec-2020	Original Environmental Assessment Category Partial Assessment (B)	Current EA Category Partial Assessment (B)
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Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach [MPA]	<input type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Disbursement-Linked Indicators (DLIs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a Non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	

Development Objective(s)



To improve the efficiency, transparency, accessibility and reliability of Serbia’s real property management systems.

Ratings (from Parent ISR)

	Implementation					Latest ISR
	19-May-2016	17-Nov-2016	24-May-2017	23-Jan-2018	30-Oct-2018	16-May-2019
Progress towards achievement of PDO	S	S	MS	MS	MS	MS
Overall Implementation Progress (IP)	S	MS	MS	MS	MS	MS
Overall Safeguards Rating	S	S	S	S	S	S
Overall Risk	S	S	S	S	S	S

BASIC INFORMATION – ADDITIONAL FINANCING (Real Estate Management Project Additional Financing - P168640)

Project ID P168640	Project Name Real Estate Management Project Additional Financing	Additional Financing Type Cost Overrun, Restructuring	Urgent Need or Capacity Constraints No
Financing instrument Investment Project Financing	Product line IBRD/IDA	Approval Date 21-Nov-2019	
Projected Date of Full Disbursement 30-Apr-2023	Bank/IFC Collaboration No		
Is this a regionally tagged project? No			



Financing & Implementation Modalities

- Series of Projects (SOP) Fragile State(s)
- Disbursement-Linked Indicators (DLIs) Small State(s)
- Financial Intermediaries (FI) Fragile within a Non-fragile Country
- Project-Based Guarantee Conflict
- Deferred Drawdown Responding to Natural or Man-made disaster
- Alternate Procurement Arrangements (APA)
- Contingent Emergency Response Component (CERC)

Disbursement Summary (from Parent ISR)

Source of Funds	Net Commitments	Total Disbursed	Remaining Balance	Disbursed	
IBRD	44.00	29.19	12.79	<div style="width: 70%; background-color: #28a745;"></div>	70 %
IDA				<div style="width: 0%; background-color: #6c757d;"></div>	%
Grants				<div style="width: 0%; background-color: #6c757d;"></div>	%

PROJECT FINANCING DATA – ADDITIONAL FINANCING (Real Estate Management Project Additional Financing - P168640)

FINANCING DATA (US\$, Millions)

SUMMARY (Total Financing)

	Current Financing	Proposed Additional Financing	Total Proposed Financing
Total Project Cost	44.00	22.90	66.90
Total Financing	44.00	22.90	66.90
of which IBRD/IDA	44.00	22.90	66.90
Financing Gap	0.00	0.00	0.00

DETAILS - Additional Financing



World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	22.90
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COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

Yes No

Does the project require any other Policy waiver(s)?

Yes No

INSTITUTIONAL DATA

Practice Area (Lead)

Urban, Resilience and Land

Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

Gender Tag

Does the project plan to undertake any of the following?

a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF

Yes

b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment

Yes

c. Include Indicators in results framework to monitor outcomes from actions identified in (b)

Yes

**PROJECT TEAM****Bank Staff**

Name	Role	Specialization	Unit
Olivera Jordanovic	Team Leader (ADM Responsible)	Senior Land Administration Specialist	SURLN
Aanchal Anand	Team Leader	Land Administration Specialist	SURLN
Benedicta T. Oliveros	Procurement Specialist (ADM Responsible)	Senior Procurement Specialist	EECRU
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Fabiola Altimari Montiel	Counsel	Senior Counsel	LEGLE
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Luis M. Schwarz	Team Member	Sr Finance Officer	WFACS

Extended Team

Name	Title	Organization	Location
Paul Cruddace	Technical Change and Innovation Specialist	Consultant	
Richard Grover	Property Valuation Specialist	Consultant	
Rumyana Tonchovska	Senior IT Specialist	Food and Agriculture Organization	



I. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING

1. This Project Paper seeks the approval of the Executive Directors to provide an additional loan in the amount of EUR 21 million (US \$22.9 million equivalent) to the Republic of Serbia for the Real Estate Management Project (P147050). The current Project has been under implementation since October 8, 2015 and the proposed Additional Financing (AF) would include an extension of the Project's closing date by two years, with a new proposed closing date of December 31, 2022¹.

2. The Additional Financing was formally requested by the Government of Serbia (GoS) in a letter dated on July 23, 2018, for the financing of a cost overrun, and full achievement of the development objectives. There are no changes to the Project Development Objective (PDO), Project Beneficiaries or Project Components.

Background

3. The Real Estate Management (REM) Project is financed by a loan from the International Bank for Reconstruction and Development in the amount of EUR 36.2 million (US\$ 44million equivalent). The original loan was approved on March 16, 2015 and became effective on October 8, 2015.

4. The project is implemented by the Republic Geodetic Authority (RGA) which manages the real estate cadastre in the Republic of Serbia, a single system for property rights registration. RGA supervises 164 Local Cadastre Offices (LCOs) spread around the country. RGA is supervised by the Ministry of Construction, Transport and Infrastructure (MCTI).

5. The Project Development Objective (PDO) of the REM Project is *to improve the efficiency, transparency, accessibility and reliability of Serbia's real property management systems*. The main focus of the Project is to ensure accurate, complete and electronically available information for the improvement of services and greater transparency in real estate management. The results of these activities are to be measured through:

- Efficiency –reduced time to register transactions (*from 48 to 4 days*);
- Transparency – rules, procedures, methodologies and information widely and easily accessible, and procedures operating for public to verify their information (*from limited availability to data available on internet*);
- Accessibility – open data available to municipalities for re-use (*from none to available*);
- Reliability – the public trusts the quality of real property data (customer satisfaction with real estate management system quality and efficiency increased from 66 percent to 80 percent).

6. The Client has demonstrated a strong commitment to the *Project Development Objective (PDO)*. Current progress towards achievement of **PDO** is **Moderately Satisfactory**. Measured by the PDO indicators progress toward achieving the PDO is the following:

¹ To include extension of loan number 8486-YF also with a closing date of December 31, 2022.



- a) *Average number of days to complete recordation of purchase/sale of property in land administration system* has been reduced from 48 days to 7 days. The progress so far is good but further improvement has been hindered due to delays in developing and implementing the integrated (centralized) cadastre system (software) and lack of funds for full (country-wide) implementation.
- b) *Rules, procedures, methodologies and information widely and easily accessible and procedures operate for public to verify their information* - significant progress has been made on this indicator with the new updated procedures being available online, in media and in local offices, but, more importantly, through the introduction of e-cadastre, e-permitting and national Geoportal for easy access to information.
- c) *Open (structured) data available to municipalities for re-use*. Full set of structured data are available for information (view) and download/re-use by municipalities. Further investments (hardware) are required to ensure sustainability of the system and service delivery.
- d) *Increased customer satisfaction* is on track - increased from the baseline of 66 percent of customers satisfied and very satisfied to 90 percent in 2018.

7. In accordance with the Project Appraisal Document (PAD) for the REM Project, project beneficiaries are (i) the general public, foreign investors and Serbian nationals residing abroad currently owning real estate or desiring to acquire real estate in the future; (ii) land market professionals (lawyers, surveyors, valuers) and organizations associated with mortgaging; and (iii) government agencies and local authorities who would all benefit from more accurate and accessible real estate data and better services and/or be able to provide better services.

8. The PDO, PDO level indicators and targets, and project beneficiaries have remained unchanged since appraisal.

9. The Project is structured around four components:

Component A - Valuation and Property Taxation, which is supporting the RGA to develop a mass valuation system, create a sales price register, and improve the quality and transparency of the valuations and the valuation infrastructure in Serbia.

Component B - E-Governance for Enabling Access to Real Estate Information, which is supporting RGA to develop and implement several integrated and interoperable systems and services to support the real estate sector.

Component C - Institutional Development of the Republic Geodetic Authority (RGA), which is supporting the agency to improve business standards and processes, enhance services, and meet EU service standards.

Component D - Project Management and Support Activities, which provides RGA with a project implementation unit (PIU), monitoring and evaluation support, public outreach on the project activities to improve social inclusion, provision of training to stakeholders, and additional studies and the design of subsequent proposals for adoption of policies and regulations.

10. Through these components, the Project supports the Serbian Government's reform agenda in the following ways:

- E-governance for enabling access to real estate information which will improve the business climate, attract investors, and reduce transaction cost and time;



- Property valuation and taxation activities which will support fiscal consolidation, and strengthen local governance;
- The development of real estate markets will boost small and medium enterprises that use real estate as collateral; and
- The development of a National Spatial Data Infrastructure (NSDI), which will advance European integration.

11. As of September 30, 2019, US\$ 29 million or 70 percent of the total original loan amount (US\$ 44 million) has been disbursed. There are additional US\$ 3 million contracted and the remaining US\$12 million are allocated to (i) activities for which the contracts are renewed annually (mainly consultants based on their satisfactory performance); (ii) activities for which the procurement is ongoing; and (iii) activities such as civil works on the archive building and the national roll-out of the integrated system for real estate cadastre (ISREC) – with estimated cumulative value of US\$ 8 million – for which the technical specifications have been developed but the bidding process has been halted due to the lack of sufficient funding.

12. The Fiduciary Management system of the REM Project is satisfactory², there are no pending financial audit reports. Auditors issued an unqualified opinion for the latest audited project accounts covering the period ending December 31, 2018. There are no on-going INT investigations. The Fiduciary risk is Moderate. Safeguards is rated Satisfactory and risk is rated Low. *The AF does not have any new activities that could have environmental or social impact. It is being put in place to finance the financing gap under the project. Therefore, the AF will be governed by safeguards policies triggered under the original project.*

13. Major achievements under the project structured by component include the following:

14. **Component A:** (i) law regulating (property) valuers professionals introducing new licensing system and national standards for valuation in line with the EU standards have been adopted; (ii) a national Sales Price Registry for Serbia has been established; and (iii) new technologies used for cost-effective identification of built structures (using satellite imagery) have been introduced and a building registry for Serbia (to be used for identification of taxable units, infrastructure needs as well as for registering structures built without permits) has been rolled out nation-wide.

15. The Sales Price Register (SPR) and the building registry - which are among the key deliverables of Component A - have been established. The SPR now captures and reports the sales prices of property transactions across Serbia. Data collection has been made easier by linking the data coming into the SPR with the e-Front Desk, which is operated by notaries. Data links are also being created with the Tax Administration and Statistics Authority. Starting in 2019, the Statistics Authority will replace its own system for the collection of data about new dwelling prices with data from the SPR. Three municipalities are using data from the SPR in annual property tax assessments. The reliable information available through the SPR has significantly improved the availability and transparency of property market data available in Serbia.

16. For the first time in history, Serbia has a registry of built structures at a national level. The building registry now provides information on properties registered in cadastre, but also those that are not registered as they lacked building or occupancy permit. It also shows the registered properties which no longer exist as they were demolished. The analyses conducted on the building registry data showed that the number of properties registered in cadastre is almost the same as the number of unregistered properties (4.8 million vs 4.3 million). Each structure in the building registry is

² Current Procurement rating is Moderately Satisfactory while the Financial Management is rated Satisfactory – *Implementation Status and Results Report, May 16, 2019.*



georeferenced so the municipalities which run legalization projects can accurately identify the structures for which the permit was lacking, and which might be located in the same land parcel and have the same address as the structures built with permits. The building registry is linked with other RGA databases so that it gets updated with any update in cadastral database.

17. *Component B:* (i) regulatory improvements in the areas of planning and construction made through implementation of a one-stop-shop (OSS) system for issuing construction permits resulted in an improvement of Serbia's Doing Business (DB) ranking in dealing with construction permits from 186 (among 189 economies) in 2015 to 11 (among 190 economies) in 2019; the OSS system addresses over 330,000 requests from over 45,000 investors in one year (Nov 2018 to Oct 2019) (ii) phase 1 of the integrated system for real estate cadastre (ISREC) development was completed, improving the efficiency and transparency of the work of cadastre offices; (iii) introduction of e-Front Desk for notaries improved the speed of property registration (reflected in improved DB ranking on property registration as result of reduced total number of days for registering property transaction from 54 in 2016 to 21 in 2019); (iv) the Law on National Spatial Data Infrastructure was adopted and the national geoportal (GeoSrbija) was established, enabling interoperability and data sharing among various agencies, as well as harmonization with EU INSPIRE Directive; and (v) 18 million pages have been scanned and indexed since the beginning of the project. All land books taken over from the local courts during the creation of unified land registry and cadastre have been scanned; collection of deeds from Belgrade and Zemun have been completed; about 65% of the archived cadastre plans have been scanned (about 120 000 map sheets); the cadastral plans and cadastre studies for Belgrade for the period 2002-2011 are scanned and indexed. All scanned documents are available online for use by the local offices and scanning of incoming documents was introduced in all offices.

18. *Component C:* (i) a new law on cadastral procedures linking the databases of cadastre, notaries, the tax administration and the courts was adopted, enabling online submission of applications for registration of property transactions and property tax declarations through notaries, substantially improving the reliability of the property rights registration system; (ii) a system for registration of spousal property as joint property was introduced³, and a mobile services team was organized to address the needs of people with disabilities; (iii) the law on cadastre was amended to improve the cadastral processes and stop the creation of backlogs; and (iv) a Strategy for institutional development for the Republic Geodetic Authority (RGA) was adopted by the Government of Serbia, while a two-year Business Plan was prepared and submitted to the Government for approval.

19. *Component D:* (i) a strong Monitoring and Evaluation (M&E) system, including the systematic use of customer satisfaction surveys⁴, has been developed and implemented to track progress on improving RGA business processes and service delivery; (ii) the PIU has revamped and launched the new RGA website and has actively utilized social media to raise public awareness of its events and services. In line with its proactive approach to public outreach, RGA employees have also been featured as guests on TV stations, and have engaged in dialogues on diverse topics such as the property mass valuation system, resolution of second instance cases, registration of marital property in the cadastre etc. (iii) proposals for improving regulatory framework in relevant areas (agriculture, planning and construction, disaster risk management, etc.) have been developed; (iv) over 6,500 people have been trained in using new systems, implementing new procedures, and delivering better services; and (v) the Project also launched the mobile services pilot, a distinctive approach in Serbia's real estate sector, to improve service delivery for vulnerable groups.

³ When comparing the 2017 and 2018 cadastral data a 0.5 percent increase in properties registered to women can be noticed which is mainly a result of the implementation of the new Law on Procedures for Registration in Real Estate Cadastre and Utility Cadastre (Official Gazette no. 41/2018, 95/2018 and 31/2019)

⁴ Collecting the data in a gender disaggregated manner.



Rationale for Additional Financing

20. While the REM Project has supported significant achievements, it lacks funds and time to fully meet its objectives. Financing gap occurred for the following reasons:

- A. Significant progress on digitization of RGA's business processes and records created a need for additional IT investments in data storage expansion, improved network equipment, data migration, and additional system functionalities to ensure interoperability with other systems/applications which could not have all been foreseen at project design stage.
- B. New technology often comes with higher initial/introduction costs, but it provides for costs-savings in the medium to long-term due to improved system efficiency. For instance, when the project was designed the building registry was to be established through use of available aerial imagery and property records held by RGA and municipalities. During implementation, high quality satellite imagery became available and the use of it shortened the time for establishing the building registry from three years to one year, requiring much less engagement of human resources and operating costs. Use of this technology will also enable a more efficient update of the building registry in the future.
- C. The approach to developing an integrated system for real estate cadastre (ISREC) was changed during the first year of implementation. To address the risk of a major ICT system development contract failing with no functional software and/or application produced (which is the experience of the previous Real Estate Cadastre and Registration Project) the REMP project design envisaged two stage approach: development of a prototype system, followed by development of a full system. During early implementation, this approach was revisited, and the risk of a two-stage approach was reassessed and found to be substantial, as the result could have been a prototype system developed, with insufficient time within the project to complete the development of the full system. The decision was made to apply modular design for the ISREC development and split the system development into 3 to 5 contracts, combining outsourcing with inhouse capacity. This approach was deemed far less risky but entailed additional costs, approximately 70 percent over the costs estimate for the two-stage approach.
- D. In the initial design, three modules of ISREC (Utility Cadastre, Human Resource Management, and Financial Management) were planned as optional (non-core ISREC modules) and the cost of these modules was not included in the overall ISREC costs, as they were conditional to successful development of core modules of ISREC. The financing of these modules was to be provided from project's costs savings. Good progress on ISREC development created space to start developing the non-core modules and finance them under the Additional Financing.
- E. The costs of software development in Serbia and in the region have increased significantly over the past four years affecting the costs of the ISREC development contract.
- F. The costs of the paper archive building increased from US\$ 2.1 million to US\$ 3 million (as per the detailed design developed under the project) due to a change in the building location. The land parcel identified at the project preparation stage was in the industrial zone of Belgrade within a former socially owned factory with all infrastructure in place (supply of gas, electricity, and water). Privatization of the company had failed, and a bankruptcy procedure was initiated which locked all its movable and immovable property from transaction. As a result, the transfer of use/investment rights to RGA was canceled necessitating a new location. The new location comes with higher infrastructure costs as connections to main utility lines would need to be built.



G. Finally, the original/parent project's costs estimates made by the Borrower were very conservative. At the time of project preparation, the Government of Serbia was cautious about rising public debt and was concerned about slow disbursement of funds in projects under implementation. Given competing investment needs the Government's approach entailed very constrained estimates to fit the limited fiscal space. Since then, fiscal stability improved and REMP proved to be achieving results and disbursing in accordance with the schedule, so the Government requested additional loan funds from the Bank to match the revised estimates.

21. The additional time for project implementation is needed because (i) activities related to regulatory reform (such as streamlined registration of property transaction, introduction of OSS for construction permits, and the appeals process related to property registration) were delayed due to the delay in preparation and adoption of legal amendments ranging from 1 to 3 years; (ii) ISREC development was delayed for about 1.5 years due to the change in the system development approach and the revised business processes which required amendments to the laws to be passed; (iii) complexity of the ISREC system which requires substantial capacity building not only during system roll-out but also during implementation; (iv) delay in construction of a paper archive depot/building (put on hold due to lack of funds as the preliminary design showed that the costs would be significantly higher than what was estimated based on the design concept during project preparation); (v) time to address the backlog of some 150,000 appeals cases (locking out an estimated 250,000 properties in Serbia from formal transactions) accumulated before 2015 was significantly underestimated during the assessment at the project preparation stage.

II. DESCRIPTION OF ADDITIONAL FINANCING

PDO

22. There is no change to PDO for the purpose of the proposed Additional Financing.

Project Beneficiaries

23. There is no change to project beneficiaries for the purpose of the proposed Additional Financing.

Project Components

24. There are no changes to the project Components. The Additional Financing is to support activities within the four project components, and to address any gaps in the original Project Components:

Component A: Valuation and property taxation.

25. Component A supports the development of a system for improving the coverage, efficiency, and fairness of annual property taxation through a sales price register and the software for processing and disseminating this data, the establishment of a building registry, improvement of the quality of property price indexes, development of a mass assessment pilot program, and improvement of the real estate valuation framework and standards. Although the focus is on annual property taxation, work under this component contributes significantly to improving the transparency and efficiency of the property market, which benefits the economy as a whole. Investments in the building registry are expected to have significant value in a number of applications outside of property taxation, including the legalization of past constructions and disaster management. In order to be able to undertake mass valuation so that properties are



assessed for tax purposes on their market values, it is necessary to develop systems for collecting transaction prices, to be able to adjust prices paid at different times to a common base, to ensure that valuations are carried out in accordance with internationally recognized standards, and to identify the properties to be valued. These investments are also expected to provide critical data for resilient urban infrastructure planning and development in the context of climate change mitigation and adaptation. The investments on building registry were identified in Serbia's Climate Change Adaptation Action Plan with Vulnerability Assessment and will be a critical input to the development of Serbia's Climate Strategy and Action Plan.

26. *Additional financing would support (i) the building registry through satellite imagery renewal and (ii) development of processes to enable building registry to be regularly updated to reflect changes.*

Component B: E-governance for Enabling Access to Real Estate Information

27. Component B supports the development and implementation of an integrated system for real estate cadastre, e-services and interoperability with key government registers; a central analogue and a digital archive; modernization of the address register and development and piloting of OSS system for issuing of digital building permits. It also supports the implementation of the National Spatial Data Infrastructure (NSDI) and data quality improvement and is providing support to RGA to develop and establish a new sustainable business model for further development and maintenance of the IT systems. The development of NSDI is expected to generate climate co-benefits through improved datasets for flood risks and increased data sharing among public agencies for better planning e.g. improved urban and transport planning with an emphasis on resilience.

28. *Additional Financing will provide funding for (i) completing ISREC system, namely (1) develop the remaining modules: utility cadastre, HR and Financial system modules and integrate them with ISREC, and (2) roll-out the ISREC countrywide; (ii) implementation of NSDI; (iii) implementation of sustainable business model for managing the NSDI and RGA IT systems; (iv) building analogue archive (paper depot); and (v) data quality improvement. Activities on OSS for construction permit - which included preparation of technical specification for OSS software, Quality Assurance and Quality Control during the OSS software development, hardware and network infrastructure, local consultancy to support system roll-out and upgrade and training for over 3,000 OSS system users from municipal administration, city authorities, utility companies - have been completed and will not be further supported through Additional Financing.*

Component C: Institutional Development of the Republic Geodetic Authority

29. The objective of this component is to support and improve RGA's core institutional development, enabling RGA to improve its services and meet EU standards. It finances RGA's governance, strategy and planning; strengthening of national reference infrastructure; completion of the digital mapping program; improving procedures, removal of backlogs, and enhancement of the office infrastructure; and improvement of real-estate cadastre in parts of Vojvodina Province. The investments in the National Reference Infrastructure/AGROS⁵ will help Serbia develop more accurate flood risk maps that support short-term evacuation and relief efforts and medium- to long-term urban and transport planning for resilient infrastructure.

30. *Additional Financing in this component will support (i) the ongoing business planning process of RGA (strategy and two-year business plan have been developed under the original loan, but the funds are lacking to develop a roadmap to*

⁵ Active Geodetic Reference Network of the Republic of Serbia



institutional transformation); (ii) improving National Reference Infrastructure (vertical control stabilization and levelling work were completed in the south and central regions of the country but funding is lacking to finish the north of the country); (iii) resolving first instance appeals backlog where the needs in terms of time and funds were substantially underestimated at the project preparation stage.

Component D: Project Management and Support Activities.

31. Additional financing will finance the costs of extended project implementation, namely: Project Implementation Unit (PIU) staff salaries and incremental operating costs; continuation of public awareness campaign; conducting regular biannual customer satisfaction survey; and continue to deliver services to vulnerable groups. The training and public awareness activities are expected to improve Serbia’s capacity in understanding and preparing for climate change risks.

Table 1 includes the current, additional financing and total costs by component.

Table 1 – Current and AF cost by component

Component Name	Current Cost (€M)	AF Proposed Cost (€M)	Total Cost (€M)
A. Valuation and Property Taxation	6.57	4.79	11.36
B. E-governance for Enabling Access to Real Estate Information	16.40	12.89	29.29
C. Institutional Development of the RGA	10.59	1.23	11.82
D. Project Management and Support Activities	2.55	2.04	4.59
Total Costs of Components	36.11	20.95	57.06
Front-end Fee	0.09	0.05	0.14
Total	36.2	21.0	57.2

Implementation Arrangements

32. The implementation arrangements will remain unchanged. The project under AF will continue to be implemented by the Republic Geodetic Authority. Project Council will continue to perform its policy advisory role and overall guidance to implementation. The composition of the Project Council will slightly change for the Additional Financing to ensure the key stakeholder institutions remain involved.⁶ Steering Committee will continue to supervise the project implementation. Donor Coordination Group with RGA has been discontinued with the establishment of the Ministry of European Integration (2017) which coordinates the EU assistance, and the international and bilateral donors’ aid. Experienced PIU staff will continue to support RGA in day-to-day project implementation. Excellent results in realization of the REM Project are indicators of the PIU’s adequate experience and technical capability to implement the additional activities under AF. In cases of a need for specialized expertise, consultants are planned to be hired under the open competition (international or national) to support capacity of the PIU, as provided in the Procurement plan. Project Operational Manual (POM) has been updated to include Additional Financing.

⁶ The Project Council will include the representatives of Ministry of Construction, Transport and Infrastructure, Ministry of Finance, Ministry of Justice, Ministry of Public Administration and Local Self-Government; Ministry of Economy, Tax Administration, Statistical Office and RGA. With the OSS for construction permits completed and the land parcel for new paper archive building allocated, the participation of Serbian Business Registers Agency (SBRA), and State Property Directorate (SPD) in the Project Council will be discontinued. Also, the Directorate for e-Government ceased to exist and its role has been taken over by the Office for Information Technologies and eGovernment (OITEG). The Cooperation and coordination between OITEG and RGA have been ensured through the broader e-government platform thus OITEG will not be part of the PC.



Project Restructuring

33. Project restructuring includes (i) extension of the Project Closing date by two (2) years (till Dec 31, 2022); (ii) adjustment of the Results Framework (RF); and (iii) change in Component C description.

34. A two-year extension of the *Project Closing Date*⁷ would allow the project to fully meet the PDO targets related to activities on implementing mass valuation pilots, ISREC integration and national roll-out, construction of paper archive and NSDI implementation.

35. The *RF has been adjusted* to increase target values and timeframe for achievement. Definition of the PDO indicator - *Increased customer satisfaction with real property management system including as to quality and efficiency* – has been expanded to include RGA's responsiveness to customer feedback, and a sub-indicator is introduced to disaggregate the results by gender. Five (5) new intermediate level indicators have been introduced and four (4) were dropped. New indicators are either replacing dropped ones to better reflect project results or have been introduced to capture project results that were not initially envisaged, such as significant progress on National Spatial Data Infrastructure, impact of reformed procedure for registration of spousal property on women's access to property, and improvement of RGA services resulting from the citizens/customer feedback. The dropped indicators are those which are no longer relevant (such as the one related to activities on real estate cadastre improvement through geodetic survey which have been dropped), or a replacement indicator has been introduced.

36. There is a change in the description of Component C resulting from the change in the following activities:
- *enhancement of office infrastructure* which among other involved refurbishing of two smaller local cadastre offices (Sopot and Ruma) and placing access ramps for people with disabilities. In the first year of implementation, a detailed assessment of local cadastre offices showed that one office was in a building which ultimately had to be demolished due to the damage to its foundation, while the other office was to be moved to a different location. For these reasons the civil works in Sopot and Ruma were dropped. As for the access ramps, most local cadastre offices are in the buildings shared by several public institutions, so investment in ramps would have to be made jointly by all institutions which proved unfeasible. RGA has installed the ramps (fixed or mobile) in locations where it was possible including at the RGA headquarter office that now has a service area accessible to customers with physical disabilities.
 - *real estate cadastre improvement* through geodetic measurements and production of digital cadastre map database in selected areas in Vojvodina where the existing survey document and cadastral maps were in poor shape has been dropped, as those were deemed unnecessary. Real estate cadastre improvement has effectively been achieved for the whole country through data quality improvement activities in Component B and establishment of building registry in Component A.
 - *setting up mobile services in 5 selected locations* – RGA's 2016-2020 Strategy emphasizes its institutional commitment to provide mobile services to customers who have difficulty with accessing its services. In May 2017, RGA launched the first mobile services pilot in Zemun Municipality (City of Belgrade), partly also because this office does not have an access ramp for disabled persons. The 'mobile services' team of RGA received training from the National Organization for Persons with Disabilities and highlighted mobile services as part of its extensive public outreach efforts. Given the limited number of physically disabled RGA customers specifically in Zemun municipality, RGA's mobile services team received two requests for mobile

⁷ To include extension of loan number 8486-YF also with a closing date of December 31, 2022.



services which they administered satisfactorily. RGA has therefore proposed to make a more concerted effort to tap into latent demand for mobile services by expanding its scope to all of Belgrade's sixteen municipalities and situating the pilot in RGA's head office in Belgrade. Coordinating this pilot from the head office would facilitate the mobile services team's access to vehicles that are needed to implement this initiative. Moreover, depending on the extent of demand, a second mobile services team could potentially be established in the RGA head office to cater to additional RGA customers.

Other Arrangements

37. While no changes are required in implementation, safeguards, and financial management agreed under the REM Project, the AF is subject to the Bank's new procurement policy framework. Disbursement estimates, components, costs and the implementation schedule will be also revised to reflect the additional activities and extension of the closing date.

Cross-cutting issues

38. Gender. Although Serbia adopted the Law on Gender Equality in 2009, which seeks to ensure equal status of women and men, there are more men registered as property owners than women. Share of properties with women registered as owners is around 34 percent on average, but it ranges from 13 percent in the south to 50 percent in the north of the country. This share has not changed for more than a decade. There are many reasons for such inequality, and they are cultural, economic, or reflect gaps in the regulatory framework.

39. There are two gaps the project aims to address: (1) property ownership data are incomplete and analysis of the data disaggregated by gender is difficult; and (2) registration of joint ownership on properties acquired during marriage was optional before the adoption of Law on the Procedure for Registration in Real Estate Cadastre and Utility Cadastre in 2018 and rarely implemented in practice.

40. (1) The Cadastral database currently contains over 40 percent of properties where ownership data cannot be gender disaggregated. This is due to a lack of the unique identification number (which contains indication of sex and age) of the person registered as the property owner. In addition, property data are distributed in more than 160 cadastral databases and conducting any analysis is cumbersome and may produce unreliable results. Through Component B, the REM Project supports development and implementation of a centralized cadastral database, and data quality improvement. The latter includes cooperation with other government agencies' such as the Ministry of Interior who provides missing ID numbers to RGA so that the identity of the property owner could be properly established. The result of this data quality improvement will increase the number of properties for which the data on ownership can be gender disaggregated. In addition, creation of a centralized cadastral database will facilitate quick and easy access to the property data at national level and enable creation of valuable reports such as the age structure of female property owners. Some preliminary analysis of the age structure of female property owners shows that very young women, girls 19 years old and younger, and women older than 60 predominate which suggests that the prevailing manner in which women in Serbia acquire properties is through inheritance. It also indicates that working-age women have less access to property which is likely due to their low economic power linked with difficult access to finance (housing loans), but also insufficient use of the right to register a co-ownership right over marital property.

41. Reliable, gender disaggregated data on properties is a crucial input to the Government's efforts to create policies that support gender equality. It also enables monitoring of Serbia's progress on (i) implementing the Strategy for Gender



Equality (2016-2020) and (ii) meeting the Sustainable Development Goals (where RGA is the authority which contributes to reporting on all land related SDGs.)

42. (2) An additional gap relates to the registration of spousal properties. A major share of such properties has been registered in the name of one spouse, and again men prevail. While the regulatory framework supported registration of joint ownership of marital properties, the registration fee in such cases was double as each spouse needed to pay the full registration fee. The REM Project supports strengthening of land sector policy and the regulatory framework through sub-component D5. Through this sub-component the REM Project contributed to the development of the new Law on the Procedure for Registration in Real Estate Cadastre and Utility Cadastre (Official Gazette, no. 41/2018, 95/2018 and 31/2019) implemented since July 2018 which determined that all property acquired during marriage was to be registered under both spouses' names. Further, RGA adopted (with the support of the Ministry of Finance) a new price list for RGA services (new regulation) introducing a reduced fee of EUR 3 against the normal fee of EUR 50 to incentivize joint registration for spouses.

43. The Additional Financing will continue to support data quality improvement, establishment of a central cadastral database and strengthening of the sector policy and regulatory framework. The following new indicators are introduced to track improved access to gender disaggregated data and effects of the new law on the ground, and those are the following:

- *Number of properties with data maintained and reported in gender disaggregated manner as share of total number of properties registered*
- *Properties registered to women as share of total properties registered.* This indicator sets a modest target of only 1 percent increase over a period of two years as it is based only on property transactions taking place since 2018. It is important however to capture the trend of increase no matter how small it is, as such a trend has not been noticed before 2018. It would also indicate if the regulatory change is bringing results.

44. Climate Change. Climate Change is anticipated to cause 3.2 to 4°C increase in mean temperatures and 20 % decrease in precipitation in Serbia towards the end of this century. Climate models indicate high likelihood of increased droughts and wildfires, with the possibility of flood events intensifying. The Climate and Disaster Risk of the project can be considered low, with floods as the most pronounced risk. The AF aims to provide multiple climate co-benefits. The biggest of these benefits is expected to come from Component B, which supports the implementation of NSDI, and Component C, which will enhance the National Reference Infrastructure for improved horizontal and vertical accuracies. Both these investments are critical for the development of digital elevation models and flood risk maps to identify high-risk areas and support climate change mitigation and adaptation by providing critical information for short-term evacuation and relief efforts and medium- to long-term resilient urban and transport planning efforts. The shared geospatial data among government agencies and the public will enable better integration of climate considerations into spatial, infrastructure, transportation and environmental planning. Similarly, Component A's investments in the development of mass property valuation system can be expected to support the development of climate disaster and adaptation related insurance schemes as the basis of compensations, as insurance companies to develop better insurance mechanisms in response to climate change. Additionally, Component A will also fund the acquisition of satellite imagery and the identification of all built structures for the development of a building registry. This data is expected to be directly relevant for the identification of climate disaster impacts, integrating climate considerations to spatial and DRM planning, and in targeting climate disaster related evacuation activities. This data is already used in a Disaster Risk Assessment on



the impact on property values. Moreover, Component B will support analogue and digital archives for property records and an OSS system for building permits that will physically protect these records from climate induced disasters.

45. Citizen Engagement. Several citizen engagement mechanisms have been introduced and systematized throughout the project's duration to solicit and respond to feedback from RGA clients and the general public, and will continue to be supported under the Additional Financing:

- **Crowdsourcing for Geoportal Serbia:** Continuing a participatory approach from the parent project, all citizens and interested stakeholders will be able to provide feedback and suggestions and to advise on the quality of current property information through a crowdsourcing mechanism for the Geoportal. The RGA will continue to build up and correct geospatial data based on citizens' and Geoportal users' input.
- **Participatory design of the e-Front Desk for surveyors:** The Additional Financing will continue to support the development and establishment of an electronic platform for surveyors. A working group (consisting of RGA staff and private sector representatives) has been set up to test the E-Front Desk and to consider and further integrate users' needs and concerns.
- **Results of biennial customer satisfaction surveys have been considered and addressed:** The main and repeating results of biennial customer satisfaction surveys (i.e. difficult access to information, unkind officers, and long queues in RGA's offices) have been analyzed, communicated and translated into concise corrective actions, such as (i) establishing a Help Desk (InfoCentar) which collects feedback from RGA customers, gives guidance and assistance on RGA services, and provides information on the status of applications and appeals; (ii) providing training and capacity building for RGA staff on customer-oriented service provision and professional approaches to engage with various customers; and (iii) improving the infrastructure and reorganization of front offices. The Additional Financing will continue biennial customer satisfaction surveys and use their results to inform RGA strategies and plans to improve client orientation and service delivery.
- **The Public Awareness Campaign will be strengthened to better present and disseminate customer satisfaction survey results** at local and national levels. The campaign will include events to present citizens information on how citizen feedback has been addressed and responded to (including grievances received through the formal and legal appeal mechanism), for example through annual Open Customer Dialogues.
 - **The established Grievance Redress Mechanism (GRM) will be continued:** The formal and legal two-stage appeal mechanism at the RGA (appeals against RGA resolutions to the local office and appeal to the legal department in the RGA head office) allows for feedback and grievances on any issue. During the Additional Financing the GRM will be enhanced and the resolution of backlog cases will be further pursued.

46. Definition of the PDO indicator- *Increased customer satisfaction with real property management system including as to quality and efficiency* – is expanded to include RGA's responsiveness to customer feedback aiming to capture experience of customers involved in working groups, using the e-Front Desk or Help Desk.

47. Vulnerable Groups. In cooperation with the National Association of People with Disability the RGA's mobile services pilot is geared towards meeting the accessibility needs of clients with disability and improving the accessibility of services to persons with disabilities. The RGA's efforts to support the development and implementation of an integrated system for real estate cadastre under Component B have also served to benefit members of the Roma community and other vulnerable groups who are eligible for social benefits. Due to the progress on ISREC e-services and its interoperability with key government registers, RGA can now provide documentation that is required by persons to prove their eligibility for social benefits, while reducing the need for them to transverse through multiple agencies.



48. Maximizing Finance for Development (MFD). The proposed Additional Financing will help achieve the objectives of the original project and accelerate the implementation of certain activities. The greatest MFD contribution will come from the introduction of the one-stop-shop (OSS) for construction permits and property registration. These are direct services that will benefit the private sector and establish a more competitive business environment, which is a Government priority being addressed through the Project and the proposed AF. The establishment of the OSS for construction permits and property registration can be expected to have a direct impact on the improvement of Serbia's performance in terms of distance to frontier in the Ease of Doing Business assessment of the World Bank. Other project activities such as the completion of the new IT system, ISREC, is expected to make it easier for RGA to provide services to both individuals and legal entities, which include businesses. The mass valuation pilots and the establishment of a valuation system in Serbia will increase market transparency and will make more accurate sale and rental price data more easily available. This is important information for the development of the real estate market. By providing accurate market information in real-time, the valuation component will increase transparency. Increased transparency improves trust and greater accuracy reduces risk, which in turn can boost real estate market liquidity. Finally, additional investments in NSDI will make investments in core datasets, which are essential for every economy. The availability of high-quality datasets on the national geoportal will make available for the private sector information, which otherwise would not be available or be expensive to acquire. This way investments in NSDI can support the private sector by reducing short-term costs and by crowding in private capital in the medium- to long-term with the development of new businesses and job creation.

III. KEY RISKS

49. Key Risks. The overall risk is rated **Substantial** due to the following four risks associated with the project: (1) Political and Governance; (2) Technical Design; (3) Institutional Capacity for Implementation and Sustainability (ICIS); and (4) Stakeholders.

50. Political and Governance (Substantial). Upcoming parliamentary elections in March 2020 might bring political changes in the government, resulting in a change of priorities, suspensions or delays of reforms, or replacement of key staff. This risk will be mitigated through early engagement with the new government and the Project Council which gathers key stakeholders.

51. Technical Design Risk (Substantial). The project involves significant number of activities related to information and communication technology (ICT) developments which RGA could not meet with its own resources. The project is financing critical ICT expertise and delivers a comprehensive training program to build RGA's ICT capacity. The training program includes specialized basic and advanced IT/geoinformation courses⁸ delivered by certified training providers, training of trainers to support ISREC roll-out and on-the-job training for RGA staff. In addition, RGA has been recruiting geoinformation specialists with its own funds. A new HR strategy has been put in place to ensure the recruitment of new people and their training would be supporting the sustainability of new ICT systems introduced through the project. Additional Financing would continue to support technical assistance to build the necessary capacity in RGA, as well as the establishment of necessary technical units, procedures, and regulations to carry out the reforms.

⁸ Such as, ESRI/ArchGIS, PostgreSQL, PostGIS, Cisco, JavaScript, creation and management of multi-user geodatabase, programming languages (Python most used in OpenSource community), General Data Protection Regulation (GDPR), etc.



52. ICIS Risk (*Substantial*) derives from the RGA's current operating (organizational) and financing model⁹ which provides little incentives for RGA to continue to improve its services and build the capacity of its staff. Digital transformation which RGA pursues requires substantial investments in infrastructure, information/cyber security, and in staff with specific skills (ICT, geoinformation) which RGA is not able to attract due to the cap on the salaries of civil servants. Low salaries have triggered several strikes at RGA in the past, including the most recent one - from December 2018 to May 2019. The project had supported a strategy and a business plan for RGA's development to a modern, service-oriented, self-financed organization (fee-based and operating on a cost-recovery basis). The strategy was adopted by the Government and the project will continue to support RGA in developing a roadmap for institutional transformation based on the model approved by the Government. The Government has recognized the importance of RGA's transformation and established a working group to coordinate the actions. Additional Financing will contribute to these ongoing Government efforts by providing technical assistance for developing an institutional development roadmap. Such roadmap would build on the new strategy and business plan and would include operational plan, definition of target governance structure, stakeholder mapping, needed legislative changes and changes in rules and procedures, rationalization of decision-making authorities, etc. It would also provide a plan for ICT system sustainability by identifying the activities and processes which require building and maintaining inhouse capacity, such as management structure, and those which would be outsourced. Such plan would also include detailed costs estimates.

53. Stakeholders Risk (*Substantial*). Project success is highly dependent on cooperation and coordination between sector stakeholders. Substantial changes introduced to the services provided by RGA and the way RGA communicates with the public and private sector clients requires effective information sharing and training to both RGA staff and users of RGA services. A set of project activities has been in place to actively address this risk, such as (i) public awareness campaign; (ii) expert/client working groups; (iii) extensive training program; (iv) memorandums of understanding signed with participating institutions and municipalities; and (v) Project Council gathering key stakeholders¹⁰.

IV. APPRAISAL SUMMARY

A. Economic and Financial Analysis

54. Since the AF is designed to support the Project activities that were originally planned while also introducing some new activities, the economic analysis presented herein updates the PAD economic analysis based on the new investments and targets. For the new estimates for the net present value (NPV) and internal rate of return (IRR), the following changes have been made:

- Original project benefits are taken but have been delayed in terms of realization;
- NSDI benefits, previously unforeseen, have been added for the period of 2021-2023;
- The new project amount is USD 66.9 million (USD 44 million of the original project and USD 22.9 million proposed in the AF).

55. Otherwise, the economic analysis and model remain the same. The discount rate applied is 12.5%, same as in the PAD. Similarly, project benefits are simply measured over the period of the project and not in the post-implementation period.

⁹ RGA is a government organization under the Ministry of Construction, Transport and Infrastructure and is being financed from the central government budget.

¹⁰ Project Council includes representatives of the Ministry of Construction, Transport and Infrastructure, Ministry of Finance, Ministry of Justice, Ministry of Public Administration and Local Self-Government, Ministry of Economy, Tax Administration, Statistical Office, and RGA.



56. Based on the original analysis presented in the PAD and these changes, the new estimate for the NPV for the Project and the AF combined is USD 3.40 million and the IRR is 21.5%. Since the NPV is greater than zero and the IRR is greater than the discount rate of 12.5%, the Project, along with the proposed AF, can be considered a sound investment.

B. Technical

57. The land administration system in Serbia has a strong legal framework in place. All current data is in digital form and RGA is intensively working on data quality improvement to strengthen the reliability of land and real estate data. Service provision is generally quite good, and it is improving through introduction of new systems such as e-Front Desk for notaries and surveying companies. Staff are trained, and a comprehensive training program is in place to address needs for any additional capacity building. RGA has strong ownership of the project and is committed to achieving the project objectives. There is a high level of public perception that the quality and speed of service has improved significantly since the REM Project commenced which has been reflected in the results of the customer satisfaction surveys. RGA has embraced the eGovernment agenda which is one of the top priorities of the Government. Serbia has been recognized as the leader on the geospatial agenda in the Western Balkans with strong progress made on setting up the National Spatial Data Infrastructure. There is still more that needs to be done to achieve best international standards in terms of harmonizing records and the speed of processing applications, especially within some of the local cadastre offices. This will be addressed in the AF period. Strong partnership has been developed with the relevant institutions such as Ministry of Construction, Transport and Infrastructure, Ministry of Justice, Tax Administration, Ministry of Interior, Office for Information Technologies and eGovernment and many other with an aim to develop a strong and reliable land administration system. RGA has also developed a strong implementation capacity over the course of the REM Project.

58. As this AF follows on a well-performing project, the technical design is focused on the key activities needed to fully meet the development objective. Use of satellite imagery for the building registry has already been tested in 2016 and their renewal will support municipalities having access to reliable, up-to-date data for property taxation and legalization efforts. Building an integrated system for real estate cadastre would enable removal of obsolete business processes and integrate over a hundred cadastral databases located in local cadastre offices and establish one central real estate cadastre database. It will ensure that the clients would be able to obtain services in any RGA office in the country not only in the office covering the territory where the property was located. This should help to reduce the time taken for registration and help to reduce the backlogs that affect many offices. There is good capacity within the agencies and the private sector to undertake the necessary regulatory amendments, software upgrades and data integration required for project execution. Contract for ISREC development is in implementation and it includes integration of modules that are being developed under the ongoing contracts. Additional financing will build on the current activities and support development of the remaining modules, system integration and national roll-out.

59. To move towards a completely digital environment, a new building for storing paper records has been supported by the Project. The detailed design for the building had been prepared and the construction permit was obtained. The land parcel where the building will be located is a state property with the right of use transferred to RGA through a government decision. Additional Financing will finance the increased costs estimates of the civil works for the infrastructure connecting the archive building to the main utility lines.

C. Financial Management

60. The financial management arrangements of the parent Project will be adopted for the additional financing. The financial management arrangements of the ongoing Real Estate Management Project are continuously satisfactory. The fiduciary tasks are responsibility of the PIU at RGA, which has sufficient capacity and long-term successful track record of



implementation of the World Bank projects. Financial management covenants are complied with, i.e. acceptable quarterly interim unaudited financial reports (IFRs) are delivered within due dates, as well as annual audits which had clean opinion throughout and were performed by audit firms acceptable to the Bank. Additional Financing will have the same PIU in charge of fiduciary and will rely on the same arrangements and requirements as the existing project in terms of planning and budgeting, accounting, financial reporting, internal controls, flow of funds and external audit. Staff in charge of financial aspects of implementation will continue to work on the project.

61. Additional Financing will be disbursed via existing Designated Account for the original loan, and one consolidated set of financial reports for both sources of funding will be prepared. Allowed methods of disbursement will be advances to the designated account, direct payments, reimbursement and special commitments. For advances to the designated account, the funds will be withdrawn to the existing EUR designated account opened at the NBS, up to the ceiling amount that will be described in the Disbursement and Financial Information Letter (DFIL), through withdrawal applications signed by the authorized signatories. The DFIL will also define minimum threshold for direct payments. The Interim Unaudited Financial Reports (IFRs) will be prepared and delivered 45 days after the end of the quarter. IFRs will include consolidated information for the original loan and additional financing. Annual financial statements providing sufficient details on transactions for both original loan and additional financing will be audited by independent auditors acceptable to the World Bank, and the audit will be delivered six months after the end of the audited period. Existing set of internal controls and procedures will likewise apply for the additional financing.

D. Procurement

62. The comprehensive management and implementation of procurement will be carried out by the existing PIU procurement team. The implementing agency has developed a Project Procurement Strategy for Development (PPSD), which provides the basis for the procurement methods selected in the Procurement Plan.

63. Project procurement review is expected to be conducted annually with the focus on the post review contracts. Complete project documentation shall be available for the Bank's review during supervision missions. A project procurement post review report will be prepared annually and shared with the PIU/RGA.

64. The procurement process under the REM Project has been carried out in accordance with World Bank "Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 (revised July 2014); and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" dated January 2011 (revised July 2014). For Additional Financing procurement will be conducted in accordance with the *World Bank's Procurement Regulations for IPF Borrowers: Procurement in Investment Project Financing – Goods, Works, Non-Consulting and Consulting Services (August 2018)*. The project will also be subject to the World Bank's Anti-Corruption Guidelines, dated July 1, 2016. Financing of the AF activities shall be based upon Procurement plan, which includes following categories: activity, type-category, estimated cost, selection method and review by the Bank (prior/post).

65. Project Operational Manual has been updated to reflect changes in project procurement arrangements under Additional Financing.

E. Social (including Safeguards)

66. The parent Project identified four key vulnerable groups and has shaped activities to ensure that the project has a positive impact on them. Women, people with disabilities, people of Roma ethnicity, and the elderly will receive special



attention from the project. Specific measures aiming to promote inclusion through the project include: (a) support for mobile registration services that can reach populations that cannot physically or financially afford to reach registration offices; (b) support for communications strategies that increase information on real estate management for vulnerable groups; and (c) capacity building for RGA and local registration office staff on serving vulnerable customers.

67. Monitoring and Evaluation of activities during implementation of parent Project showed lower participation on mobile services and access by vulnerable groups and attested to the need to tailor outreach efforts regarding RGA services to the information needs of these groups. The Additional Financing will therefore continue to provide support for inclusion activities and capacity building for RGA as well as the public awareness campaign and will incorporate revisions in the customer survey questionnaire to measure the awareness of vulnerable groups regarding RGA services and their level of satisfaction with service provision.

68. The Additional Financing would also continue to provide support to the enhancement of the e-governance system to facilitate access to information and services.

F. Environment (including Safeguards)

69. There is no change in OPs triggered for this AF. The scope of activities proposed under the AF is a continuation of activities proposed within the parent Project, which is classified as Category B, triggering Operational Policy (OP) 4.01, and the Environmental Assessment is still valid for the AF. Civil works funded under the project include construction of the new analog archive and the Additional Financing will finance the increased costs estimates as per the detailed design developed during project implementation. The site-specific Environmental Management Plan has been updated and redisclosed on Sept 23, 2019¹¹ and Sept 25, 2019¹², respectively. No additional civil works are expected and the majority of the project activities to be continued under the Additional Financing are environmentally neutral.

G. Other Safeguard Policies (if applicable)

70. Not applicable.

V. WORLD BANK GRIEVANCE REDRESS

71. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World 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/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org

¹¹ <http://www.rgz.gov.rs/vesti/2582/vest/finalni-plan-upravljanja-%C5%BEivotnom-sredinom-izgradnja-novog-arhivskog-depoa->

¹² <https://hubs.worldbank.org/docs/ImageBank/Pages/DocProfile.aspx?nodeid=31433177>



VI SUMMARY TABLE OF CHANGES

	Changed	Not Changed
Results Framework	✓	
Components and Cost	✓	
Loan Closing Date(s)	✓	
Procurement	✓	
Implementing Agency		✓
Project's Development Objectives		✓
Cancellations Proposed		✓
Reallocation between Disbursement Categories		✓
Disbursements Arrangements		✓
Safeguard Policies Triggered		✓
EA category		✓
Legal Covenants		✓
Institutional Arrangements		✓
Financial Management		✓
APA Reliance		✓
Other Change(s)		✓

VII DETAILED CHANGE(S)

COMPONENTS

Current Component Name	Current Cost (US\$, millions)	Action	Proposed Component Name	Proposed Cost (US\$, millions)
A. Valuation and Property Taxation	7.99	Revised	A. Valuation and Property Taxation	13.22
B. E-governance for Enabling Access to Real Estate Information	19.93	Revised	B. E-governance for Enabling Access to Real Estate Information	34.00



C. Institutional Development of the Republic Geodetic Authority	12.87	Revised	C. Institutional Development of the Republic Geodetic Authority	14.21
D. Project Management and Supporting Activities	3.10	Revised	D. Project Management and Supporting Activities	5.30
TOTAL	43.89			66.73

LOAN CLOSING DATE(S)

Ln/Cr/Tf	Status	Original Closing	Current Closing(s)	Proposed Closing	Proposed Deadline for Withdrawal Applications
IBRD-84860	Effective	31-Dec-2020	31-Dec-2020	30-Dec-2022	30-Apr-2023

Expected Disbursements (in US\$)

Fiscal Year	Annual	Cumulative
2015	59,610.60	59,610.60
2016	737,902.62	797,513.22
2017	1,183,186.62	1,980,699.84
2018	1,483,801.20	3,464,501.04
2019	2,038,157.76	5,502,658.80
2020	2,265,009.02	7,767,667.82
2021	4,205,372.00	11,973,039.82
2022	6,112,000.00	18,085,039.82
2023	4,814,960.18	22,900,000.00

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Latest ISR Rating	Current Rating
Political and Governance	● Substantial	● Substantial
Macroeconomic	● Moderate	● Moderate
Sector Strategies and Policies	● Low	● Low



Technical Design of Project or Program	● Substantial	● Substantial
Institutional Capacity for Implementation and Sustainability	● Substantial	● Substantial
Fiduciary	● Moderate	● Moderate
Environment and Social	● Low	● Low
Stakeholders	● High	● Substantial
Other		
Overall	● Substantial	● Substantial

LEGAL COVENANTS – Real Estate Management Project Additional Financing (P168640)

Sections and Description

Schedule 2, Section I.A.1. Project Implementation Unit: The Borrower maintains the Project Implementation Unit under the RGA at all times during Project implementation with the necessary resources and staff to carry out the Project, and with a composition and terms of reference satisfactory to the Bank.

Schedule 2, Section I.A.4. Project Council: The Borrower maintains at all times during Project implementation a Project Council with a composition, terms of reference, and resources satisfactory to the Bank. The Project Council shall be in charge of making any major policy decisions concerning Project implementation, and for overall Project supervision as well as approving annual work plans, training plans and reports.

Schedule 2, Section I.A.5. Project Steering Committee: The Borrower establishes and maintains at all times during Project implementation a Project Steering Committee with a composition, terms of reference, and resources satisfactory to the Bank. Members of the Steering Committee shall include the Director General of RGA, and the relevant RGA Sector and Department Directors whose units are directly related to the Project activities, and selected experts from other institutions of the Borrower. The Project Steering Committee shall be in charge of supervising the regular implementation of activities of the Project and shall provide reports to the Project Council on a quarterly basis, or as requested by the Project Council.

Schedule 2, Section IV.2.(a) RGA Office Infrastructure Enhancement: The Borrower ensures that all RGA offices refurbished under the Project shall be furnished and equipped to provide the necessary services to the public, in a manner satisfactory to the Bank, and shall provide sufficient resources for the purpose.

Schedule 2, Section IV.2.(b) RGA Mobile Services: The Borrower provides the necessary staff, vehicles, and resources for vehicle maintenance, insurance, and operation for the provision of mobile services at the selected RGA offices.

Schedule 2, Section IV.1. Training Plan: The Borrower shall, not later than December 1 of each year during Project implementation (starting on December 1 of the year in which Project implementation begins), furnish to Bank for its approval, a proposal for the Training plan to be carried out under the Project during the following calendar year.

Conditions



VIII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Serbia

Real Estate Management Project Additional Financing

Project Development Objective(s)

To improve the efficiency, transparency, accessibility and reliability of Serbia’s real property management systems.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Improve efficiency of Serbia's real property management system							
Avg no. of days to complete recordn of purchase/sale of property in land adm systm (Number)		48.00		30.00	15.00	7.00	4.00
Action: This indicator has been Revised	Rationale: End target date extended.						
Avg no. of days to complete recordn of purchase/sale of property–Urban (Number)		48.00		30.00	15.00	7.00	4.00



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Action: This indicator has been Revised	Rationale: End target date extended.						
Avg no. of days to complete recordn of purchase/sale of property–Rural (Number)		48.00		30.00	15.00	7.00	4.00
Action: This indicator has been Revised	Rationale: End target date extended.						
Improve transparency of Serbia's real property management systems							
Rules, procedures, methodologies and information widely and easily accessible and procedures operate for public to verify their information (Text)		Limited availability.	Procedures, methodologies and information available on internet.		Updated procedures, methodologies and information available on internet		Data available on internet
Action: This indicator has been Revised	Rationale: End target date extended.						
Improve accessibility of Serbia's real property management systems							
Open (structured) data available to municipalities for re-use (Text)		None	Development of data model and specifications for geoportal	Geoportal has download service		Available to all municipalities	Available
Action: This indicator has been Revised	Rationale: End target date extended.						



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Improve the reliability of Serbia's real property management systems.							
Increased customer satisfaction with real property management system, including as to quality and efficiency. (Percentage)		66.00		70.00			80.00
Action: This indicator has been Revised	Rationale: End target date extended. Definition of the indicator expanded to include satisfaction with RGA's responsiveness to feedback from customers.						
Increased customer satisfaction with real property management system, including as to quality and efficiency - female (Percentage)		67.00					82.00
Action: This indicator is New	Rationale: This is new sub-indicator introduced aiming at capturing the impact of the project activities related to promotion of greater access to property rights registration for women through increased satisfaction of female customers.						

Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
A. Valuation and Property Taxation							
Property price index established (Text)		Initial system in place.		Completed			Price index established.



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Action: This indicator has been Revised	Rationale: End target date extended.						
Valuers operating in accordance with valuation standards. (Text)		Limited use of standards.	Production of valuation standards approved	Standards for qualifications and education of valuers	Professional regulation approved		Valuers operating in accordance with valuation standards.
Building register (Percentage)		0.00		20.00	70.00		100.00
Action: This indicator has been Revised	Rationale: End target date extended.						
Mass appraisal system developed (Text)		No system	Data acquisition	Model tested	Tested in sample municipalities		In use in 5 Municipalities
Action: This indicator has been Revised	Rationale: End target date extended.						
B. E-governance for Enabling Access to Real Estate Information							
Integrated REC and Registration System is operational in all RGA offices (Text)		No integrated system	Prototype developed and tested	Core system under development	Core system developed	Implemented in 15 LCOs	System fully implemented in all LCOs
Action: This indicator has been Revised	Rationale: End target date extended.						
Central archive operational (Yes/No)		No	No	No	No	No	Yes
Action: This indicator has been Revised	Rationale:						



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
		End target date extended					
System for electronic issuing of building permit established. (Text)		No system		System developed	System tested	System piloted	System developed, tested and piloted
Number of institutions providing data through NSDI. (Number)		17.00					45.00
Action: This indicator is New		Rationale: An indicator on NSDI was missing from the original project Results Framework and it is now introduced through restructuring.					
Number of properties with data maintained in gender disaggregated manner as share of total number of properties registered (Percentage)		58.80					80.00
Action: This indicator is New		Rationale: This indicator is being introduced to monitor the improvement in cadastral data to allow reporting in gender disaggregated manner.					
C. Institutional Development of the Republic Geodetic Authority							
Corporate strategy and business plan submitted to government (Yes/No)		No	No	Yes	Yes		Yes
Number of stabilized grid points (Number)		0.00		858.00	1,716.00		1,716.00
Action: This indicator has been Marked for Deletion		Rationale: The three indicators related to the National Reference Infrastructure will be replaced with one which measures the progress on establishing the leveling network in the territory of the Republic of Serbia. This corresponds better with the change in the manner the measurements were conducted which is through private sector contracts covering defined geographical area.					



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Number of leveled elevations (Number)		0.00		1,526.00	3,052.00	3,915.00	4,202.00
Action: This indicator has been Marked for Deletion	Rationale: <i>The three indicators related to the National Reference Infrastructure will be replaced with one which measures the progress on establishing the leveling network in the territory of the Republic of Serbia. This corresponds better with the change in the manner the measurements were conducted which is through private sector contracts covering defined geographical area.</i>						
Number of measured gravimetry points (Number)		0.00		137.00	274.00		274.00
Action: This indicator has been Marked for Deletion	Rationale: <i>The three indicators related to the National Reference Infrastructure will be replaced with one which measures the progress on establishing the leveling network in the territory of the Republic of Serbia. This corresponds better with the change in the manner the measurements were conducted which is through private sector contracts covering defined geographical area.</i>						
Clearing backlogs in accordance with defined service standards. (Percentage)		0.00	25.00	50.00	65.00	80.00	95.00
Action: This indicator has been Revised	Rationale: <i>End target date extended.</i>						
Number of beneficiaries from vulnerable groups assisted through mobile services (Text)		no mobile service established yet					No target. Just to be monitored
Action: This indicator has been Revised	Rationale: <i>End target date extended.</i>						
Number of beneficiaries from vulnerable groups assisted		0.00					No target. Just to be



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
through mobile services - female (Text)							monitored.
Action: This indicator has been Revised	Rationale: End target date extended.						
Target land area with use or ownership rights recorded as a result of project (Hectare(Ha))	0.00	0.00	1,500.00	4,500.00	9,500.00	11,500.00	
Action: This indicator has been Marked for Deletion	Rationale: This indicator is dropped. It relates to the activity under Component C - acquiring cadastral data in the Vojvodina region in Serbia - which was dropped. The cadastral data in Vojvodina are being improved through two other project activities: establishment of the building registry (Comp A) and data quality improvement (Component B).						
Digital utility lines completed under the project (Kilometers)	0.00	6,800.00	13,000.00	20,000.00	27,000.00	34,000.00	
Area covered by digital maps under the project. (Hectare(Ha))	4,661,004.00	5,300,000.00	5,800,000.00	6,400,000.00	6,700,000.00	6,700,000.00	
RGA's institutional development roadmap submitted to the government. (Yes/No)	No						Yes
Action: This indicator is New	Rationale: This indicator is introduced to monitor progress on improving RGA's institutional development and transformation to a self-financed agency (fee-based and operating on a cost-recovery basis).						
Area covered with leveling network established under the project as a share of total country area. (Percentage)	0.00	60.00				100.00	



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
<i>Action: This indicator is New</i>		Rationale: <i>This indicators replaces the three indicators related to the National Reference Infrastructure, namely: number of stabilized grid points, number of leveled elevations and number of measured gravimetry points.</i>					
D. Project Management and Supporting Activities							
Number of persons trained (Number)		0.00	1,500.00	2,500.00	4,000.00	5,000.00	7,300.00
<i>Action: This indicator has been Revised</i>		Rationale: <i>End target date extended.</i>					
Number of persons trained - female (Number)		0.00	400.00	800.00	1,300.00	1,700.00	2,100.00
<i>Action: This indicator has been Revised</i>		Rationale: <i>End target date extended.</i>					
Level of satisfaction of trainees with training (Percentage)		0.00	70.00	80.00	90.00	90.00	90.00
<i>Action: This indicator has been Revised</i>		Rationale: <i>The level of trainees' satisfaction with the training has been constantly high (over 90%). The project will continue tracking it as the substantial training yet needs to be delivered on ISREC system as it progresses. End target date extended.</i>					
Level of satisfaction of trainees with training - female (Percentage)		0.00	70.00	80.00	90.00	90.00	90.00



Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Action: This indicator has been Revised	<p>Rationale: <i>The level of female trainees' satisfaction with the training has been constantly high (over 90%). The project will continue tracking it as the substantial training yet needs to be delivered on ISREC system as it progresses.</i></p>						
Properties registered to women as a share of total properties registered. (Percentage)		34.20					36.20
Action: This indicator is New	<p>Rationale: <i>This indicator aims to capture the increase in number of properties registered to women as a result of two actions taken under the project: (1) reduced registration fee for registering a joint ownership for spousal properties; (2) mandatory registration of co-ownership for all properties being subject to transaction during marriage.</i></p>						

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Avg no. of days to complete recordn of purchase/sale of property in land adm systm	This indicator measures the improvements in the timeliness of recordation of property purchases or sales, distinguishing between rural or urban, applicable to the project. The baseline value is the average number of days required to complete the	Quarterly reports	Republic Geodetic Authority (RGA)	RGA's Document Management System reports	PIU, Real Estate Cadastre (REC) sector in RGA



	recording of purchase/sale of a property in the land administration system in Serbia.				
Avg no. of days to complete recordn of purchase/sale of property–Urban		Quarterly reports	Republic Geodetic Authority	RGA's Document Management System reports	PIU, REC sector in RGA
Avg no. of days to complete recordn of purchase/sale of property–Rural		Quarterly reports	RGA	RGA's Document Management System Reports	PIU, REC sector in RGA
Rules, procedures, methodologies and information widely and easily accessible and procedures operate for public to verify their information	This indicator measures availability of rules, procedures, methodologies used by RGA, and the Ministry of Construction Transport and Infrastructure for delivering service to the public; and the availability and accessibility of the information related to services for the public so that those could be checked for accuracy and verified.	Half yearly reports	RGA, Ministry of Construction, Transport and Infrastructure (MCTI), Municipalities, Business Registry	Analysis of the data from the websites.	PIU, REC sector in RGA
Open (structured) data available to municipalities for re-use	This indicator measures availability of RGA data at Geoportal that can be viewed and downloaded (for re-use) or accessible	Half-yearly reports	RGA	Analysis of the data from Geoportal.	PIU, REC sector in RGA



	through Geoportal services.				
Increased customer satisfaction with real property management system, including as to quality and efficiency.	This indicator measures the increase in customer's satisfaction with the quality and efficiency of RGA services and RGA's responsiveness to the feedback collected from customers. RGA's responsiveness to customer feedback refers to customers' satisfaction with their involvement in working groups, experience with the e-front desk or Help Desk. A few additional survey questions will measure this from now on.	Biennially	Surveys and Questionnaires	Surveys	Consultant contract through PIU
Increased customer satisfaction with real property management system, including as to quality and efficiency - female	This indicator measures the increase in female customers' satisfaction with RGA services.	Biennial	Surveys and Questionnaires	Surveys	Consultant contract through PIU

Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Property price index established	Self-explanatory	Half-yearly reports	Statistical Office; RGA	Analysis of the data collected by the Statistical Office and	PIU; Mass Valuation Unit in RGA



				Sales Price Registry	
Valuers operating in accordance with valuation standards.		PIU	Valuers associations; Chamber of Commerce		Annual reports
Building register	This indicator measures the area for which the building registry is established as a percentage of the total country territory.	Quarterly reports	RGA	Analysis of the building register data.	PIU, RGA
Mass appraisal system developed	This indicator measures the progress on establishment of a mass appraisal system.	Half yearly reports	RGA, Municipalities		PIU
Integrated REC and Registration System is operational in all RGA offices	This indicator measures progress on developing and implementing a software for integrated REC and Registration System in RGA.	Quarterly reports	RGA		PIU, REC and ICT sectors in RGA
Central archive operational	This indicator measures progress on establishment of RGA's central digital archive and archive building.	Half yearly reports	RGA		PIU, RGA
System for electronic issuing of building permit established.	This indicator measures progress on development and implementation of a software in the Business Registry to support the system of unified procedures for issuing	PIU, MCTI, BA, Municipalities	MCTI, Business Registry (BA), Municipalities		Quarterly reports



	building permits electronically.				
Number of institutions providing data through NSDI.	This indicator measures the number of different institutions providing data through the National Spatial Data Infrastructure.	Half yearly reports	RGA		RGA, PIU
Number of properties with data maintained in gender disaggregated manner as share of total number of properties registered	This indicator measures the number of properties registered in cadastre with data recorded and kept in a gender disaggregated manner as a share of total properties registered in cadastre.	Annually	RGA	Analysis of data in cadastral database	RGA, PIU
Corporate strategy and business plan submitted to government	This indicator measures RGA's progress on developing its corporate strategy and business plan aligned with relevant sector and government strategies.	PIU, RGA	RGA		Annually
Number of stabilized grid points	Self-explanatory	PIU, RGA	RGA		Quarterly reports
Number of leveled elevations	Self-explanatory	PIU, RGA	RGA		Quarterly reports
Number of measured gravimetry points	Self-explanatory	PIU, RGA	RGA		Quarterly reports
Clearing backlogs in accordance with defined service standards.	This indicator measures progress on reducing the backlog in RGA and MCTI. It measures the cases resolved in accordance	Half yearly reports	RGA		PIU, RGA



	with RGA standards as a percentage of the total backlog cases at any given moment.				
Number of beneficiaries from vulnerable groups assisted through mobile services	This indicator measures the total number of beneficiaries from vulnerable groups benefiting from RGA mobile services. Vulnerable groups include people with disabilities, elderly, women, and Roma. Total number of female beneficiaries is a sub-indicator.	Half yearly reports	RGA, Municipalities		RGA, PIU
Number of beneficiaries from vulnerable groups assisted through mobile services - female	This indicator measures the total number of beneficiaries from vulnerable groups benefiting from RGA mobile services. Vulnerable groups include people with disabilities, elderly, women, and Roma. Total number of female beneficiaries is a sub-indicator.	Half yearly reports	RGA		RGA, PIU
Target land area with use or ownership rights recorded as a result of project	This indicator measures the area over which use or ownership rights have been recorded as a result of the	PIU, REC sector in RGA	RGA		Half yearly reports



	project. The baseline value is expected to be zero.				
Digital utility lines completed under the project	This indicator measures the total length of utility lines (in kilometers) digitized under the project.	PIU, RGA	RGA		Half yearly reports
Area covered by digital maps under the project.	This indicator measures the total territory (in million hectares) for which the cadastre maps have been digitized under the project.	PIU, RGA	RGA		Half yearly reports
RGA's institutional development roadmap submitted to the government.	This indicator measures RGA-s progress on developing a plan for transformation into a fee-based, service oriented agency.	Annually	RGA		RGA, PIU
Area covered with leveling network established under the project as a share of total country area.	This indicator measures progress on establishing the leveling network in the Republic of Serbia. It measures geographical area in which the levelling network was established and stabilized as percentage of the total country area.	Annually	RGA		RGA, PIU
Number of persons trained	This indicator measures the total number of people trained under the project. Total number of female trainees is a sub-indicator.	Half yearly reports	RGA, MCTI, Municipalities		PIU, RGA, MCTI, Municipalities



Number of persons trained - female	This indicator measures the total number of people trained under the project. Total number of female trainees is a sub-indicator.	Half yearly reports	RGA, MCTI, Municipalities		PIU, RGA, MCTI, Municipalities
Level of satisfaction of trainees with training	This indicator measures the level of satisfaction of people trained under the project, disaggregated by gender.	Half yearly reports	Surveys, questionnaires		PIU, RGA, MCTI and Municipalities
Level of satisfaction of trainees with training - female	This indicator measures the level of satisfaction of people trained under the project, disaggregated by gender.	Half yearly reports	RGA, MCTI, Municipalities		PIU, RGA, MCTI, municipalities
Properties registered to women as a share of total properties registered.	This indicator measure the share of properties registered to women in the total number of properties.	Half-yearly	RGA		RGA, PIU

