

Document of
The World Bank

Report No: PAD955

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF EUR 36.2 MILLION
(US\$ 44 MILLION EQUIVALENT)

TO THE

REPUBLIC OF SERBIA

FOR A

REAL ESTATE MANAGEMENT PROJECT

February 23, 2015

Social, Urban, Rural and Resilience Global Practice
Europe and Central Asia Region

This document is being made publicly available prior to Board consideration. This does not imply a presumed outcome. This document may be updated following Board consideration and the updated document will be made publicly available in accordance with the Bank's policy on Access to Information.

CURRENCY EQUIVALENTS

(Exchange Rate Effective December 31, 2014)

Currency Unit		EUR
EUR 1	=	US\$ 1.215
EUR 1	=	RSD 120.958
	FISCAL YEAR	
July 1	–	June 30

ABBREVIATIONS AND ACRONYMS

AGROS	Active Geodetic Reference Network of Serbia
CM	Cadastral Municipality
CPS	Country Partnership Strategy
CQ	Selection based on Consultant's Qualifications
DC	Direct Contracting
DCG	Donor Coordination Group
DCM	Digital Cadastral Map
ECA	Europe and Central Asia
EMP	Environmental Management Plan
EPN	European Positioning Network
EU	European Union
EULN	European Leveling Network
EUPOS	European Positioning System
EUR	Euro
FAO	Food and Agriculture Organization of the United Nations
FBS	Fixed Budget Selection
FM	Financial Management
FY	Financial Year
GDP	Gross Domestic Product
GIZ	Gesellschaft für Internationale Zusammenarbeit
GLT	Greater than Leadership Team
GNSS	Global Navigation Satellite System
GoS	Government of Serbia
IA	Implementing Agency
IC	Individual Consultant Selection
ICB	International Competitive Bidding
ICT	Information Communications Technology
IFR	Interim Financial Report
IMF	International Monetary Fund
INSPIRE	Infrastructure for Spatial Information in Europe
IPA	Instrument for Pre-Accession Assistance
IRR	Internal Rate of Return

IPF	Investment Project Financing
IT	Information Technology
ITQ	Invitation to Quote
LCS	Least Cost Selection
LGU	Local Government Unit
MCTI	Ministry of Construction, Transport and Infrastructure
MPALSG	Ministry of Public Administration and Local Self-Government
MoE	Ministry of Economy
MoF	Ministry of Finance
MoJ	Ministry of Justice
NBS	National Bank of Serbia
NCB	National Competitive Bidding
NMIC	National Mortgage Insurance Corporation
NPV	Net Present Value
NSDI	National Spatial Data Infrastructure
OEDC	Organization for Economic Cooperation and Development
OSS	One-Stop-Shop
PDO	Project Development Objective
PIU	Project Implementation Unit
POM	Project Operational Manual
QCBS	Quality and Cost-Based Selection
REC	Real Estate Cadastre
RECRP	Real Estate Cadastre and Registration Project
RGA	Republic Geodetic Authority
RICS	Royal Institution of Chartered Surveyors
RoS	Republic of Serbia
S	Shopping
SBD	Standard Bidding Documents
SBRA	Serbian Business Registers Agency
SIDA	Swedish International Development Agency
SME	Small and Medium-Sized Enterprise
RSD	New Serbian Dinar
SSS	Single Source Selection
TA	Technical Assistance
TEGoVA	The European Group of Valuers' Associations
TOR	Terms of Reference
USAID	United States Agency for International Development
WBI	World Bank Institute

Regional Vice President:	Laura Tuck
Country Director:	Ellen Goldstein
Global Practice Director:	Ede Ijjasz-Vasquez
Practice Manager:	Jorge Munoz
Task Team Leader:	Gavin P Adlington

SERBIA
Real Estate Management Project

TABLE OF CONTENTS

Page	
I.	STRATEGIC CONTEXT12
	A. Country Context..... 12
	B. Sectoral and Institutional Context..... 12
	C. Higher Level Objectives to which the Project Contributes 14
II.	PROJECT DEVELOPMENT OBJECTIVE15
	A. Project Development Objective (PDO) 15
	B. Project Beneficiaries 15
	C. PDO Level Results Indicators..... 15
III.	PROJECT DESCRIPTION15
	A. Project Components 15
	B. Project Financing 17
	C. Program Objective and Phases..... 18
	D. Lessons Learned and Reflected in the Project Design..... 18
IV.	IMPLEMENTATION19
	A. Institutional and Implementation Arrangements 19
	B. Results Monitoring and Evaluation 19
	C. Sustainability..... 20
V.	KEY RISKS AND MITIGATION MEASURES20
	A. Risk Ratings Summary Table 20
	B. Overall Risk Rating Explanation 21
VI.	APPRAISAL SUMMARY21
	A. Economic and Financial Analyses 21
	B. Technical..... 22
	C. Financial Management..... 23
	D. Procurement 24
	E. Social (including Safeguards)..... 24

F. Environment (including Safeguards)	25
G. Other Safeguards Policies Triggered	26
Annex 1: Results Framework and Monitoring	27
Annex 2: Detailed Project Description.....	33
Annex 3: Implementation Arrangements	49
Annex 4: Operational Risk Assessment Framework (ORAF).....	62
Annex 5: Implementation Support Plan.....	67
Annex 6: Social Assessment	70
Annex 7: Economic and Financial Analysis	74

PAD DATA SHEET*Serbia**Real Estate Management Project (P147050)***PROJECT APPRAISAL DOCUMENT***EUROPE AND CENTRAL ASIA**GSURR*

Report No.: PAD955

Basic Information			
Project ID P147050	EA Category B - Partial Assessment	Team Leader(s) Gavin P. Adlington	
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints []		
	Financial Intermediaries []		
	Series of Projects []		
Project Implementation Start Date 01-Oct-2015	Project Implementation End Date 31-Dec-2020		
Expected Effectiveness Date 01-Oct-2015	Expected Closing Date 31-Dec-2020		
Joint IFC No			
Practice Manager/Manager Jorge A. Munoz	Senior Global Practice Director Ede Jorge Ijjasz-Vasquez	Country Director Ellen A. Goldstein	Regional Vice President Laura Tuck
Borrower: Ministry of Finance			
Contact: Telephone No.:	Nenad Mijailovic 381113613245	Title: Email:	State Secretary nenad.mijailovic@mfin.gov.rs
Responsible Agency: Republic Geodetic Authority			
Contact: Telephone No.:	Zoran Popovic 381112650886	Title: Email:	Acting Director General zpopovic@rgz.gov.rs
Responsible Agency: Ministry of Construction Transport and Infrastructure			
Contact: Telephone No.:	Dejan Trifunovic 381113616273	Title: Email:	State Secretary dejan.trifunovic@mgsi.gov.rs
Project Financing Data(in USD Million)			
<input checked="" type="checkbox"/>	Loan	<input type="checkbox"/>	IDA Grant
<input type="checkbox"/>		<input type="checkbox"/>	Guarantee

[]	Credit	[]	Grant	[]	Other					
Total Project Cost:		44.00			Total Bank Financing:		44.00			
Financing Gap:		0.00								
Financing Source						Amount				
Borrower						0.00				
International Bank for Reconstruction and Development						44.00				
Total						44.00				
Expected Disbursements (in USD Million)										
Fiscal Year	2016	2017	2018	2019	2020	2021	0000	0000	0000	0000
Annual	2.00	5.00	7.00	13.00	15.00	2.00	0.00	0.00	0.00	0.00
Cumulative	2.00	7.00	14.00	27.00	42.00	44.00	0.00	0.00	0.00	0.00
Institutional Data										
Practice Area (Lead)										
Social, Urban, Rural and Resilience Global Practice										
Sectors / Climate Change										
Sector (Maximum 5 and total % must equal 100)										
Major Sector				Sector		%	Adaptation Co-benefits %		Mitigation Co-benefits %	
Public Administration, Law, and Justice				General public administration sector		40				
Public Administration, Law, and Justice				Law and justice		30				
Information and communications				Information technology		30				
Total						100				
<input checked="" type="checkbox"/> I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.										
Themes										
Theme (Maximum 5 and total % must equal 100)										
Major theme				Theme				%		
Environment and natural resources management				Land administration and management				30		
Rule of law				Personal and property rights				20		

Public sector governance	e-Government	40
Urban development	Municipal finance	10
Total		100
Proposed Development Objective(s)		
To improve the efficiency, transparency, accessibility and reliability of Serbia's real property management systems.		
Components		
Component Name	Cost (USD Millions)	
A. Valuation and Property Taxation	7.99	
B. E-governance for Enabling Access to Real Estate Information	19.93	
C. Institutional Development of the Republic Geodetic Authority	12.87	
D. Project Management and Supporting Activities	3.10	
Compliance		
Policy		
Does the project depart from the CAS in content or in other significant respects?	Yes []	No [X]
Does the project require any waivers of Bank policies?	Yes []	No [X]
Have these been approved by Bank management?	Yes []	No [X]
Is approval for any policy waiver sought from the Board?	Yes []	No [X]
Does the project meet the Regional criteria for readiness for implementation?	Yes [X]	No []
Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	X	
Natural Habitats OP/BP 4.04		X
Forests OP/BP 4.36		X
Pest Management OP 4.09		X
Physical Cultural Resources OP/BP 4.11		X
Indigenous Peoples OP/BP 4.10		X
Involuntary Resettlement OP/BP 4.12		X
Safety of Dams OP/BP 4.37		X
Projects on International Waterways OP/BP 7.50		X

Projects in Disputed Areas OP/BP 7.60			X
Legal Covenants			
Name	Recurrent	Due Date	Frequency
Project Implementation Unit		01-Oct-2015	
Description of Covenant			
The Borrower establishes and maintains the PIU 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.			
Name	Recurrent	Due Date	Frequency
Project Council		31-Dec-2015	
Description of Covenant			
The Borrower establishes and 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.			
Name	Recurrent	Due Date	Frequency
Project Steering Committee		01-Oct-2015	
Description of Covenant			
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.			
Name	Recurrent	Due Date	Frequency
Accounting Software		31-Dec-2015	
Description of Covenant			
No later than 90 days after the Project becomes effective, the Borrower shall ensure that the PIU has acquired and maintains operational accounting software for Project accounting and financial reporting, acceptable to the Bank.			
Name	Recurrent	Due Date	Frequency
Project Reports	X		Quarterly
Description of Covenant			
The Borrower shall monitor and evaluate the progress of the Project and prepare Project Reports. Each Project Report shall cover the period of one calendar semester, and shall be furnished to the Bank not later than one month after the end of the period covered by such report.			
Name	Recurrent	Due Date	Frequency
Auditing of Financial Reports	X		Yearly

Description of Covenant

The Borrower shall have its Financial Statements audited in accordance with the provisions of Section 5.09(b) of the General Conditions. Each audit of the Financial Statements shall cover the period of one fiscal year of the Borrower. The audited Financial Statements for each such period shall be furnished to the Bank not later than six (6) months after the end of such period.

Name	Recurrent	Due Date	Frequency
RGA Office Infrastructure Enhancement	X		CONTINUOUS

Description of Covenant

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.

Name	Recurrent	Due Date	Frequency
RGA Mobile Service	X		CONTINUOUS

Description of Covenant

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.

Name	Recurrent	Due Date	Frequency
Training Plan	X		Yearly

Description of Covenant

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

Source Of Fund	Name	Type
IBRD	PIU and Project Operational Manual	Effectiveness

Description of Condition

- (a) the PIU has retained a PIU director, procurement specialist and a financial management specialist, with experience and terms of reference satisfactory to the Bank;
- (b) the Operational Manual, satisfactory to the Bank, has been adopted by the Borrower

Team Composition**Bank Staff**

Name	Role	Title	Unit
Gavin P. Adlington	Team Leader (ADM Responsible)	Lead Land Administration Specialist	GSURR
Benedicta T. Oliveros	Procurement Specialist	Procurement Analyst	GGODR
Aleksandar Crnomarkovic	Financial Management Specialist	Sr Financial Management Specialist	GGODR

Aanchal Anand	Team Member	Junior Professional Associate	GSURR
Jorge E. Villegas	Safeguards Specialist	Senior Social Development Specialist	GSURR
Nikola Ille	Safeguards Specialist	Senior Environmental Specialist	GENDR
Olivera Jordanovic	Team Member	Sr Land Administration Specialist	GSURR
Ramiro Ignacio Jauregui-Zabalaga	Counsel	Senior Counsel	LEGLE
Tomoko Unaki	Safeguards Specialist	E T Consultant	GSURR
Jose Janeiro	Senior Finance Officer	Disbursement	WFALA
Extended Team			
Name	Title	Office Phone	Location
Anthony Lamb	Land registration		
Richard Grover	Property Valuation Specialist, FAO		Rome
Rumyana Tonchovska	Senior IT Specialist (FAO)		Rome

I. STRATEGIC CONTEXT

A. Country Context

1. Serbia's economy went back in recession in 2014, for the third time in five years. While the recession in 2009 was mainly a result of severe impact of the international economic crisis, recessions in 2012 and 2014 were primarily caused by natural disasters - a drought in 2012 and severe floods in 2014. In addition, weak domestic demand and various structural bottlenecks, including the prolonged privatization of remaining state and socially owned enterprises and lack of reform of public enterprises, prevented the economy from recovering more rapidly. Inflation decreased significantly in 2014, to 1.7 percent by year end. On the external side, the current account deficit continued to decline and stood at an estimated 6 percent of GDP in 2014, although there was a slowdown in export growth. The consolidated fiscal deficit is estimated to have been around 6.6 percent of GDP in 2014. The projection for 2015 is for a stagnation of the economy with some increase in inflation i.e. return to the targeted band of the National Bank of Serbia (NBS). The government is expected to reduce its expenditures and raise additional revenues so that consolidated fiscal deficit goes below 6.0 percent of GDP. Unemployment will most likely remain at the same level as in 2014 at around 17 percent.

B. Sectoral and Institutional Context

2. The proposed project is an extension of the World Bank's decade-long engagement in Serbia's real property sector. Between 2004 and 2012, with the help of the Bank-funded Real Estate Cadastre and Registration Project (RECRP) (P078311), Serbia established the Real Estate Cadastre (REC), a single system for real property rights registration, which is under the authority of Republic Geodetic Authority (RGA). The project was rated "satisfactory" and played a pivotal role in the development of land and real estate markets in Serbia. The RECRP was followed by a Technical Assistance (TA) project (P132409), which advised the Government of Serbia on three critical areas of real estate reform: (a) planning and permitting; (b) valuation, taxation, and state land management; and (c) security of property and property rights. The TA outputs were finalized and a Land Policy Note, which highlighted the benefits of real estate reform on Serbia's fiscal deficit and business climate, was prepared and shared with the Government. It was during the course of the TA that the Government requested the proposed project in order to carry out some of the crucial reforms recommended in the TA.

3. Despite persistent problems in the broader economy, Serbia's real estate sector has seen considerable improvement over the last decade. Ten years ago, the cost and time required to register property rights were excessive, most real properties were not registered, only 20 percent of the country was covered in "land books" (legal registers maintained by municipal courts), and there was a mismatch between these books and the records of the RGA. With the help of the RECRP, the time required to register transactions has been reduced, cadastral offices have been renovated, important geodetic infrastructures have been built, and customer satisfaction has improved. RGA still needs to record all buildings in the cadastre to ensure that all properties are included in the property tax and that legalization of buildings that are currently built informally can proceed smoothly.

4. Although these improvements are significant, Serbia's real property registration services remain below European Standards. RGA's attempts to develop a new Information Technology

(IT) system failed, the REC is not interoperable with other key government registries, online services are limited, and the backlog of registration requests is increasing. Over 30 percent of RGA's analog cadastral maps have yet to be digitized and it lacks an archive center for keeping important paper records. Investments in geodetic infrastructure are needed and RGA services need to be made more accessible to all, including vulnerable groups. The data held by RGA on land, ownership, buildings, utility lines, various forms of maps, etc. is vital information for most government services and needs to be made complete and more easily available. Lastly, while RGA's mandate has been further expanded to cover activities such as property valuation and building register, it does not have a viable business model, and there are concerns about the sustainability of the services it provides.

5. Property valuation and taxation is another area where Serbia has made limited progress. Property tax yield in Serbia is relatively low, with about 0.6 percent of its GDP collected annually in property taxes, against an average of 1.8 percent in OECD countries. Serbia lacks the complete and accurate data necessary to establish the tax base, it uses outdated valuation methods, and its tax rates are low. In addition, valuation is done by professionals who operate without licenses and are not required to comply with international valuation standards. It also means that banks are exposed to a high level of risk when utilizing real estate as collateral for loans.

6. The complexity and cost of developing land legally is another issue that deserves particular attention as it constitutes a burden to investments. According to the 2015 Doing Business Report, Serbia ranks 186 out of a total of 189 countries in the construction permit category. Entrepreneurs have to go through 16 procedures, wait 264 days and spend 1,209 percent of Serbia's per capita income to obtain a construction permit. Obtaining a construction permit takes on average 87 more days and is three times more expensive than other countries in the Eastern Europe & Central Asia (ECA) region.

7. While the complexity and cost of obtaining construction permits discourage some investors, they lead others to develop land without going through the formal procedures. Several measures would need to be adopted to address this issue. First, Serbia would need to reduce the building development charge as it currently generates nearly 85 percent of the permitting cost. If coordinated with a more efficient property tax, this measure should not generate overall losses in local tax revenues. Second, Serbia would have to improve the urban planning process as the absence of detailed urban plans often prevents the issuance of permits. Third, the time required to obtain building permits could be reduced by establishing 'one-stop-shops'. The whole discipline related to urban planning and issuance of construction permits is closely linked to the work planned under the Project. The United States Agency for International Development (USAID) is heavily involved in this area and the project teams will work closely with USAID contractors to support improvements in this sector. Activities relating to creating detailed urban plans, planning laws, regulations and manuals and the associated work with municipalities is not included as part of the Project because USAID is already providing much of the necessary assistance. It has however been agreed that the project will develop and host the databases needed to make urban plans available to the public. The project will support the establishment of one-stop-shop for construction permits and assist development of an Information and Communications Technology (ICT) system for electronic issuing of construction permit.

8. Lastly, the administration of public real assets is a major issue. The Serbian government is by far the largest real property owner in the country. In mid to large Serbian towns and cities, the central government and Local Government Units (LGUs) can own up to 95 percent of the territory.

LGUs already hold and manage a large number of real property assets, and the number will continue to increase as the central government implements its decentralization program. At the same time, LGUs already struggle with administrating their real property assets. More generally, public real property management is not optimal. Serbia lacks a comprehensive public asset management strategy and has yet to develop a well-balanced policy and regulatory framework for managing public real assets. The Project will support development of more complete data sets of real property assets to help the governments, both central and local, to better manage their assets.

9. The project would be implemented by the Republic Geodetic Authority with the support of the Ministry of Construction, Transport and Infrastructure (MCTI) and the Serbian Business Registers Agency (SBRA). A Project Council comprising representatives from ministries and a Steering Committee comprising RGA directors will be set up along with a Project Implementation Unit (PIU) and a Donor Coordinator Group (DCG). For details, refer to Section 4 (Implementation) and Annex 3 (Implementation Arrangements).

C. Higher Level Objectives to which the Project Contributes

10. The proposed project supports the Serbian government's new economic reform agenda in several important ways:

- (a) Property valuation and taxation activities which will **enable fiscal consolidation, reduce the fiscal deficit**, and strengthen local governance;
- (b) E-governance for enabling access to real estate information which will **improve the business climate, attract investors, and reduce transaction cost and time**;
- (c) The development of real estate markets will **boost small and medium enterprises** that use real estate as collateral; and
- (d) The development of a National Spatial Data Infrastructure (NSDI), which will **advance European integration**.

11. The proposed project is in line with the recommendations of the Competitiveness pillar of the FY12-15 Country Partnership Strategy (CPS), which seeks to make real property rights more secure. The strategy also recommends simplifying and lowering the cost of obtaining construction permits. Such a measure will encourage investments and slow down the construction of buildings without the necessary permits.

12. The proposed project also advances the Bank's twin goals of poverty reduction¹ and shared prosperity.² First, property rights help increase the intensity with which households use their land and/or property assets and contribute to economic growth. This is precisely why there is a strong link between poverty and the absence of land and property assets. By improving access to and reliability of property rights, the proposed project will help increase economic growth and reduce poverty in Serbia. Second, one-half to three-quarters of a country's wealth lies in the capital value of land and property. Therefore, secure property rights help promote inclusive growth which targets the country's bottom 40 percent in terms of per capita income. Third, the proposed project

¹ The World Bank's poverty reduction goal is to reduce the percentage of people in this world living with less than USD1.25 a day to 3 percent by 2030.

² The World Bank's shared prosperity goal is to promote income growth of every developing country's bottom 40 percent in terms of per capita income.

will improve the fairness of the property taxation system and create positive distributional effects for those who are poorer but pay their fair share of property tax.

II. PROJECT DEVELOPMENT OBJECTIVE

A. Project Development Objective (PDO)

13. The objective of the Project is to improve the efficiency, transparency, accessibility and reliability of the Republic of Serbia's real property management systems.

B. Project Beneficiaries

14. The primary beneficiaries of the project would be the general population, particularly members of the public within Serbia, but also foreign investors and overseas Serbian nationals, who currently own real estate or who will acquire real estate in the future, with special attention provided to women and vulnerable members of society to ensure that the benefits are more equally distributed. The main focus of the project is to ensure accurate, complete and electronically available information for the improvement of services and greater transparency. Beneficiaries would also include the land market professionals (lawyers, surveyors, valuers) and organizations associated with mortgaging, who would benefit from more accurate and accessible real estate data and who will be able to provide better services to the public. Further, government agencies, such as the MCTI, Tax Administration, the Ministry of Justice (MoJ)³, and LGUs would benefit as they will be able to easily access information about real estate: for planning and property tax purposes; for providing social and other local government services; and through improvements in the use of the real estate that they manage.

C. PDO Level Results Indicators

15. There are four PDO level results indicators: Efficiency: reduced time to register transactions; Transparency: rules, procedures, methodologies and information widely and easily accessible, and procedures operate for public to verify their information; Accessibility: open data available to municipalities for re-use; and Reliability: the public trust the quality of real property data (See Annex 1).

III. PROJECT DESCRIPTION

A. Project Components

16. The Project consists of four components: (A) Valuation and Property Taxation; (B) E-governance for Enabling Access to Real Estate Information; (C) Institutional Development of the RGA; and (D) Project Management and Support Activities.

³ Courts are the first point of entry for any property transaction related documents (sales-purchase or lease agreements, encumbrances, mortgages, inheritances, etc.), and they are under the responsibility of the MoJ

Component A: Valuation and Property Taxation (EUR 6.6 million)

17. Component A will support provision of goods, consultants' services and non-consulting services for:

(a) improving the system for annual property taxation through (i) developing a sales price registry for real estate; (ii) developing software to process data from the sales price registry; (iii) developing and assessing a Mass Appraisal pilot program on property tax rolls and collection procedures in local governments units; and (iv) establishing a building registry; and

(b) improving the real estate valuation framework through, improving the quality of education for valuers, and adopting internationally recognized standards for valuation.

Component B: E-governance for Enabling Access to Real Estate Information (EUR 16.4 million)

18. Component B will support provision of works, goods, consultants' services, non-consulting services to improve e-governance for enabling access to real estate information through:

(a) developing and implementing an integrated real estate cadaster and registration system based on RGA's (ICT) strategy and archive strategy;

(b) developing a business model and technical framework in line with international standards for the Borrower's NSDI and upgrading the necessary network services;

(c) developing a financial mechanism and a business plan for the sustainability of RGA's information technology department;

(d) developing and implementing a central analogue and digital archive management strategy, including providing necessary equipment and training and constructing a central archive building;

(e) improving the quality of RGA's data standardization and carrying out a public outreach campaign for users to submit cadastral data; and

(f) developing and implementing a one-stop-shop system for electronic issuance of construction permits.

Component C: Institutional Development of the RGA (EUR 10.6 million)

19. Component C will support provision of goods, consultants' services, non-consulting services to improve RGA's institutional development through:

(a) developing a business plan for RGA's governance and institutional and corporate planning and strategy;

(b) supporting the sustainability of the National Reference System and the functionality of the Active Geodetic Reference Network of Serbia (AGROS) and improving the Borrower's gravimetric networks and vertical reference system;

(c) carrying out the digital mapping of selected cadastral municipalities and transforming existing utility maps into digital form;

(d) improving registration procedures of properties, removing registration backlogs in the cities of Belgrade, Novi Sad, Nis and Kragujevac, enhancing office infrastructure in selected municipalities in Serbia, and setting up mobile services at selected local RGA offices; and

(e) acquiring cadastral data (geodetic measurements and digital cadaster map database production) in the Vojvodina region in Serbia.

Component D: Project Management and Support Activities (EUR 2.5 million)

20. Component D will support provision of goods, consultants’ services, non-consulting services and Incremental Operating Costs for carrying out project management activities, including:

- (a) provision of support to project implementation unit (PIU) on Project management;
- (b) monitoring and evaluation of the project;
- (c) public outreach on the project activities to improve social inclusion;
- (d) provision of training to stakeholders in the public and private sectors according to a training plan set forth in the Operational Manual; and
- (e) studies on, *inter alia*, customer satisfaction, real estate administration and management, and based upon the results of said studies, design proposals for adoption of policies and regulations.

B. Project Financing

Lending Instrument

21. The project would take the form of Investment Project Financing (IPF) implemented over a five-year period. The IPF instrument is appropriate for the proposed operation because it will finance reforms and capacity building as well as direct investments that are critical to further implement the project.

Project Cost and Financing

22. The project costs and financing details are presented in the table below:

Project Components	Project cost (EUR million)	IBRD Financing	% Financing ⁴
A. Valuation and Property Taxation	6.6	6.6	100%
B. E-governance for enabling access to real estate information			100%
<i>B1. Integrated Real Estate Cadastre and Registration System Development</i>	7.2	7.2	
	0.9	0.9	

⁴ As per the Loan Agreement, expenditures related to goods, works and non-consulting services for the Project are financed 100 percent exclusive of taxes, while expenditures related to consulting services, training and operation costs are financed 100 percent inclusive of taxes.

<i>B2. Support to the National Spatial Data Infrastructure (NSDI)</i>	0.1	0.1	
<i>B3. Sustainability of the Sector for Information and Communication Technologies</i>	5.7	5.7	
<i>B4. Central Analogue and Digital Archives</i>			
<i>B5. Data quality improvement and Data Standardization</i>	1.4	1.4	
<i>B6. One-Stop-Shop System for electronic issuing of construction permit</i>	1.1	1.1	
Total cost of Component B	16.4	16.4	
C. Institutional Development of the Republic Geodetic Authority			100%
<i>C1. Governance, Strategy and Planning</i>	0.2	0.2	
<i>C2. National Reference Infrastructure</i>	2.1	2.1	
<i>C3. Support to the Digital Mapping Program</i>	3.7	3.7	
<i>C4. Improving Procedures, Removal of Backlogs and Enhancement of the Office Infrastructure</i>	1.2	1.2	
<i>C5. Real Estate Cadastre (REC) Improvement</i>	3.4	3.4	
Total cost of Component C	10.6	10.6	
D. Project Management and supporting activities			100%
<i>D1. Project Implementation Unit</i>	1.4	1.4	
<i>D2. Monitoring and Evaluation</i>	0.2	0.2	
<i>D3. Public Awareness</i>	0.2	0.2	
<i>D4. Training</i>	0.6	0.6	
<i>D5. Policy and legal development</i>	0.1	0.1	
Total cost of Component D	2.5	2.5	
Total Project Costs	36.1	36.1	100%
Front-End Fees	0.1	0.1	100%
Total Financing Required	36.2	36.2	100%

C. Program Objective and Phases

23. Not applicable

D. Lessons Learned and Reflected in the Project Design

24. The project's design drew strongly on the experience of the RECRP, plus the Bank team's extensive experience in the Europe and Central Asia (ECA) region and the western Balkans region in particular over the last decade or more. A variety of lessons were derived from the RECRP (as listed in the Implementation Completion and Results Report for that project). These lessons are reflected in the project design, including: the need for robust institutional arrangements and a satisfactory legal framework; good donor coordination in the area of cadastre and land registration; the importance of sustainability, particularly through financial independence, to ensure that project achievements in improved services and IT are maintained and expanded; and on the development of IT system, the potential risks of engaging one contractor to carry out all the necessary work.

25. The project also draws lessons from other projects. For example, the valuation and property taxation component is a new undertaking in the Bank's engagement with Serbia, but it has been successful and beneficial in other countries in the ECA region, such as Slovenia, Turkey and Russia. Some of these lessons include carrying out pilots in municipalities (Slovenia), developing policy by establishing commissions involving a wide range of stakeholders (Turkey), and paying attention to technical training programs (Russia). Other projects' lessons in the areas of implementation of one stop-shop for construction permit (Montenegro), reducing corruption, improving customer services and expanding e-services are also reflected in the project design.

26. Furthermore, to address the issue of gender and providing services to vulnerable groups, and promote equitable access to property rights, the project builds on the experience of the initiative of Greater than Leadership teams "Informed and Inclusive Land Administration in the Western Balkans⁵." The project reflects the lessons learned in the design of subcomponents and implementation arrangements.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

27. RGA would be responsible for project implementation with the support of the MCTI, and for sub-component B6 (one-stop-shop for electronic issuing of construction permit) with the support of the MCTI and the SBRA. A PIU will be established in RGA to support RGA in project implementation. The Steering Committee comprising RGA directors and selected experts from other institutions, shall be in charge of supervising the regular implementation of activities of the Project. A Project Council consisting of representatives of MCTI, the Ministry of Public Administration and Local Self-Government (MPALSG), Ministry of Finance (MoF), MoJ, Ministry of Economy (MoE), SBRA, RGA, Statistical Office, State Property Directorate, Directorate for e-Government and Tax Administration, would also be set up. The Steering Committee will report to the Project Council on a quarterly basis, or as requested by the Project Council. The project coordinator would be a representative from MCTI, and coordination would be linked to a donor coordination group. Roles, responsibilities, and operational procedures for the Steering Committee and Project Council will be defined in details in the Operational Manual.

28. A Donor Coordination Group (DCG) is necessary because there are a variety of donors involved with MGSI and RGA and the strengthening of real estate management in Serbia. EU supports cadastral data exchange between Belgrade and Pristina, and an institutional review in RGA. GIZ provides support legislative and institutional reforms related to both urban and rural land. USAID supports improving the construction permitting process through the Business Enabling Project. SIDA supports the regional NSDI initiative, and Norway provides technical assistance for RGA integrated software development.

29. A DCG would therefore be formed and meetings would be chaired by MCTI, with meetings held quarterly. Members of the DCG would include representatives from the MCTI, RGA, World Bank, USAID, European Union (EU), GIZ, SIDA and Norway.

B. Results Monitoring and Evaluation

30. RGA successfully complied with best practices in Monitoring and Evaluation (M&E) during the RECRP. It provided regular detailed quarterly reports with data on transactions and real estate market activity. In the new project, such reports would be augmented with disaggregated data for male and female users and owners, as well as assessments of the use of services by disadvantaged

⁵ Greater Than Leadership (GTL) program is a technical assistance for Inclusive and Informed Land Administration in the Western Balkans. This program's focus was on gender and other vulnerability issues on land and it was developed by the land team of the World Bank Europe and Central Asia Region (ECA Land Team), the World Bank Institute (WBI) and the Food and Agriculture Organization of the United Nations (FAO). This program supported the creation of 7 country teams in the Western Balkans and helped them design 11-month action plans to address the issues of gender and social inclusion in land administration in their countries.

groups, such as persons with disabilities, elderly and Roma. Social and customer satisfaction surveys were conducted during the RECRP, and these provided detailed guidance on how to provide more inclusive, transparent and efficient services. Such surveys would be continued and additional specialized studies would be conducted covering associated areas, such as the impact of new valuation and property taxation procedures. A dedicated officer within the PIU would be assigned to the M&E function and that person would provide not only statistical reports but analysis of the statistics produced within the quarterly reports. The M&E officer would be involved during the design of the information system to ensure that the necessary data to monitor the project impact can be extracted in standard reports. The quarterly reports would be provided to the Bank implementation support team, RGA management and the Project Council.

C. Sustainability

31. RGA has proven capacity to implement complex programs as shown by the success in implementing the RECRP. Technical capacity is in place for ongoing maintenance following project interventions. However it was clear following the RECRP and subsequent problems in maintaining systems and equipment that ongoing sustainability is an issue because funding is not assured. Component C.1 is specifically designed to address the issue of ongoing sustainability and includes a program to develop a corporate strategy and business plan, with a special focus on the sustainability of the Sector for IT under subcomponent B.3. The technical infrastructure being put in place under the project will require ongoing support if it is to provide public services following project closure and this is a key issue to resolve during the project. The most likely conclusion would be to establish the financing structure that enables RGA to operate based on income it derives from services provided.

V. KEY RISKS AND MITIGATION MEASURES

A. Risk Ratings Summary Table

Risk category	Rating
Stakeholder Risk	S
Implementing Agency Risk	S
- Capacity	S
- Governance	M
Project Risk	M
- Design	S
- Social and Environmental	L
- Program and Donor	L
- Delivery Monitoring and Sustainability	S
Overall Implementation Risk	S

B. Overall Risk Rating Explanation

32. The risk rating for overall implementation is “substantial”. There are no major policy reforms that are required for achieving the envisioned results. The key implementing agency, RGA, is experienced with implementation of Bank-funded projects. However land projects are complex and difficult to implement. Also the project involves significant information technology needs, which is one area where the implementing agency failed to deliver under the previous project. Moreover, the RGA is affected by a fluctuating budget assigned to them by the Serbian government. The World Bank and RGA will monitor risks throughout implementation in order to identify and address weaknesses.

VI. APPRAISAL SUMMARY

A. Economic and Financial Analyses

33. The project has several important economic and financial benefits. First, property valuation and taxation activities will enable fiscal consolidation, reduce the fiscal deficit, and strengthen local governance. Second, e-governance for enabling access to real estate information at RGA will improve the business climate, attract investors, and reduce transaction cost and time. Third, the one stop shop (OSS) will further improve the business climate in Serbia and attract more investment. Fourth, the development of real estate markets will boost small and medium enterprises that use real estate as collateral. Fifth, the development of a NSDI will advance European integration which, in turn, will bring Serbia several important economic benefits.

34. Of the benefits that can be quantified, there are four key channels through which the project is going to have an economic impact. First, the lack of valuation standards increases market risk. In order to minimize their own risk exposure, banks and court valuation experts are over-cautious and they often apply percentage reduction to the value of the property. As a result, loan values are often just a third of the property values that the owners originally submit. However, with the introduction of a standardized valuation, some of these reductions will be removed leading to credit injection in the mortgage lending market. Second, a similar mechanism will increase Small and Medium Enterprises’ (SMEs’) access to credit as they will be able to obtain more money for the same collateral. This will spur the growth of businesses. Third, the availability of more reliable and transparent information about property values will increase municipal tax collection from those who are currently evading taxation. Fourth, the introduction of e-government will result in efficiency savings both for RGA and for its customers (productivity savings). Other economic benefits that cannot be monetized include improved construction permitting process through the OSS, increased foreign investment due to availability of more reliable information, and fewer economic distortions due to greater transparency. For detailed models and analysis, see Annex 7 (Economic and Financial Analysis).

35. The project’s fiscal and overall benefits are summarized in the table below:

	Cumulative Benefits (EUR M)	Return on Investment	Net Present Value (EUR M)	Internal Rate of Return
Fiscal Gains Only	84.9	134%	10.2	20.8%
Total Benefits	464.4	1183%	185.4	99.8%

B. Technical

36. **Legal framework.** The current legal framework provides a sufficient basis for the project, and it is generally in line with international good practice. The Law on State Survey and REC of 2009⁶ adopts a single agency model, and registration occurs on a parcel based system that links the object in the REC to the rights held over that property. That law regulates most of the project activities, such as registration and mapping, mass valuation, NSDI and certain e-government initiatives. The provisions dealing with some topics need to be updated and improved, particularly in regard to more rapid registration procedures and the use of e-signatures, to meet the needs of the twenty first century. Such amendments are envisaged during the course of the project. Further, a specific law on NSDI is currently being developed, and it should be enacted in the early stages of the project. The NSDI law would replace the basic provisions in the Law on State Survey and REC, and consequential amendments have been prepared to other laws to permit e-government initiatives to be fully achieved, such as amendments to the Law on General Administrative Procedure to recognize the use of e-signatures, as envisaged under the Law on Digital Signature of 2004. The Law on Notaries of 2011⁷ is now operational, and notaries could be given additional powers and rights through consequential amendments that would permit them to directly provide a range of real estate registration services to clients, such as online lodgment of priority notices and transactions (particularly mortgages). Amendments to the Law on Planning and Construction⁸ were adopted in December 2014. Notwithstanding the foregoing, no activity under the Project entails, requires or supposes the passage of any legislation by the Republic of Serbia (RoS).

37. **Registration procedures.** The current registration procedures operate reasonably well in areas with few property transactions but in offices with high demands, it is clear that the procedures need to be streamlined to optimize efficiency of resources, including staff time, and to deliver better and cheaper services to the public. The appeal procedures, too, need to be streamlined so that appeals are dealt with quickly and consistently. While new registration software will go some way to improving operations, fundamental changes to the procedures and the laws on which they are based are required to meet the standards achieved in some neighboring countries. Further training of staff and improvements to access to offices, as well as improvements to, and expansion of, e-services are also required if RGA is to keep pace with developments in the region.

38. **IT.** The existing IT system at RGA has been in use for many years and is based on very old DOS technology. RGA has both the resources within their IT department and the vision about what needs to be done to produce a new system. RGA will receive support with Norwegian funding in designing the system and then the project resources for developing the system. During the course

⁶ Official Gazette no.72/2009, 18/2010 and 65/2013.

⁷ Official Gazette no.31/2011, 85/2012, 19/2013, 121/2014 and 6/2015.

⁸ Official Gazette no. 72/2009, 24/2011, 121/2012, 132/2014 and 145/2014.

of the project, the strategic and business plans must be developed to ensure that the systems can be adequately maintained.

39. **Records management.** Currently, RGA's paper records (maps, plans, register books, transactions, other records) are spread around the 167 local offices and the headquarters. The condition of archives varies from place to place, but in general, they are overcrowded and at risk of damage from the environment and pests. A program to digitize key records was developed several years ago, with the support of SIDA, the Norwegian government and the Bank, but only a fraction of the most important documents have so far been digitized. The project will support the expansion of digitizing. Further, while plans are rapidly moving to a digital environment, paper based documents, particularly transactions, will continue to be an important part of the registration process in coming years, and thus scanning of in-coming documents will be initiated. Finally, the overall document management system will be brought into the modern era, and a back up center will be constructed to safeguard RGA's increasing larger electronic archive.

40. **Cadastral data acquisition and production of cadastral maps.** RGA has a long tradition and good capacity in all technical aspects relating to cadastral data acquisition and production of cadastral maps. It has successfully completed the REC and the conversion of cadastral maps into digital form for much of the country during the RECRP. The capacity in both the private and public sectors in these technical fields is good.

C. Financial Management

41. A Financial Management (FM) assessment was conducted during March and April 2014, and updated in December 2014. In order for FM arrangements for the project to be acceptable to the Bank, the following actions need to be implemented:

- Person to be in charge of financial management responsibilities for the project needs to be appointed within RGA (condition of effectiveness)
- Project Operations Manual (POM) which includes section on FM, accounting and internal controls to be applied on the project needs to be prepared (condition of effectiveness)
- Appropriate financial and accounting software to be used for project accounting and reporting needs to be acquired and installed (90 days after the project's effectiveness). With regard to required actions, it should be noted that first draft of POM has been prepared prior to negotiations, but it requires additional work in order to be finalized and agreed with the Bank.

42. The annual audited project financial statements are to be provided to the Bank within six months of the end of each fiscal year and also at the closing of the project. The audit is to be conducted by a private audit firm acceptable to the Bank and in line with terms of reference (ToR) agreed with the Bank. The PIU within RGA is to submit a full set of interim un-audited financial reports (IFRs) consolidated for all components and all sources of funding for each calendar quarter throughout the life of the project. The IFRs will be due 45 days after the end of the reporting quarter. Acceptable accounting software will be used for project accounting and reporting, including principal financial reports being quarterly IFRs and annual project financial statements.

43. The POM will minimize the risk of an error, safeguard the project's assets and ensure the use of funds for intended purposes. Application of the controls and procedures in practice will be verified by the Bank's supervision. The Designated Account in foreign currency for administering

the project funds will be opened in the NBS. The control environment in the NBS is considered to be acceptable.

D. Procurement

44. The first Country Procurement Assessment Report (2002) rated public procurement ‘high risk’ (based on an earlier classification of low, average, high) that may negatively affect implementing agencies’ ability to carry out procurement under Bank financed projects. However, since that assessment, the government has made considerable progress in setting up modern procurement functions. While that process is still underway and a joint review of the Country Public Procurement System in Serbia is also underway, significant challenges remain to improve: (a) preparation and readiness of Serbia for EU accession negotiations of the public procurement chapter; (b) the capacity of the public sector institutions and staff to deliver development projects and programs, and to absorb available financing resources, with particular focus on procurement; and (c) Integrity Risk, Prevention and Fight against Corruption measures and processes in the public procurement and financial management systems.

45. Procurement arrangements at the project level were reviewed as part of preparation for the project. RGA would be the main implementing agency. This authority has already implemented the RECRP. A PIU would be established, which would report directly to the General Director of RGA. The PIU would be responsible for all procurement procedures under the project, supported by at least one full-time procurement officer. The proposed PIU Director and technical staff already have some experience in World Bank procurement, but this is rather limited. A procurement officer experienced in World Bank procurement would be hired for the needs of the project, and would work in close coordination with the PIU team. Selection of the Procurement Officer is a condition for Project effectiveness. The PIU would undertake all roles and tasks required for project administration and implementation. They would work in close collaboration with the MCTI, MoF, MoE and the other key project stakeholders. The inter-ministerial Project Council would have the mandate to ensure coordination and communication among the involved ministries.

46. The procurement process under the project would be 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) and the provisions stipulated in the Loan Agreement. The Bank’s Standard Bidding Documents, including evaluation for procurement of works and goods will be used, as well as the Bank’s Standard Request for Proposal for selection of consultants, including the standard evaluation report.

47. During the project preparation, a procurement plan for the first 18 months was prepared. Details on procurement arrangements are presented in Annex 3.

E. Social (including Safeguards)

48. This project does not trigger any social safeguards policies. Operational Policy 4.12 on Involuntary Resettlement will not be triggered since land acquisition will not occur. The project does address a wide variety of social issues through specific activities. The project is designed such that each component improves equity, transparency and accountability of the processes of real estate management.

49. The project has 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 Romani 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) renovation of selected local registration offices in order to provide wheelchair access; (c) support for communications strategies that increase information on real estate management for vulnerable groups; and (d) capacity building for RGA and local registration office staff on serving vulnerable customers. These measures were developed during the ‘Land and Gender’ conference by the Serbia team, composed of RGA; the Ministry of Labor, Employment and Social Policy; and the MGSI⁹, and have been incorporated into the project. Monitoring and evaluation of activities will pay attention to the impacts of these activities on inclusion.

50. Due to the floods in May 2014, the project is also taking into consideration the needs of flood-affected population. The floods affected 1.6 million people in 24 municipalities¹⁰ across the central and western regions in Serbia, causing disruption in energy distribution, water supply, agriculture, and transport infrastructure. Due to these severe disruptions in people’s livelihoods, the project will avoid piloting a mass appraisal program in the areas affected by the floods until the situation in these areas has settled. This will avoid any unintended negative impacts on these populations.

51. The project also includes several mechanisms to ensure accountability and transparency that can also serve to ensure that negative impacts on the poor are minimized. Information on the process of valuation and on the mechanisms to interact with client institutions responsible for real estate management will also be disseminated, and channels for dissemination will be chosen based on their overall reach and also their reach into vulnerable communities and households. Feedback from direct project beneficiaries will also be conducted, through customer satisfaction surveys, and the client and the task team will meet regularly to discuss how this feedback can be used to improve project outcomes.

F. Environment (including Safeguards)

52. The project is classified as environmental category B. While the majority of the project activities are environmentally-neutral, some civil works would be funded. These include: (a) a new analog archive building in Zemun; (b) a major rehabilitation of existing RGA office in Sopot; and (c) minor rehabilitation of the existing RGA building in Ruma. For these works, the locations are defined, and include buildings and building plots that are already owned by either RGA or are state property. Additional rehabilitation of RGA offices may be also undertaken using project funds, but details are not known at present. Nevertheless, it is envisaged that these works, if any, would be undertaken on buildings already owned by RGA or for which RGA has the right to use, build or renovate. In the event a different location is agreed upon for a the new analog archive building a new Environmental Management Plan (EMP) will be prepared by RGA and agreed with the Bank for that location.

⁹ At the time of the ‘Land and Gender’ conference it was the Ministry of Natural Resource, Mining, and Spatial Planning.

¹⁰ The floods in May 2014 had a major impact on 24 municipalities, but there were 49 municipalities in total affected by floods.

53. Three site-specific EMPs have been prepared and disclosed in the country, and they include locations that have already been identified. The sites are located in urbanized areas, and the rehabilitation/reconstruction works on existing offices would be undertaken with no change in the building footprint. There would be no works in protected areas or outside urban areas, nor on, or adjacent to, cultural heritage protected sites. If additional structures will be selected during Project implementation, confirmations are to be made whether any of the buildings chosen for rehabilitation are designated cultural property.

54. Civil work activities are not expected to have any major or negative environmental impact. The issues relevant to these activities, which are covered in site-specific EMPs, relate to general health and safety; construction waste; hazardous waste management; construction material management; traffic management; dust, noise and vibrations; and general public safety and awareness. The above impacts are to be successfully mitigated through application of good engineering practices.

55. Safety measures for workers dealing with dangerous/hazardous materials, like asbestos plates in Sopot, are identified and will include detailed specification of the “building decommissioning method” during preparation of the technical specification, as well as specific health and safety equipment to be used. Both the contractor and the waste management company will need to have a valid license to work with this type of waste.

56. Disclosure and consultation – Three draft EMPs, cleared by the Bank on April 29, 2014 were disclosed on RGA’s website on May 15, 2014, and in the local newspaper “Politika” on May 15, 2014. It was further discussed at the stakeholders’ meeting on May 22, 2014 in Belgrade, Serbia, and suggestions from the meeting were incorporated into the final EMPs. The public debate was held on the RGA premises on May 22, 2014. Publication in the Bank’s Infoshop was on July 15, 2014.

G. Other Safeguards Policies Triggered

57. None

Annex 1: Results Framework and Monitoring

Republic of Serbia: Real Estate Management Project (P147050)

Project Development Objectives

PDO Statement

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

These results are at | Project Level

Project Development Objective Indicators

Indicator Name	Baseline	Cumulative Target Values				
		YR1	YR2	YR3	YR4	End Target
Average number of days to complete recordation of purchase/sale of property in land administration system (Number) - (Core)	48		30	15	7	4
Urban areas	48		30	15	7	4
Rural areas	48		30	15	7	4
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
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
Increased customer satisfaction with real property management system, including as to quality and efficiency (Percentage)	66			70		80

Intermediate Results Indicators

Indicator Name	Baseline	Cumulative Target Values				
		YR1	YR2	YR3	YR4	End Target
Property price index established (Text)	Initial system in place.		Completed			Price index established.
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		20	70		100
Mass appraisal system developed (Text)	No system	Data acquisition	Model tested	Tested in sample municipalities		In use in 5 Municipalities
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 LOC	System fully implemented in all LCOs
Central archive operational (Yes/No)	No	No	No	No	No	Yes
System for electronic issuing of building permit established (Text)	No system		System developed	System tested	System piloted	System developed, tested and piloted
Corporate strategy and business plan submitted to government (Yes/No)	No	No	Yes	Yes		Yes
Number of stabilized grid points (Number)	0		858	1,716		1,716
Number of leveled elevations (Number)	0		1,526	3,052	3,915	4,202
Number of measured gravimetry points (Number)	0		137	274		274
Clearing backlogs in accordance with defined service standards. (Percentage)	0	25	50	65	80	95
Number of beneficiaries from vulnerable groups assisted through mobile services (Number)						No target. Just to be monitored
Number of beneficiaries from vulnerable groups assisted through mobile services - female (Number)						No target. Just to be monitored.

Intermediate Results Indicators

Indicator Name	Baseline	Cumulative Target Values				
		YR1	YR2	YR3	YR4	End Target
Target land area with use or ownership rights recorded as a result of project (Hectare(Ha)) - (Core)	0	0	1,500	4,500	9,500	11,500
Area covered by digital maps under the project (Hectare(Ha) 10 ⁶)	4.6	5.3	5.8	6.4	6.7	6.7
Digital utility lines completed under the project (Kilometers)	0	6,800	13,000	20,000	27,000	34,000
Number of persons trained (Number)	0	1,500	2,500	4,000	5,000	7,300
Of which female	0	400	800	1,300	1,700	2,100
Level of satisfaction of trainees with training (Percentage)		70	80	90	90	90
Female		70	80	90	90	90

Indicator Description

Project Development Objective Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Average number of days to complete recording of purchase/sale of property in land administration system	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 recordation of a purchase/sale of a property in the land admin system in Serbia as per Doing Business 2015.	Quarterly reports	Republic Geodetic Authority (RGA)	PIU, Real Estate Cadastre (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)	Half yearly reports	RGA	PIU,RGA ICT Sector
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, the Ministry of Construction Transport and Infrastructure, and municipalities 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	PIU, RGA, MCTI, Municipalities
Increased customer satisfaction with real property management system, including as to quality and efficiency.	This indicator measures the increase in customer's satisfaction with RGA services.	Bi-annual studies and customer surveys	Surveys and Questionnaires	Consultant contract through PIU

Intermediate Results Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Property price index established	Self-explanatory	Half yearly reports	Statistical Office; RGA	PIU Mass Valuation Unit in RGA
Valuers operating in accordance with valuation standards.	This indicator measures the improvement in property valuation through harmonization of national valuation standards with international standards which are then used by the valuers nationwide.	Annual reports	Valuers associations; Chamber of Commerce	PIU
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	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 building permits electronically.	Quarterly reports	MCTI, Business Registry (BA), Municipalities	PIU, MCTI, BA, Municipalities
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.	Annually	RGA	PIU, RGA
Number of stabilized grid points	Self-explanatory	Quarterly reports	RGA	PIU,RGA

Number of leveled elevations	Self-explanatory	Quarterly reports	RGA	PIU, RGA
Number of measured gravimetry points	Self-explanatory	Quarterly reports	RGA	PIU,RGA
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 with RGA standards as a percentage of the total backlog cases at any given moment.	Half yearly reports	RGA	PIU, RGA
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	PIU, RGA
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 project	Half yearly reports	RGA	PIU, REC sector in RGA
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.	Half yearly reports	RGA	PIU, RGA
Digital utility lines completed under the project	This indicator measures the total length of utility lines (in kilometers) digitized under the project.	Half yearly reports	RGA	PIU,RGA
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
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 and Questionnaires	PIU; RGA; MGSI, Municipalities

Annex 2: Detailed Project Description

Component A. Valuation and Property Taxation (EUR 6.6 million)

1. The taxation of property plays an important part in the tax system of many developed economies, particularly to provide revenue for local government units that are under their direct control. Currently, Serbia raises significantly less from these taxes than the OECD average. There is evidence that municipalities are not raising all the revenue from this source that the law indicates that they should due to tax avoidance and not being able to tax properties on their market values effectively. Improving real property taxation would make a useful contribution to fiscal stability. Serbia also lags behind other countries in the region in the development of its valuation capacity, particularly in the adoption of internationally-recognized standards and valuer education.
2. This component will support RGA in developing a mass valuation system, creating a property price index in cooperation with the Statistical Authority, and establishing a registry of buildings (and their parts) liable to be taxed under the annual property tax. It would also support improving the valuation infrastructure and the quality of valuations. The implementing agencies for this component will be RGA in cooperation with municipal authorities.

Sales Price Registry and Property Price Index

3. A sales price registry can provide accurate information about trends in the property market, which is currently lacking in Serbia. RGA, as the registration body, is well placed to produce this. Data on sales prices will be collected at the first available point in the transaction process, which is when the sales contract is registered, using a web-based application. A quality assurance scheme will be developed to ensure the security and integrity of the data and staff trained in entering and maintaining the data. The project will also support entering the backlog of data since 2012.
4. Data can be made available about individual transactions, which would improve valuation accuracy. For monitoring market trends, there is a need for price indexes. RGA will work with the Statistical Authority, to develop suitable indexes in accordance with the standards developed by EUROSTAT. The project will provide support for consultancy services and for the development of software to process data from the sales price register so that indexes can be regularly updated.

Mass valuation pilot projects

5. Mass valuation estimates an equation for predicting the value from the characteristics of each property so that the valuation process can be computerized. The equation can be estimated from a sample of properties, using the Sales Price Register, and tested against a second sample of properties. Once a reliable equation has been developed, values can be generated for the entire population of properties according to their characteristics.
6. The impact of changing to the mass appraisal model will be evaluated in a sample of approximately 5 municipalities to see the impact both of an improved tax valuation system and the creation of a comprehensive fiscal cadastre that identifies each unit of occupancy so that all taxable properties are listed in the tax rolls. The local property tax data base for each municipality will have to be populated with the property characteristics of each occupancy unit based on the requirements of the mass valuation system. The existing property tax rate can applied to the database that would then contain all taxable properties and a more accurate assessment of their market value. Field-work will be needed to collect property characteristics to populate the database

for each of the municipalities. In addition, it will be necessary to develop or improve the existing revenue management information system in the selected municipalities to ensure that each is able to undertake billings and record collections. In order to undertake this work, the component will finance consultants' services, goods and software. The system will be tested with selected municipalities to enable better understanding of the likely benefits and issues in rolling out the system nationwide. Municipalities will be selected according to the readiness of their property tax and revenue management information systems, and to ensure that there are municipalities with complex property characteristics, like buildings in multiple occupation and commercial properties, and areas of major new residential and commercial development in the sample.

Establishment of a Building Registry

7. The present cadastre is parcel based and many parcels contain complexes of several units, which are not recorded separately, such as apartment blocks or mixed used developments. A registry of buildings and units of occupancy is needed for a variety of uses involving spatial data of which property taxation is one. The creation of a building register will ensure that municipalities have a comprehensive list of properties from which the annual property tax should be collected. This should reduce the tax and/or increase tax revenues by ensuring that all properties which should be subject to the tax are actually in the tax roll. The project will support collection of the data to establish the registry using techniques such as aerial photography and the reconciliation of lists of properties compiled for various purposes such as elections and utility billing.

Improving Valuation infrastructure

8. Whilst Serbia has not officially adopted appropriate valuation standards or qualifications, there is local good practice in the form of small local professional bodies that follow international standards and a few valuers who are members of a professional body that has adopted internationally-recognized standards. The problem is that only a minority of valuations are undertaken in accordance with these standards. Unless Serbia improves its valuation infrastructure, it will be unable to comply with the EU's Mortgage Directive or International Financial Reporting Standard 13 on Fair Value Accounting.

9. The project will support stakeholder discussion and the work on improving the valuation infrastructure to meet international standards. RGA will act as the facilitator, convener and champion to encourage the adoption of internationally recognized valuation standards and improving the training of valuers. In this area, relatively small expenditure could have a significant impact by spreading good practice from its current small pockets out into the wider economy.

Component B. E-governance for Enabling Access to Real Estate Information (EUR 16.4 million)

10. This component would support the MCTI and RGA to develop and implement: an Integrated REC and Registration IT system, including a fiscal building register, sales index and price index; e-services and interoperability with key government registers; a central analogue and a digital archive; modernization of the address register and utility cadastre and develop and piloting of the OSS system for issuing of digital building permits. It would also support the implementation of the National Spatial Data Infrastructure (NSDI) and data quality improvement. The component aims at increasing RGA's capacities to manage the IT systems over the long-term and

establishment of a new sustainable business model for further development and maintenance of the IT systems in place.

11. RGA is currently maintaining the REC and registration records in 166 local offices, using outdated software solutions, xBase technology, developed in 1990's (JE under DOS, GeodisKN under earlier Windows versions, and MapSoft under earlier Windows version). The old tools used for software design (FoxPRO for DOS, MS Access for Windows) enforced keeping the records in a distributed database system, without physical connections (each local RGA office maintains its own database), data structures are not unified, and they do not respect the international standards and good practice. Due to the limited software control of data input and lack of unified procedures, data in the local databases are inconsistent, especially in the segment of personal data input, such as: personal identification number, company name (which are continuously inputted in multiple fields with various input styles), addresses, etc. The systems in use are based on various technical platforms and use different licenses, which makes system maintenance complicated, extremely inefficient and expensive.

12. To remedy the lack of a unique software solution, RGA designed a central database for the purposes of Web services, which is populated with data sent from local RGA offices in the form of backup, and a set of Web services have been recently developed and implemented to provide easier access to data for external users. Due to the various errors in the data at the local level, the migration process is very complicated and relatively slow, since data need to be cleaned from errors each time during migration (where possible) and reformatted in line with central database structure.

13. This component would contribute to the improvement of governance of tenure of real estate by improving efficiency, effectiveness, transparency of services and minimizing opportunities for corrupt practices, and by providing tools for increased accountability and equity monitoring, including provision for gender disaggregated data on real estate ownership and reports on performance and efficiency of local offices and the staff working there (reporting on processing times, work load distribution, etc.).

14. The implementing agency for this component will be RGA with the support of MCTI and SBRA and it will have six subcomponents:

B.1 Integrated REC and Registration System Development (EUR 7.2 million)

15. During the past decade RGA has made several attempts to develop and implement a new software solution in order to replace the old systems in use, which: are based on old technologies; are not integrated; have data structures that are not standardized and not unified; and repeat the paper based system in their system workflow. Several of those attempts failed, or partially failed, and many of lessons have been learned.

16. The Kingdom of Norway has already allocated funds to support the subcomponent preparation. The Bank team met with the representatives of USAID and discussed possible support during the project preparation in complimentary to the Norwegian support.

17. It has been agreed that the preparatory work would include: a) design of a new data model, compliant with the EU INSPIRE requirements and with the Land Administration Domain Model;¹¹ b) business processes reengineering; c) development of technical specifications for the Integrated REC and Registration IT system; d) development of a quality assurance plan and a software development plan; e) system architecture design and recommendations on technical platform; and f) development of disaster recovery datacenter requirements. The financial support is being provided by the Kingdom of Norway (for the parts under RGA's competence) and by USAID for the part related to the extension of the data model to cover construction permits, spatial and urban planning.

18. The new Integrated REC and Registration IT system would have centralized architecture and would use the web based technology. A modular approach would be adopted and the system developed in several steps and will cover: front and back office functionalities, including establishment of a digital archive (digitalization of incoming documents and integration with the historical digital archive), development of WEB portal for e-services provision to the external users, interoperability with key government registers, such as the Address Register, personal ID register, companies register, tax register, and the Register of Spatial Units upgrade and integration, development of a fiscal building register, price index and sales index modules, upgrading of the Utility Cadastre to comply with the new data model and development and implementation of a document management system. This subcomponent would also support documents transformation to the permanent archiving format, development of software/customization of off the shelf products, and supply of equipment and licenses.

19. RGA has been requested to host the centralized register of urban plans and the project would support the necessary hardware and other equipment to support the Central Register of Urban Plans. The development of the data model, development of application software and capacity building of the LGUs to use the application would be provided by USAID. GIZ would support the development of a rule book for the LGUs to ensure that common standards and data model are used for the development of new urban plans.

20. RGA is planning to establish three levels IT management structure: level 1: a decision making body; level 2: a project manager, responsible for day-to-day management of all IT related activities; and level 3: working groups, consultants, contractors, as needed. A quality assurance and quality control mechanism would be established as part of the IT management structure. An external quality assurance advisor would be hired to support the RGA project manager and the decision making body, as needed.

21. Related ongoing projects and RGA requests for financial support by various donors: a) EU financed framework contract, which among other activities would review RGA's IT systems in use and provide recommendations for adjustments to face the full range of institutional tasks and obligations of RGA, and would prepare a map of donors support in the land domain; b) EU IPA 2010 financed project for software development, related to RGA's e-services provision, related to the issuing of construction permits (eGateway), improvement of RGA's IT system, and

¹¹ ISO 19152:2012, Geographic information - Land Administration Domain Model (LADM). The new data model will cover all areas under the RGA's competency, price index, sales index, fiscal buildings register, construction permits, spatial and urban planning.

improvement of the e-government web portal; c) a memorandum of understanding signed between RGA and USAID for development of software for development of a central system for management of urban plans; d) The Kingdom of Norway financed project to support RGZ to prepare the new data model, to reengineer the business processes and to develop technical specifications for the Integrated REC IT system. A donors' coordination mechanism would be put in place to avoid overlapping of activities. (See Annex 3, paragraph 2.)

22. This subcomponent would finance software development, supply of hardware and licenses for the main data center, the disaster recovery data center and for the local RGA offices, communications equipment, network infrastructure improvement, provision of IT technical training, technical assistance for quality assurance and quality control and the reconstruction of the main and the disaster recovery data centers.

B.2 Support to the National Spatial Data Infrastructure (EUR 0.9 million)

23. The Law on State Survey and REC prescribes establishing of the NSDI, which involves strategy, technology, rules, standards and human resources necessary for acquisition, processing, storage, access, sharing and optimal use of spatial data. In this manner, some of the provisions of the INSPIRE Directive are being transposed to the legislation in Serbia. The government adopted a Mid-Term Program for establishment and maintenance of the NSDI for 2011-2015. The Strategy for establishment of the NSDI 2013-2015 is under development. Full transposition of the EU INSPIRE Directive to the Serbian legislation, pursuant to the National Program for Adoption of *Acquis*, is to be defined by the proposed Law on National Spatial Data Infrastructure. This subcomponent would support:

- (a) NSDI business model development (financing model, pricing policy, spatial data sharing and distribution among stakeholders, licensing, cost-benefit analysis, spatial data and services access for emergencies);
- (b) development of NSDI technical framework by upgrading network services for discovering, viewing, transformation, download and linking spatial data;
- (c) introduction and support for implementation of international standards for spatial information, including ISO, OGC, CEN W3C and INSPIRE Implementation Rules and data harmonization for themes under competence of RGA.

24. Further, under Component D, there would be support for organization of NSDI annual conferences, plus training and capacity building, including study visits to EU member states and participation in INSPIRE annual conferences and other relevant international and national events.

25. Related projects: During the period 2008-2011, RGA was supported by Norway under twinning arrangements to develop a national geoportal and to develop NSDI strategy and metadata, which continued with Norwegian assistance for two more years (2011-2013) and included legal support, geoportal improvements and capacity building. Under a bilateral agreement between the RoS and the Republic of France, RGA has been implementing a project entitled "National Spatial Data Infrastructure and Remote Sensing Center for the Republic". The project started on September 23, 2010, with the duration of 3 years, and was completed on December 31, 2013. RGA was actively participating in the EU-financed multi-beneficiary project "INSPIRATION – Spatial Data Infrastructure in the Western Balkans", which aimed at promoting Spatial Data Infrastructure

(SDI) and at coordinating its further development in the western Balkan countries. A new regional project (Inpulse) has started with the Swedish Government financial support to assist the NSDI implementation. RGA has received EU financial support under the PROFID program (funded by Sweden) to develop technical specifications for the new NSDI geoportal and the selection process is underway.

B.3 Sustainability of the Sector for Information and Communication Technologies (EUR 0.1 million)

26. This subcomponent would support the establishment of a new business model for the support of the ICT system development and maintenance management, including NSDI development and maintenance. RGA already has a well structured sector for information and communications, which envisages 75 permanent positions. Currently, 118 experts are working in the Sector for Information and Communication Technology (ICT) (permanent staff and staff on fixed-term contracts), divided in four units: 1) information systems maintenance (hardware, software, help desk) – 14 staff members; 2) NSDI – 16 staff members; 3) GIS, responsible for digital cadastre plans maintenance, Address Register, Register of Spatial Units and Utility Cadastre – 19 staff members; 4) archive, both digital and analog – 24 staff members. The salaries of the Sector for ICT staff are much lower than the remuneration in the private sector, and this puts at high risk the maintenance and further development of key government registers, which are of strategic national importance such as: the Register of Spatial Units, Address Register, REC, Utility Cadastre, NSDI and central digital archive for property information.

27. A financial mechanism for the long-term support of the Sector for ICT would be developed as part of the strategic and business planning activities under Component C (see below). In addition, the business plan would cover IT service and performance standards and staff and training policies. This subcomponent would support the implementation of the business plan, including development of detailed job descriptions, training programs (targeting also users) and training modules for key users.

28. This subcomponent would also finance temporary technical assistance, where needed, to support IT contract management and quality assurance, ICT training. The assistance would be used for updating of the ICT Strategy (as part of the business planning activities), implementation of the disaster recovery policy, quality assurance and quality control, establishment of a help desk, and drafting service level and data sharing agreements. The data sharing agreements may require establishment of inter-governmental working groups.

B.4 Central Analogue and Digital Archives (EUR 5.7 million)

29. RGA plans to complete its digital archive and to establish a central analog archive during the next five to ten years. This subcomponent would support the archive and document management strategy and an action plan, establishment of a central analog archive, including construction of a building and further development of digital archive, data digitalization, integration of digital archive with the Integrated REC and Registration IT system, and development of software for managing the central digital and analog archives.

30. Further development of the digital archive and improvement of an analog archive would contribute to reduction in the time to process transactions and would allow simplification of working procedures and optimization of RGA's business operation.

Further implementation of digital archive

31. Related projects: With the support of the RECRP, SIDA project “Capacity Building in Serbia: Real Estate Cadastre and Registration Project, Phase III” and the donation project by the Kingdom of Norway "Geographic information for development and EU integration", a digital archive strategy and methodology for records digitalization have been developed, a central scanning center has been established and is in operation in Belgrade, and about 40 percent of documents have been scanned, indexed and verified.¹²

Establishment of a central analog archive

32. The process of establishment of the REC included transfer of documentation (land books) from the courts to RGA. The archive documents, currently “dispersed”, are of utmost importance for enforcement of denationalization and restitution procedures, and they have to be bundled and kept in a secure place. The process of digitizing the analog archive is ongoing, but there remains a need to create a catalogue of archive documents and ensure adequate archive storage.

33. The construction of an archive building is envisioned under this subcomponent to provide an area for scanning. This would be subject to RGA developing an acceptable digital archive strategy and obtaining a location permit and preliminary design for the analog archive building. The furniture and the necessary equipment, software and licenses would be supplied under the project as well as training of staff to manage the central archive.

B.5 Data quality improvement and data standardization (EUR 1.4 million)

34. The analysis of RGA data showed that the data format is not consistent (standardized), which is partially a consequence of outdated software solutions currently in use (distributed database system). The current systems have limited ability to perform quality control on data input. Different system users are using different patterns for the data entry (for example: some of them enter the full address in the system while others use the abbreviations or some personal identification numbers are entered. The data quality issue may generally be divided in three categories: a) incorrectly entered data in regards to the content; b) data entered with correct content, but in not standardized format, which makes queries more difficult; and c) missing data, without influence on the validity of rights registered, but containing shortcomings, such as lacking personal number of citizen or address change not updated, etc.

35. Part of the errors would be eliminated by data standardization, while other parts would be remedied by physical overview of database with data filtering according to the predefined criteria. Conversion of DOS modified code page to UNICODE would also be performed. Part of the data error cleaning would require a different approach and more systematic work, with possible public awareness campaigns inviting users to submit the correct data.

36. Within this subcomponent, individual consultants would be hired for data quality control and improvement. The data cleaning process will be automated where possible. The subcomponent

¹² Based on the Dialogue Agreement on cadastral records between Belgrade and Pristina, dated September 2, 2011, EU IPA financing is available for the supply of additional equipment and scanning and indexing of approximately 12 million pages, approximately 138,000 pages of sketches or photo-sketches and 7,400 plans, which are currently kept in Serbia (documents from cadastre offices located in southern Serbia, the majority being in Krusevac). RGA is planning to introduce scanning of incoming documents in all offices by the end of 2014.

would support a media campaign to stimulate citizens to submit the missing data, including other forms of mass data acquisition.

B.6 One-stop-shop system for electronic issuing of construction permits (EUR 1.1 million)

37. The amendments to the Law on planning and constructions were adopted by the Parliament on December 29, 2014. The amendments to the Law introduce the one-stop-shop principle for issuing construction permits, which have to be implemented in two phases: phase one – paper based system and phase two digital system. This sub-component will support the development and implementation of the OSS system for electronic issuing of building permits in the Serbian Business Registers Agency. The draft rule book is ready and should be approved soon. The project will support the review of the existing IT systems and database structures of the institutions/organizations, which are part of the building permits processes, re-design of the working process to comply with the one-stop-shop principles, identification of any additional legal amendments, which may need to be on place to support the new unified digital processes, development of requirements for all institutions/organizations involved, development and piloting of IT system, which supports the electronic issuing of construction permits, capacity building. This subcomponent will finance technical assistance, software development, independent quality assurance and quality control of the design and development of the application software and supply of hardware and standard licenses.

38. Related ongoing projects: EU IPA 2010 financed project, which supports:

- 1) System for RGA electronic services, related to the issuing of construction permit (eGateway)
- 2) Improving information system of the RGA, as the prerequisite for electronic service implementation related to construction permit issuing
- 3) e-Government Portal improvement
 - 3.1.eGradjevinskeDozvole (eConstructionPermits) module
 - 3.1.1. Software module for quoted services generating
 - 3.1.2. Software module for quoted services processing
 - 3.2.Improving ePlacanje+ (ePayment) platform
 - 3.3.Improving user interface
- 4) Improving services rendered by the Provider and process standardization.

Component C. Institutional Development of the Republic Geodetic Authority (EUR 10.6 million)

39. Under this component, works initiated by RGA under the RECRP would be pursued and expanded. The component would also support RGA's efforts to improve its services and meet EU standards in this regard. It comprises five subcomponents: C.1) Governance, Strategy and planning; C.2) Maintenance of the reference infrastructure; C.3) Conversion of existing analogue maps into digital form; C.4) Improving procedures, removal of backlogs, and enhancement of service infrastructure; and C.5) REC improvement.

C.1 Governance, Strategy and Planning (EUR 0.2 million)

40. There remain concerns over the financial sustainability and transparency of RGA as a modern land administration organization. The RECRP provided equipment and office renovations, but current government funding does not cater for their upkeep and upgrading. As a major focus of the project relates to e-governance, it is essential that the new systems prove to be sustainable. More broadly, RGA needs to increase its focus on customers through greater openness, transparency and accountability to accord with international best practice. This subcomponent would fund the preparation of a corporate strategy and business plan for RGA. Within the project period, the government would agree the strategy and business plan. Additionally, the subcomponent would support publications of customers' rights and obligations, development and reporting on service standards, establishment of a hotline for information and complaints, improvements to the audit and control functions of RGA, and fostering greater cooperation with key users and civil society.

C.2 National Reference Infrastructure (EUR 2.1 million)

41. RGA is responsible for establishing and maintaining the National Reference System by the Law on State Survey and REC, pursuant to Article 31, which consists of: 1) spatial (three-dimensional) reference system; 2) horizontal (two-dimensional) reference system; 3) vertical (single-dimensional) reference system; 4) gravimetric reference system; and 5) astronomic reference system. Under the RECRP, the spatial reference system was established and this subcomponent would make the spatial reference system sustainable by upgrading and completing the technical equipment and also by re-establishing the vertical reference system and the gravimetric reference system.

C.2.1 Maintenance of the National GNSS Stations Network – AGROS

42. The Permanent Stations Network in Serbia (known as the Active Geodetic Reference Network of Serbia or “AGROS”) established during the RECRP is a basic infrastructure providing services for RGA and a great number of authorities and private sector enterprises. Already 350 users are benefitting from this infrastructure and creating a fee income of approximately EUR 70,000 per year, which is assigned to the state budget. The system is used for efficient cadastral survey, construction survey, machine positioning and precision farming.

43. Under the project, the functionality of this important infrastructure is to be maintained by replacing outdated equipment and making further improvements to capacity. The AGROS is linked to the rest of the European Union Positioning System (EUPOS) network, and Serbia is taking an important role, considering that one of the control points for the European Positioning Network (EPN) maintenance is situated within the AGROS network. The following activities are included: i) re-placement of outdated receivers; ii) installation of a time station for the control center; iii) procurement and renewal of the network access licenses for the system control software in the AGROS control center for the next five years; iv) enhancement of the IT infrastructure; and v) promotion of the system and staff training.

C.2.2 Establishing Vertical Datum

44. The vertical reference system serves as the base for accurate height determination of spatial objects. For projects and studies in the field of transportation, water management and sewerage, flooding and disaster management, leveled height information is a prerequisite. A precise leveling network was established some 100 years ago, but 70 percent of the benchmarks have since been destroyed and the quality of altitudes is questionable, both due to the time elapsed and tectonic shifts, plus the methods of measuring and results processing. The last systematic measurements were carried out 40 years ago. It is necessary to establish a new reference leveling network for Serbia. A project design has been prepared and work can start as soon as funds are available. The project would utilize both the private sector and RGA staff for the levelling work and includes construction of the levelling monuments; procurement of equipment and vehicles for motorized leveling (two passenger vehicles and one pickup vehicle per team, which would be modified for this purpose); staff training; and processing the results. The results would be included within the European Leveling Network (EULN).

C.2.3 Basic Gravimetric Network

45. In order for the levelling results to be used for integration with the EUPOS and for scientific use for inclusion in pan-European gravity work a new measurement campaign for the gravimetric network of Serbia will be completed. Serbia (as well as Bosnia and Herzegovina, and FYR Macedonia) is not included within the European gravity network. The work would be done by RGA staff but a new gravimeter will be required and operational costs for the survey work and processing would be needed. RGA has regular contact with the universities and those interested in the gravimetric model of the Serbia would support them in training and use of the equipment. They intend to interconnect the network with the neighboring countries.

C.3 Support to the Digital Mapping Program (EUR 3.7 million)

46. The e-government agenda requires all cadastral data to be in digital form, in accordance with national standards (based on international standards). Much of this work was done in the RECRP, but about 50 percent of the cadastral municipalities (CMs) remain to be digitized: maps for 20 percent of CMs are currently underway and maps for 30 percent of CMs are to be digitized under the project. The activities proposed under the project would support: i) transformation of analog maps to digital format (original survey data input); and ii) transformation of utility cadastre analog maps into digital format (digitalization and original survey data input).

C.3.1 Completion of the graphical database by transformation of maps and measurements

47. The project support would focus on expanding the workforce capacity by engaging up to 200 consultants working in local cadastral offices and in the Sector for REC at RGA's headquarters to carry out the digitizing work.

C.3.2 Transformation of existing utility maps to the database

48. RGA is responsible for maintaining documentation on the location of the utility network. This is an important base for spatial planning and the management of construction permits. To facilitate these activities, it is planned to convert the existing utility maps to digital form for the busiest

towns and municipalities where no digital database exist. The project would support the engagement of up to 50 consultants each year.

C.4 Improving Procedures, Removal of Backlogs and Enhancement of the Office Infrastructure (EUR 1.2 million)

49. The REC is a property register, based on the survey data. The REC also records the ownership of the property plus other real rights on real estate (land, buildings and other constructions, apartments and offices as building special parts) and obligations, such as mortgages. Work on the establishing the REC was largely completed under the RECRP. REC maintenance involves collecting, determining and registering changes occurring to real estate and property rights that are registered in the REC. Within the REC maintenance procedure, for the purpose of improving services for clients (government, corporations and individuals), RGA intends to continue both operative and institutional development, through the following components:

C.4.1 Improving procedures

50. RGA's registration procedures under the Law on State Survey and REC suffer from a variety of shortcomings including complexity, long notice periods, problematic appeal processes and statutory norms that do not encourage prompt resolution of applications. To address these and many other problems, RGA has begun a process of analyzing its laws and work processes, with the objective of rationalizing them and adjusting them to support a modern, more efficient electronic approach to registration data processing. In this manner, greater work efficiency and decrease of time for transaction registration would be achieved, alongside increased work transparency. The existing decision-making procedures would be analyzed, firstly on applications for registration of property rights and encumbrances on real estate, as prescribed by the current legal and by-law documents, with the objective to simplify the procedure for property rights and encumbrances registration and also to reduce the period of norms for resolving cases. The process for obtaining extracts (title information) would also be streamlined.

51. Simplification of the procedures would influence upgrading the quality of work, which would in turn bring lower the number of cases appealed. For each case under appeal, due to the long decision-making period, subsequent applications in relation to the same real estate are often delayed because they can only be processed after the first case is resolved, which also increases the total number of unresolved cases. Therefore, the appeal process would be fully revised and streamlined in accordance with best practice in the region.

52. The project would support RGA in these activities through provision of specialist registration consultants with international experience, policy and legal support, and study tours to observe modern, efficient registration systems.

C.4.2 Removing backlogs in Belgrade, Novi Sad, Nis and Kragujevac

53. Following the completion of the REC during the RECRP, all registration work in urban areas and all land books from the courts were transferred to RGA. As RGA dedicated much of its registration staff to finalizing the REC, a backlog of outstanding requests for registration has developed in major cities. Further, the Law on State Survey and REC, which provided the foundation for completion of the REC, provided for shorter public display periods, but these

resulted in lower responses from real estate owners during the public display procedure, thus decreasing the data quality, which has brought up numerous cases within the REC maintenance procedure, and numerous requests for correction of data both on real estate and on property rights. Also, the Law extended the deadline for submitting the requests for errors correction to five years from the day of the REC enforceability, thus it may be expected that the number of such cases would only increase in the years to 2016 (the REC was largely completed by 2011). An additional limiting factor is some 23000 unresolved appeal cases against the decisions by the local RGA offices, which are with the second-degree decision-maker (by promulgating the Law on State Survey and REC, RGA's competence has ceased and the ministry competent for the construction and urbanism (MCTI) has been appointed as second degree decision-maker).

54. The activities on customer service improvement in the major cities should firstly provide for shorter decision-making periods from the moment of application submitting, as well as quality of service improvements, which should also result in a decreased number of cases being submitted to the second-degree decision-maker.

55. During the period of the project, a backlog of some 150,000 cases needs to be resolved, one third being the request for correction of registration performed within the REC establishing procedure. Professional qualifications of the consultants for this activity depend on the type of case – correction of data on real estate, correction of property rights registered and resolving the cases in the REC maintenance field. For these activities, it would be necessary to hire consultants, using project funds, as follows: 76 experienced lawyers, 28 geodetic professionals and 76 consultants for administrative works and registration of changes. Additionally, the project would support the employment of consultants to deal with the backlog unresolved appeal cases with the MCTI. There are about 500,000 additional cases resulting from *Lex Specialis*¹³ which allows people to register properties developed without construction or occupation permit. This backlog will be addressed by RGA using their own resources and possible savings due to efficiency gains generated by the project.

56. Training of the consultants and RGA staff should be performed during the first two years of the project, which would influence the quality of data produced during the project. It is expected that the training would also improve RGA's operation in the long-term, influencing the work quality improvement after the project's completion.

C.4.3 Enhancement of the office infrastructure

57. The local cadastre offices in two political municipalities that are located on the Belgrade's quickly developing outskirts, would be refurbished. The project would support design, supervision and execution of the works and RGA will finance furniture and equipment for these offices from its own funds.

58. Finally, based on an assessment of accessibility of RGA offices for persons with disabilities or special physical needs, minor renovations to offices (including the construction of ramps and improved handrails) would be undertaken.

59. The need for RGA front offices to be operational would continue over at least the next five to ten years for the following two reasons: (1) the development and the implementation of the new IT system would take time, and centralized services would be possible only after some years; and

¹³ Official Gazette no. 25/2013, 145/2014

(2) there is still a relatively low number of the internet users in the Serbia,. The activities in local offices supported under the project would improve the quality of services significantly for a long time and also support the enhancement of services for disabled and elderly persons.

60. Additionally, the project would support the introduction of up to five mobile offices. These would be based around the country and bring services to people who are not normally able to make the visit to RGA offices, particularly persons with disabilities and those living in isolated areas. The project would fund the necessary equipment (computers, scanners, etc.) and RGA will provide vehicles to make the mobile offices functional.

C.5 Real Estate Cadastre Improvement (EUR 3.4 million)

61. This subcomponent would cover those areas in the Vojvodina region that are under heavy development pressure. Spatial and property data is to be acquired through geodetic measurements and establishing the REC. In 23 percent of the territory of Vojvodina (approximate area of 576,000 hectares), the graphical survey in Stereographic projection and the *hvat* measurement system are in official use, based on work performed by officials of the Austrian Monarchy in the late nineteenth and early twentieth centuries, and in 1930-40s by the Yugoslavian geodetic organizations. Of a total of 448 CMs in Vojvodina, the Stereographic projection survey is in force in 130 CMs plus eight CMs where it is in force in part of the CM.

62. This work is necessary primarily because the existing survey documents and cadastral maps are in a very poor physical state (analog maps are torn or do not exist) and numerical survey data do not exist. For the purposes of cadastral and land consolidation survey work, RGA commenced preparation of designing documentation in October 2013, and the Government of Serbia (GoS) is already financing that survey in ten cadastral municipalities.

63. Cadastral data collecting consists of the following activities:

- (a) Geodetic measurements, with collecting of real estate and property rights holders' data; and
- (b) DCM database production.

64. Measurement and data collecting is to be contracted out to the licensed private geodetic companies. Work on designing documents production, preparation, cadastral classification, public display of data and professional supervision would be performed by RGA employees. Data collection for priority areas would be performed. This would involve data acquisition in settled areas of 32 CMs (with the total area of 11,482 hectares) to be performed under the project. Consumables (paper, toner, envelopes, etc.) would be supplied using project funds.

Component D. Project Management and Support Activities (EUR 2.5 million)

65. This component would support incremental costs of consultant services, communications, training, equipment and operations to facilitate project implementation including procurement and financial management, monitoring, evaluation and reporting.

D.1 Project Implementation Unit (EUR 1.4 million)

66. A project funded PIU within RGA would be established in order to manage the project and provide fiduciary oversight. Under the PIU director and a land administration specialist who would

act as assistant director, the PIU would contain expertise to coordinate and oversee the components dealing with property valuation and property taxation, information technology, institutional development and improvement of RGA services, public awareness, monitoring and evaluation (M&E), and training.

67. The PIU would be established full-time with sufficient professional personal to administer the project, with M&E, Training and Environmental Safeguards specialists operating on a part-time basis. It would be based at RGA's headquarters building and report directly to the General Director of RGA.

D.2 Monitoring and Evaluation (EUR 0.2 million)

68. An M&E specialist within the PIU would be responsible for monitoring of project progress, overseeing the conduct of the various surveys to be undertaken, monitoring the utilization of information available on portals, and checking the impact of the project on real estate market activity, gender equity, support for vulnerable groups, etc. Social and customer surveys would be conducted in years 1, 3 and 5 of the project. Results from the RECRP would provide much of the baseline data.

69. The work on M&E and surveys would build on the experience acquired during the RECRP to help ensure that the project's outputs are achieved. This would require regular checking and monitoring, analysis and reporting to RGA, the Bank supervision team and ultimately, the government. M&E data would also provide an input to the project's business planning activities. While an M&E specialist within the PIU would lead the work, the ultimate success of M&E depends on a sustainable and built-in M&E capacity within RGA. Therefore, a goal of this subcomponent is to further development RGA's M&E capacity so that this function extends well beyond the project and becomes an integral part of RGA management and business planning activities.

D.3 Public Awareness (EUR 0.2 million)

70. Following the RECRP's initiatives, activities under this subcomponent would inform and educate the public on real property registration and associated issues, new services (particularly e-services) and other matters relevant to RGA's operations and the broader real property sector. Information would be provided through radio, newspapers and billboards and publications (such as pamphlets, brochures, newsletters and posters), expansion of information provided through RGA's website, and through face-to-face presentations. Project funds would be used for developing a communications strategy and for the design and dissemination of publicity materials.

71. Special attention would be given to women and vulnerable groups, including Roma, both in terms of information and methods of delivery, to ensure that the messages reach these groups. Therefore, the public awareness strategy would specifically address these groups and public awareness activities would be coordinated with special interest groups representing women, disabled people and others. This subcomponent would also include targeted campaigns for land market professional (lawyers, surveyors, valuers, banks, real estate agents, notaries) to ensure that they are kept up to date with developments in policy, law, improvements to services and new services, including e-services. Engagement with land market professionals would also provide a forum for the exchange of ideas and concerns. Publication of the Legal Bulletin, which was

sponsored under the RECRP and which is issued twice a year, would also be supported by the project.

D.4 Training (EUR 0.6 million)

72. A set of training activities are planned to (i) enhance the capacity of RGA staff; (ii) provide contract staff with the technical knowledge that they require to complete their activities; (iii) build the capacity of the staff in public institutions and private sector stakeholders involved in implementing one-stop-shop for construction permit; and (iv) educate some land market professionals on new services. Training would be primarily conducted face-to-face through workshops, seminars, on-the-job training and study tours, although online training in new software is envisaged. Courses would cover such topics as IT software and hardware, document management, NSDI, the INSPIRE Directive and geodetic matters, such as leveling. Training in valuation, which is an integral part of the design of Component A, is separately described under that component.

73. Training related to new legislation on construction permit issuing and one-stop-shop system implementation will be conducted by the MCTI staff with support from consultants contracted under the project. In order to provide training to all stakeholders of the permit issuing process, training of trainers will have to be conducted, targeting larger municipalities first, building the capacity at the local level to deliver training to authorities in smaller municipalities. Training will be provided to authorities dealing with construction permit at local and central level, utility companies (municipal and state owned utility companies), business registry, design companies, etc. In addition to consultants, the project will support organization and logistics costs of the training. PIU will support MGSI in preparing the training plan.

74. RGA already implements a program of regular technical and legal training for its staff, so the project's training program would complement those activities. As some of the training would be provided by RGA specialists, particularly in specialized technical areas, project funds would cover only expenses (accommodation, travel, facilities, meals) of these sessions. Much of the training for the IT system would be provided by the contractors responsible for development of the Integrated REC and Registration software. Further, training under the project would complement training in the real estate management sector provided through other donor funded programs, such as those dealing with planning and permitting, state land management and technical geodetic activities.

75. RGA has established a small permanent training center at its headquarters in Belgrade, and this center would be used to provide training both under the project and for RGA's regular programs.

76. As a condition of the loan agreement, and with regard to training to be carried out under the project, the RoS, through RGA, shall:

(a) not later than December 1 of each year during the implementation of the project, furnish to IBRD for its approval, a proposal for the training plan to be carried out under the project during the following calendar year, including (i) an overview of the scope and content of the training programs or activities, (ii) an explanation of how each training program or activity is expected to contribute to achieving the objectives of the project; (iii) the budget to be made available therefore, taking into account considerations of economy and efficiency; (iv) the criteria for the selection of the beneficiaries and the providers of training; and (v) the schedule for implementation of the training, and

(b) except as otherwise agreed by the IBRD, carry out the annual training programs and activities in accordance with the agreed selection procedures, budget, and schedule, all under contractual or other arrangements satisfactory to IBRD.

D.5 Policy and Legislation (EUR 0.1 million)

77. RGA already has a group of experienced and capable lawyers who carry out necessary policy and legislative drafting work. However, with an increase in demand and a need for specialized legal knowledge that is envisaged as part of the project's reforms, it appears likely that short-term assistance would be required throughout the project period.

78. If required, funds for studies of particular contentious policy issues would be available to support of the project development objective relating to such matters as: land fragmentation and consolidation, urban planning and regularization of buildings without a construction or use permit, real estate valuation and taxation, the need for a law on valuation, impediments to registering inheritance, spatial data infrastructure, etc. Another key area would be studies and regulations for the enhancement of real estate market mechanisms and to promote transparency and governance of the real estate registration institutions.

79. This subcomponent would also finance consultants to work with RGA in the preparation of draft legislation that would enhance land administration. Such draft legislation could include amendments to the Law on State Survey and REC, implementing regulations for the proposed law on NSDI, legislation to facilitate e-governance, etc. it should be noted, however, that no activity under the Project entails, requires or supposes the passage of any legislation by the RoS.

Annex 3: Implementation Arrangements

Project Institutional and Implementation Arrangements

Project administration mechanisms

1. RGA would be responsible for project implementation with the support of the Ministry of Construction, Transport and Infrastructure (MCTI), and for sub-component B6 (one-stop-shop for electronic issuing of construction permit) with the support of the MCTI and the Serbian Business Registers Agency (SBRA). A project implementation unit (PIU) will be established in RGA to support RGA in project implementation. The Steering Committee comprising RGA directors and selected experts from other institutions, shall be in charge of supervising the regular implementation of activities of the Project. A Project Council consisting of representatives of MCTI, MPALSG, Ministry of Finance (MoF), MoJ, Ministry of Economy (MoE), SBRA, RGA, Statistical Office, State Property Directorate, Directorate for e-Government and Tax Administration, would also be set up. The Steering Committee will report to the Project Council on a quarterly basis, or as requested by the Project Council. The project coordinator would be a representative from MCTI, and coordination would be linked to a donor coordination group. Roles, responsibilities and operational procedures will be defined in details in the Operational Manual
2. A Donor Coordination Group (DCG) would be established in order to ensure that the various related projects funded by donors are properly coordinated. The DCG would be chaired by the Project Coordinator from the MCTI and co-chaired by Director General of RGA and would include representatives from the World Bank, USAID, GIZ, EU, Norway and Sweden. Other donors could be invited to join as relevant. USAID and GIZ are heavily involved in providing technical support in the fields of planning, construction permitting, property taxation and municipal development and are therefore integral to ensuring that the valuation and mass appraisal methodologies developed under the project are consistent with the advice they are giving. A database of urban plans would be developed under the project and hosted by RGA. Both the Norwegian government and the EU (through IPA funding) are supporting RGA with improving technology and SIDA have a long standing relationship with RGA in supporting training and digital archiving. DCG meetings would be planned to coincide with visits by the World Bank team for Project supervision and support.
3. RGA would establish a PIU for the purpose of managing the project and providing specific technical oversight to project activities. The PIU would be headed by a Director and would include specialists responsible for procurement and financial management. A dedicated Monitoring and Evaluation specialist would be included to: ensure that all data is collected for reporting purposes; lead the preparation and management of the various studies that would be undertaken; to monitor the progress with providing access to vulnerable groups through the mobile services; and to participate in the ongoing program for gender equality in property rights. Technical support to manage training and to coordinate the activities associated with the supply of web services, software and hardware for the information technology aspects of the project. The PIU would provide brief quarterly reports for the Project Council, the World Bank and the DCG.

Financial Management, Disbursement and Procurement

Financial Management

Implementing Entity and Staffing

4. The RGA would be in charge of financial management of the project through a PIU, which would include a financial management officer, who should be appointed prior to effectiveness. The Bank's Standard Terms of Reference for financial management staff with detailed descriptions of duties would be used for the project and attached to the POM. The PIU is responsible for the project's financial management arrangements and in summary the FM tasks would include accounting, financial reporting, disbursement, ensure application of internal controls and work with the external auditors during the audit of financial statements. Since multiple entities will be involved in overall implementation of the project, effective communication channels and lines of responsibilities between the PIU within RGA and other involved entities (including Project Council and Donor Coordination Group) needs to be established and described in the POM.

Planning and Budgeting

5. There is sufficient capacity for planning and budgeting in order to manage project funds in an optimal manner from aspects of funds allocation, liquidity and overall performance. Variances of actual versus budgeted figures should be monitored on regular basis, appropriately analyzed and corrective actions taken.

Accounting System

6. Acceptable accounting software needs to be acquired and installed at the latest 90 days after the project has become effective and will be used for project accounting and reporting. Software should entail reliable and user-friendly features for cash based accounting. Preferably, it should generate quarterly financial reports automatically based on recorded accounting entries. Accounting records should include appropriate analytics of expenditures per contracts and each specific payment. POM will describe accounting processes and controls which will be followed during project implementation.

7. The project would follow cash based accounting (cash basis IPSAS), recording transactions when actual payment is done, rather than when they are incurred. Transactions should be accounted for within 8 days after incurring. There should be appropriate back up of accounting records on external drives, as well as appropriate security regulation with regard to access and editing rights of the financial information.

8. RGA has an operating accounting system which is assessed to be reliable, but it does not include features which would allow monitoring of the use of project funds separately from the rest of the RGA's financing.

Internal controls

9. Procedures and controls to be applied on the project should be described in the POM. The Manual should be prepared and agreed with the Bank prior to effectiveness.

10. Some of the key internal controls to be applied for the project include:

- appropriate authorizations and approvals of all purchases, relevant documentation, transactions of payments etc.;
- segregation of duties as different persons are responsible for different phases of a transaction;
- reconciliations between project accounting records and other relevant sources of information (Client Connection, bank account statements etc.) should be performed at least monthly by the Finance Management Officer; and
- original documentation exists to support all project transactions.

Contract Management

11. The entity has adequate contract management capacity. Contracts implementation would be monitored in the software, the total contract amount and payments would be checked and controlled before each payment under a contract. The respective technical staff and the financial department would review and approve invoices and accompanying documentation against contracts provisions for ceilings, dynamics of payments and quality of deliverables.

Financial Reporting

12. Interim un-audited financial reports (IFRs), which include financial information relating to the whole project, will be prepared for each quarter and will be due 45 days after the end of each quarter. The IFRs will be prepared in line with cash basis IPSAS. The format of the IFRs has been agreed between the Bank and the Client and attached to the Minutes of negotiation and POM. Reporting currency will be EUR. The IFRs are intended to comprise the following reports:

- i. Cash Receipts and Payments, including comparison of budgeted versus actual amounts;
- ii. Uses of Funds by Activity;
- iii. Designated Accounts statement;
- iv. Accounting policies and explanatory notes.

External audit

13. Annual audit of the project financial statements will be conducted by a private audit firm acceptable to the Bank. The audit report will be submitted to the Bank not later than six months after the end of the audited period. Audit of project financial statements will be funded by the project. The audited project financial statements of the project will be posted by the client on the RGA or Government website, within 2 weeks upon the audit report is issued by the auditor and accepted by the World Bank. Audit terms of Reference will be agreed and attached to Minutes of negotiation and POM.

Action plan

14. The following represent financial management related conditions.

Action	Deadline	Responsible
Project Operations Manual, including procedures for financial management, accounting and internal controls for the project needs to be prepared and agreed with the Bank	Effectiveness	RGA
Person in charge of financial management responsibilities for the project needs to be appointed	Effectiveness	RGA

The following requirement represents a dated covenant:

Action	Deadline	Responsible
Acceptable accounting software for project accounting and financial reporting needs to be acquired and installed	90 days from the date of effectiveness	RGA

Financial management covenants

15. The financial management covenants for the project will be as follows:
- i. Maintaining adequate financial management system within the RGA.
 - ii. RGA will prepare interim un-audited financial reports (IFRs) for each calendar quarter and deliver to the Bank not later than 45 days after the end of the reporting quarter.
 - iii. Annual project financial statements will be audited by a private audit firm acceptable to the Bank and such audit will be delivered to the Bank not later than six months after the end of the audited period.

Funds Flow and Disbursement Arrangements

16. Project funds will flow from: the Bank - either as an advance, via a Designated Account to be opened in the NBS, which will be replenished under transaction based disbursement method, and managed as described below in the section on disbursement arrangements, or by direct payment on the basis of direct payment withdrawal applications. Additional methods of disbursement, as described in the disbursement letter, will include *reimbursement* and *special commitment*.

17. The RGA will be administering the Designated Account. It will be a EUR account. The RGA, through the PIU, will prepare withdrawal applications for replenishment of the Designated Account which ought to be signed by the RGA Director. Payments from the Designated Account are executed by the means of payment orders. After all the procedures with respect to flow of documents, verifications and authorizations described in internal controls section are applied, payment order signed by the RGA is submitted to the NBS. In the case of Direct Payment the application form for such method payment is submitted to the Bank with the same authorized signatories as described above.

18. The Ceiling for this Designated Account is defined in the disbursement letter. Documentation requirements for replenishment would follow standard Bank procedures as described in Disbursement Handbook. Monthly bank statements of the Designated Account, which have been reconciled, would accompany all replenishment requests.

19. The Bank's task team will review withdrawal applications and supporting documentation to confirm that the expenditures related to goods, works, and non-consulting services have been reported net of taxes before the withdrawal application is processed in the Bank's system.

Procurement

General

20. Procurement for the project would be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants" dated January 2011 (revised July 2014); and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers" dated January 2011 (revised 2014); and the provisions stipulated in the Loan Agreement. The World Bank Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credit and Grants dated October 15, 2006 and revised on January 2011, would also apply.

Procurement arrangements and capacity assessment

21. The RGA, under the MCTI, would be the main implementing agency. This agency has already implemented the RECRP. A PIU would be established, which would report directly to the Director General of RGA. The PIU would be responsible for all procurement procedures under the project, supported from at least one full-time procurement officer for all procurement. The PIU Director and technical staff have some experience in World Bank procurement, but this is rather limited. A procurement officer experienced in WB procurement would be hired for the needs of the project, and would work in close coordination with the PIU team. The PIU would be supported also by a procurement assistant, as needed. In addition, technical staff from relevant departments within RGA which might be called on sitting in evaluation committee would be trained on their specific role and general principles of Bank procurement rules.

22. A detailed Project Operational Manual (POM) has been prepared based on previous versions used for RECRP and it was reviewed by the Bank. It would be further revised before the project starts. The manual includes procurement methods to be used in the project along with their step-by-step explanation as well as the standard and sample documents to be used for each method, and service standards, responsibilities and accountability of PIU staff and management for carrying out the activities. The procurement staff and all potential members of tender (or bid evaluation) committees would attend the project launch workshop that would be organized by the Bank staff following the signing of the loan agreement. Further, the Bank team would help the project coordinator identify suitable training courses for the PIU existing team.

23. **Risk Mitigation:** The following measures were agreed to mitigate the risks and maintain the implementing team's capacity.

Table 2: Summary Risk Assessment

Risk	Mitigation
<ul style="list-style-type: none"> Limited procurement capacity of the PIU and insufficient knowledge of Bank's procurement and consultant guidelines may delay selection/bidding process and contract management 	<ul style="list-style-type: none"> RGA will hire a PIU procurement expert with experience in World Bank financed projects/international procurement. Selection of the procurement expert is a condition of effectiveness.
<ul style="list-style-type: none"> Unsatisfactory quality of technical designs/ToRs may lead to delays in contract implementation and to contract amendments 	<ul style="list-style-type: none"> Preparation of draft technical specifications /terms of reference before project effectiveness, at least for the contracts for which the selection process is to take place in the first 12 months of the project implementation; Close involvement of Bank technical expert in the review of the TOR/ TS and designs; Bank prior review of critical packages/ assignments.
<ul style="list-style-type: none"> PIU might be initially overwhelmed with the number of the consultants and/or size of contracts to procure and implement 	<ul style="list-style-type: none"> Recruitment of key staff after loan signing so that ToRs, technical specifications and bidding documents can be prepared early on. Strengthening PIU's procurement, technical and contract administration capacity via workshops. The packages in the procurement plan will be sequenced and phased to allow sufficient time for bidding, evaluation and Bank review.
<ul style="list-style-type: none"> The public officials/technical staff, who will be involved in project procurement through tender committees, may not be familiar with the applicable procurement procedures, and may slow down the procurement process 	<ul style="list-style-type: none"> Technical staff from relevant departments within RGA will be previously trained on their specific role and general principles of Bank procurement rules; Operations Manual will set out the service standards, responsibilities and accountability of PIU staff, technical staff management for carrying out the activities. Furthermore, the Bank team will help the project coordinator identify suitable training courses for the PIU team; The order for appointment of evaluation committees shall specify the timeframe by which the evaluation committee should complete evaluation and recommendation of award;
<ul style="list-style-type: none"> Insufficient technical capacity within the supervision or other departments on RGA may cause contract supervision delays related to implementation and poor quality of goods, works and services. 	<ul style="list-style-type: none"> Adequate consulting services and technical assistance, training, knowledge exchange would be provided under the project Component D, as needed; Intensive and close supervision by Bank technical team and procurement accredited staff in particular;

Risk	Mitigation
<ul style="list-style-type: none"> Insufficient knowledge of the latest Procurement and Consultants Guidelines (January 2011) 	<ul style="list-style-type: none"> PIU staff, and especially the Procurement Expert would attend procurement training organized by the Bank The Bank's Procurement Specialist assigned to the project has provided the PIU with a full set of the relevant, most recent procurement documents, including but not limited to standard and sample bidding documents, proposal formats, evaluation report documents, etc.

The Procurement Plan

24. The Borrower, at appraisal, finalized the procurement plan for project implementation, prepared during preparation phase, which provides the basis for procurement methods. It includes the Bank review requirements and thresholds. The procurement plan would be reviewed and agreed between the Borrower and the Bank during negotiations. It would be available as a separate project document at the office of the PIU, and on the Bank's external website. The Procurement Plan would be updated in agreement with the Bank as required to reflect the actual project implementation needs.

Procurement of Goods, Works and Non-Consulting Services

25. The following methods may be used for procurement of goods, works and non-consulting services as agreed in the procurement plan: International Competitive Bidding (ICB), National Competitive Bidding (NCB), Shopping (S), and Direct Contracting (DC).

Procurement of Works

26. Works procured under this project would include construction and rehabilitation of buildings and putting up concrete markers on part of or all the territory of the country, for the leveling grid stabilization. Procurement will be done using the Bank's Standard Bidding Documents (SBD) for all ICB and NCB packages. Prequalification would not be used at all, regardless of the size of civil works contracts. Minor works, as relevant, could use Invitation to Quote (ITQ) for Works acceptable to the Bank for contracts less than or equal to EUR 85,000.

Procurement of Goods and Non-Consulting Services

27. Goods and non-consulting services to be procured would include IT systems, furniture, IT equipment (hardware and software), purchase of vehicles for motorized levelling, measurements for the REC, gravity meter equipment, measurement of altitude differences and grid stabilization, data acquisition and improvement. Procurement for all ICB procedures would be done using the Bank's SBDs. Smaller value contracts, as needed, would be procured using harmonized NCB documents for Goods or shopping using ITQ (June 2011), depending on the cost estimate for the package. The standard documents for supply and installation of information systems would be used for the procurement of the software development phases and roll out. Software maintenance for the control center will be procured through direct contracting considering the equipment already in use works with particular software (provided only by one supplier) and any new software would require changes of the whole equipment which is not feasible and costly.

Selection of Consultants

28. Consultant services will include preparation of quality assurance system and data manual, data verification and analysis and modeling, preparation of corporate and business planning, individual consultants for entering of backlog data, map conversion and utility map conversion, capacity building, awareness raising and knowledge transfer, updating the ICT strategy. Multiple individual consultants/technical staff will be hired under the project for the entry of data. A sample contract for hiring of these individuals will be cleared by the Bank and used during the project.

29. The following methods may be used for the selection of consultants: Quality and Cost-Based Selection (QCBS), Quality-Based Selection (QBS), Least-Cost Selection (LCS), Fixed Budget Selection (FBS), Selection based on Consultants Qualifications (CQS), Individual Consultant Selection (IC), and Single Source Selection (SSS). The World Bank's Standard Request for Proposals will be used. All Terms of Reference, irrespective of prior/post review status, are subject to Bank's review and no objection.

Training and Training Plan

30. The institutions providing standard training, conducting seminars and organization of study tours would be selected on the basis of analysis of the most suitable program of training offered by the institutions, availability of services, the period of training and the reasonableness of cost. However, consultants hired to deliver training under the Project would be selected in accordance to the selection methods as stipulated in the *Consultant Guidelines* applicable to the project. An annual training plan would be prepared and agreed with the Bank. It would include information on the title of training, institution that would provide it, and timeline, cost, number, position and names of relevant people to be trained. The training plan would be updated in agreement with the Bank through the duration of the Project at least annually or as required to reflect the actual project implementation needs.

Operating Costs

31. The activities to be financed by the project (as defined in the Loan Agreement) would be procured using the implementing agency's administrative procedures, which were reviewed and found acceptable to the Bank.

Post-review Percentages and Frequency.

32. Contracts not subject to Bank's prior review would be subject to post review by the Bank's procurement specialist assigned to the project. Post review of contracts will be carried out once per year. At a minimum, one out of five contracts will be randomly selected for post review. Physical inspection will be conducted for at least 10 percent of the contracts.

General Procurement Notice

33. The GPN for the Project will be published in the UN Development Business after loan negotiations.

Procurement Plan	Type-Category	Estimated Cost (EUR) EUR 1 = \$1.21555	Selection Method	Review by Bank Prior / Post
------------------	---------------	---	------------------	-----------------------------

A. Valuation, Property Taxation and Public Real Estate Land Management

I. Investment cost

International Valuation Consultant and assesment of the municipalities specialist	CS	123,400	IC	Prior
Entering of back log data and extraction of rental data for residential sample	CS	287,936	IC (multiple)	Prior
Preparation of quality assurance system and data manual	CS	8,228	IC	Post
Rental collection for sample of commercial properties	CS	49,360	IC	Post
Consultancy for data verification and analisys & modeling (1)	CS	65,814	IC	Post
Consultancy for data verification and analisys & modeling (1) - local staff	CS	24,680	IC	Post
Consultancy for data verification and analisys & modeling (2)	CS	65,814	IC	Post
Consultancy for data verification and analisys & modeling (2) - local staff	CS	24,680	IC	Post
Data collection for the building register	TS	3,948,830	ICB	Prior
Consultancy for system implementation in at least 5 municipalities	CS	1,645,345	QCBS	Prior
International Tax Collection Consultant	CS	123,400	IC	Prior
Training for Municipal Office Staff	TR	205,668	N/A	Prior
Total investment cost		6,573,155		
Total cost for Component A		6,573,155		

B. E-governance for enabling access to real estate information

B1. Integrated Real Estate Cadastre and Registration System Development

I. Investment cost

Upgrade of existing IT systems and small modifications (scanning of incoming documents, import of Software Prototyping or pilot	CS	43,600	IC	Prior
Software Prototyping or pilot	TS	164,535	CQS	Prior
Software Development Phase I and roll out (front and back office, alphanumeric and graphic and WEB services for external users, e-signature, digitalisation of incoming docs and integration with digital archive, disaster recovery), incl. licenses	TS	1,472,584	ICB	Prior
Software Development Phase II and roll out (Address Register, Register of Spatial Units, Mass Valuation module, Price Index Module, Fiscal Building Register module)	TS	534,737	ICB	Prior
Software Development Phase III - integration with key Government registers, e-commerce, additional e-services	TS	148,080	NCB	Prior
External quality assurance advisor would be hired to support the RGA project manager	CS	164,535	CQS	Prior
Hardware Supply - phase I (emergency)	G	164,535	NCB	Post
Hardware Supply, communication and other equipment and standard licenses (for Data Centers and local offices) -phase II	G	3,948,830	ICB	Prior
LAN/WAN improvements	W	57,587	SH	Post
Supervision of data center extension	CS	16,453	CQS	Post
Data Center extension	W	172,761	NCB	Prior
Active network equipment (firewall, CISCO)	G	361,976	ICB	Prior
Total investment cost		7,250,213		

B2. Support to the National Spatial Data Infrastructure. (NSDI)

I. Investment cost

National Geoportol Upgrade and Implementation - software developemnt	TS	205,668	ICB	Prior
National Business Model, Capacity Building, Awareness, Data Harmonisation with INSPIRE TS, study visits, conference	QCBS	699,272	QCBS	Prior
Total investment cost		904,940		

B3. Sustainability of the Information Technology department

I. Investment cost

Technical Assistance to develop and implement sustainable model for IT Sector operation, ICT	CS	123,400	IC	Prior
Total investment cost		123,400		

B4. Central Analogue and Digital Archives and Establishment of BDRC

I. Investment cost

Detailed Design for Archive building and Disaster Recovery Center + Technical control of the design	CS	41,134	CQS	Post
Supervision of works for Archive building and Disaster Recovery Center	CS	41,134	CQS	Post
Data entering/scanning specialists (scanning, indexing, quality control, verification)	CS	1,974,415	QCBS	Prior
Construction works for Archive building and Disaster Recovery Center	W	1,974,415	ICB	Prior
Archive shelves for the new building	G	765,086	NCB	Post
Office furniture for the new Archive building	G	41,134	SH	Post
Expert for preservation of archived data	CS	24,680	IC	Post
IT equipment (hardware and other equipment)	G	493,604	NCB	Prior
Software upgrade and further development	G	106,947	NCB	Post
Supply of licences	G	24,680	SH	Post
Operational costs (consumables, IT equipment repair services, etc)	IOC	164,535	IOC	
Total investment cost		5,651,764		

B5. Improving digital data quality**I. Investment cost**

<i>Pilot Implementation in 3 Local Offices and Quality Assurance</i>	CS	123,400	IC	Prior
<i>Data Quality improvement in all local offices</i>	CS	1,234,010	IC (multiple)	Prior
<i>International and local advisors</i>	CS	41,134	IC	Post

Total investment cost**1,398,544****B6. Software development for the register of the unified procedures for construction permits****I. Investment cost**

<i>Local consultants (preparation of technical specifications for software development)</i>	CS	41,134	IC	Post
<i>Local ICT consultant (4) supporting the system in the Business registry (APR)</i>	CS	148,081	IC (multiple)	Prior
<i>QA & QC (consultant)</i>	CS	41,134	IC	Prior
<i>Software upgrade and training</i>	TS	345,523	NCB	Post
<i>Supporting hardware (specified in a technical specification for software development)</i>	G	493,604	ICB	Prior

Total Investment Cost**1,069,476****Total cost for Component B****16,398,337****C. Institutional Development of the Republic Geodetic Authority****C1. Corporate and Business Planning****I. Investment cost**

<i>Preparation of Corporate and Business Planning</i>	CS	164,535	QCBS	Prior
---	----	---------	------	-------

Total investment cost**164,535****C2. National Reference Infrastructure****I. Investment cost**

<i>Procurement of 16 receivers for replacement of the outdated equipment for local cadastre offices</i>	G	431,903	ICB	Prior
<i>Procurement of Time Station for the Control Center</i>	G	3,291	SH	Post
<i>Software maintenance for the control center</i>	G	189,215	DC	Prior
<i>IT equipment for the Control Center</i>	G	12,340	SH	Post
<i>Leveling grid stabilization for all Serbia territory</i>	W	608,778	NCB	Prior
<i>Company to measure altitude differences (South part of Serbia)</i>	TS	411,366	NCB	Prior
<i>Procurement of vehicles for motorized leveling</i>	G	180,988	NCB	Post
<i>Digital levels and invar barcode staves for motorized leveling</i>	G	24,680	SH	Post
<i>Equipment for leveling (tablet pc, laser distance meter, etc...)</i>	G	16,453	SH	Post
<i>Gravity meter equipment</i>	G	106,947	NCB	Post
<i>Local technical staff for gravity measurements</i>	CS	37,020	IC	Post
<i>Consultant for gravity data processing quality control (QC)</i>	CS	14,808	IC	Post
<i>Consultant for leveling quality control (QC)</i>	CS	20,567	IC	Post
<i>Operating cost (for measure altitude differences and leveling grid stabilization)</i>	IOC	82,267	IOC	

Total investment cost**2,140,623****C3. Completion of the digital mapping program****I. Investment cost**

<i>Local technical staff for cadastre map conversion*</i>	CS/TS	2,632,553	IC/NCB	Prior
<i>Local technical staff for utility map conversion</i>	CS	1,069,475	IC (multiple)	Prior

Total investment cost**3,702,028****C4. Improving services and removal of backlogs****I. Investment cost**

<i>Local technical staff for handling REC cases (back logs)</i>	CS	1,069,475	IC (multiple)	Prior
<i>Construction works and reconstruction for 2 offices (Sopot and Ruma)</i>	W	139,854	NCB	Post

Total investment cost**1,209,329****C5. Real Estate Cadastre (REC) Improvement****I. Investment cost**

<i>Data acquisition</i>	TS	3,292,000	ICB	Prior
<i>Operating costs for data collection</i>	IOC	83,000	IOC	

Total investment cost**3,375,000****Total cost for Component C****10,591,515**

D. Project Management and supporting activities

D1. Project Implementation Unit

I. Investment cost

A. PIU Director	CS	129,550	SSS	Prior
B. PIU Assistant director (With IT background)	CS	115,257	IC	Prior
C. Training specialist (Part time)	CS	53,556	IC	Prior
D. M&E specialist (Part time)	CS	53,597	IC	Prior
E. Procurement specialist	CS	107,030	IC	Prior
F. Procurement assistant	CS	99,543	IC	Prior
G. FM Specialist	CS	107,030	IC	Prior
H. FM Assistant	CS	99,543	IC	Prior
I. Valuation specialist	CS	107,030	IC	Prior
J. Office manager/Interpreter/Communications	CS	99,543	IC	Prior
K. Environmental Safeguard specialist/Civil Engineer (Part time during design and construction works)	CS	53,597	IC	Prior
E. Incremental operating costs		389,715	OC	
Total investment cost		1,414,991		

D2. Monitoring and Evaluation

I. Investment cost

Customer & Social survey (year 1,3,5)	CS	123,400	CQS	Prior
Annual Financial Audit	CS	82,267	LCS	Prior
Total investment cost		205,667		

D3. Public Awareness

I. Investment cost

Public Awareness Campaign	CS	165,000	CQS	Prior
Total investment cost		165,000		

D4. Training

I. Investment cost

Training	TR	637,435	N/A	Prior
Total investment cost		637,435		

D5. Policies and legal development

I. Investment cost

Legal drafting & Studies	CS	123,400	CQ	Post
Total investment cost		123,400		

Total cost for Component D

2,546,493

Grand Total

36,109,500

Preparation fee (0.25%)

90,500

Total cost

36,200,000

PROCUREMENT METHOD THRESHOLDS	PRIOR REVIEW THRESHOLDS
ICB: \geq EUR 900,000 (Goods); \geq EUR 4.5M (Works)	All
NCB: $<$ EUR 900,000 (Goods); $<$ EUR 4.5M (Works)	First contract for Goods; First contract for Works, if any
Shopping (SH): $<$ EUR 90,000	First contract for Goods; First contract for Works, if any
QCBS: \geq EUR 265,000	\geq EUR 450,000
CQS: $<$ EUR 265,000	First contract
Single Source Selection – none, in accordance with paras. 3.8-3.11 of the Consultant Guidelines	All contracts
Direct Contracting – none, in accordance with paras. 3.7 & 3.8 of the Procurement Guidelines	All contracts

All TORs are subject to prior review irrespective of prior/post review status.

Environmental and Social (including safeguards)

34. Operational Policy 4.12 on Involuntary Resettlement will not be triggered since land acquisition that would lead to involuntary resettlement, relocation or loss of shelter, and other negative impact to people's livelihood would not be allowed. The planned site for the construction of digital archive belongs to the government's property. It is vacant and the use right has already been transferred to RGA. The construction of a temporary building in Sopot is on vacant land assigned by government to RGA and other properties that are to be renovated are already in government possession.

35. A set of concrete actions has been incorporated in the project to achieve the improved land administration services by promoting Citizens Engagement. These actions were first developed jointly by RGA, the Ministry of Labor, Employment and Social Policy, and the Ministry of Construction, Transport and Infrastructure¹⁴ in order to improve the accessibility of services to vulnerable groups. These groups would include people with disabilities, women in rural areas, the elderly, Roma and those who are in need of services but are unable to visit an office or less aware of the benefit of land administration services. The barriers that prevent the vulnerable groups from gaining access to RGA services can include social constraints; gender relations in households; lack of access to transportation; lack of knowledge and awareness on land related issues; aging and physical disabilities. The project will address the vulnerabilities through: 1) mobile registration services; 2) renovation of selected local registration offices; 3) communications; and 5) capacity building for local registration staff. These activities would be monitored and evaluated through customer surveys and specific indicators defined in the results framework.

36. The project would set up five mobile service teams in major registration offices. The mobile service teams would each cover a region and reach out to people who need special assistance in land administration services. Identification of beneficiaries would be carried out in coordination with the municipalities, civil society and community members. The activities would not be limited to facilitating registration, but also promoting community participation in the project through active public awareness campaigns. The mobile service would disseminate publicity materials directly to beneficiaries, explaining the benefits of and need for improved valuation standards, how to access to more information, how to register properties, etc.

37. Training would be designed in order to build capacity of RGA's staff in serving customers with respect, regardless of their ethnicity, age, sex or physical disabilities, and to ensure the use of appropriate language and non-discriminatory behavior. Trainers could be involved from Roma communities or those with disabilities to sensitize staff with a viewpoint of customers from vulnerable groups. Furthermore, training on the creation and use of gender disaggregated data would be conducted to empower women to access, to own and inherit properties. The data expected to be produced would include the percentage of women owners in land records and percentage of women who sell or buy properties and mortgage them. Once data has been produced, it would be used to support public awareness campaigns, community outreach through mobile services, and in training.

38. Transparency in valuation is important for people to understand the values attributed to their real estate, particularly how their property tax and compensation in case of expropriation are

¹⁴ At the time these actions were formulated it was the Ministry of Natural Resources, Mining and Spatial Development

calculated. Improved valuation would enable the public to pay property tax in accordance with the value of property, and be fairly compensated based on their property's value. In order to deliver such transparency, the establishment of mechanisms that permit owners to inquire, request and appeal against valuation is planned. The daily inquiries would be dealt by making RGA's webpage available to improve people's access to information. Local registration offices would also be able to respond to inquiries. In case of further disputes, information on where to address the issue should be advised by local registration offices. The availability of information should be notified to people whenever their properties are valued.

Monitoring & Evaluation

39. Data on the time taken to register transactions and provide extracts from the registers, disaggregated by gender, would be collected on a monthly basis from local offices by the M&E advisor. This data is already available and would be collected on a monthly basis. The new information system would include the automatic generation of the necessary reports as part of the system design. Customer and social surveys would be conducted in the first, third and final year of the project in order to assess progress with the other PDO indicators. All other data required for the measurement of intermediate targets would be provided by the departments of RGA as they are responsible for all project activities. The data is to be collected, tabulated and analyzed by the M&E specialist within the PIU.

40. M&E reports would be provided on a quarterly basis to the Project Council, World Bank and DCG. Feedback provided by these groups would be taken into account by the M&E specialist for the subsequent reports.

Role of Partners

41. Other donors will be working in parallel to the project with close coordination established through the DCG (see above). Financing for the different projects will run in parallel and are not integrated. The important inputs, primarily through technical assistance of the other donors, for Project activities are already funded and underway.

Annex 4: Operational Risk Assessment Framework (ORAF)

Republic of Serbia: Real Estate Management Project (P147050)

Risks

Project Stakeholder Risks						
Stakeholder Risk	Rating	Substantial				
<p>Risk Description:</p> <p>Successful implementation of the project requires close coordination and cooperation of a number of stakeholders, such as the Ministry of Construction, Transport and Infrastructure (MCTI), Ministry of Public Administration and Local Self Government (MPALSG), Ministry of Economy (MoE), Republic Geodetic Authority (RGA), Ministry of Finance (MoF), Tax Administration, Serbian Business Registers Agency (SBRA), State Property Directorate, Ministry of Justice (MoJ), Statistical Office of the Republic of Serbia (SORS), Directorate for e-Government, and Local Government Units (LGU).</p> <p>Leadership Change. Changes in leadership in the MCTI, RGA and MoF could adversely affect the Project if the new leadership does not support the reforms proposed under the Project.</p> <p>Some property valuers in the country might oppose the introduction of new valuation standards and new requirements for licensing.</p>	Risk Management:					
	<p>There will be a stakeholder coordination mechanism established under the project in form of a Project Council. It will be a high-level, inter-ministerial committee comprising MCTI, MPALSG, MoF, MoJ, MoE, RGA, Tax Administration with a mandate to ensure successful project implementation. The Project Council will meet regularly on a semiannual basis, but also extraordinary meetings will be held at occasions when critical issues impeding smooth project implementation occur.</p>					
	Resp: Client	Status: In Progress	Stage Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency: CON TIN UO US
	Risk Management:					
<p>Key technical officials will be involved in the Project through the Project Council increasing the likelihood that technical support for the proposed Project is continued in the event of leadership change. Technical roundtables and presentations to the public on key reforms supported by the Project will also contribute to wider awareness and increase likelihood of continuity in event of leadership changes.</p>						
Resp: Client	Status: In Progress	Stage Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency: CON TIN UO US	
Risk Management:						
<p>Representatives of the valuers in Serbia and their professional associations will be involved in the discussion on the legislative and institutional reforms needed for introduction and implementation of new national standards harmonized with the international/EU standards. An awareness raising program will be designed to address</p>						

	valuers' concerns during the process of harmonization with the new standards. There are valuers in Serbia who have been trained and who already implement international standards and they will lead the reform.					
	Resp: Client	Status: In Progress	Stage Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency: CONTINUOUS
Implementing Agency (IA) Risks (including Fiduciary Risks)						
Capacity	Rating	Substantial				
<p>Risk Description:</p> <p>The implementing agency – Republic Geodetic Authority - has already proved that it has the capacity to implement large World Bank funded land administration projects. It will be responsible for implementing most of the project activities. However, there are activities that require the MCTI, MoE, MoJ, MoF, SORS, and LGUs working closely with the RGA on the implementation. There is a risk that these key projects partners lack the capacity to implement some of the project activities (such as those related to property valuation as they would include the introduction of a new valuation concept).</p> <p>A number of excellent results in improving land administration system in Serbia achieved with the support of the World Bank funded Project have not been maintained. This shows that the reforms conducted under the earlier project have not been well integrated into RGA.</p>	Risk Management:					
	To ensure adequate capacity the Project would support specialized technical assistance to build the capacity of the MCTI, MoJ, MoE, MoF, SORS, and LGUs. Project Implementation Unit (PIU) will be established to support the implementing agency in conducting fiduciary activities and coordinate activities with other stakeholder agencies.					
	Resp: Client	Status: Not Yet Due	Stage Implementation	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency: CONTINUOUS
	Risk Management:					
During preparation and negotiations, seek agreement with RGA to establish necessary technical units, procedures and regulations to implement reforms. Support establishment and strengthening of these units and capacity during Project implementation (e.g., mass valuation system development, ICT systems development).						
	Resp: Both	Status: In Progress	Stage Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency: CONTINUOUS
Governance	Rating	Moderate				
Risk Description:	Risk Management:					
	This risk will be mitigated by an assessment of the capacity and by providing sufficient technical assistance in order to identify constraints and to build capacity.					

<p>Lack of implementation capacity in other stakeholder agencies involved in the Project might create initial delay in disbursement.</p> <p>The impact IT reforms in RGA will depend on implementation of the e-government agenda. The fiscal constraints limit the speed of these reforms. There is a risk the IT reforms RGA conducts under the project fail to be fully utilized by other government agencies (both central and local government agencies).</p>	Resp: Bank	Status: In Progress	Stage Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency: CONTINUOUS
	<p>Risk Management:</p> <p>The design and implementation of IT development in RGA will proceed in parallel with analysis and dialog with the MoF, MoJ, MCTI, SBRA, LGUs and other key stakeholders on the use of such new system, designing the system to best match the needs, existing capacity and plans for their own systems development.</p>					
	Resp: Client	Status: In Progress	Stage Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency: CONTINUOUS
	<p>Risk Management:</p> <p>The Project Implementation Unit will be staffed with the procurement specialist and the project supervision team will closely monitor procurement activities with the support of procurement specialist.</p>					
Resp: Both	Status: Not Yet Due	Stage Implementation	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency: CONTINUOUS	
Project Risks						
Design	Rating	Substantial				
<p>Risk Description:</p> <p>The IT department of RGA may not have the capacity to manage complex IT system development and implementation. Business Registry who will be hosting and maintaining the central e-permitting system has experience with developing IT systems, but it has limited number of IT experts.</p> <p>The execution of several project activities will rely on untested implementation arrangements such as the cooperation between RGA and the</p>	<p>Risk Management:</p> <p>Technical assistance will be provided under the project to support the IT capacity building in RGA and SBRA for development of IT system. During implementation the RGA's IT strategy will be updated and HR strategy will be developed as part of the strategic business plan for RGA to ensure sustainability of the systems being put in place with the project support.</p>					
	Resp: Client	Status: Not Yet Due	Stage Implementation	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency: CONTINUOUS
<p>Risk Management:</p> <p>During preparation and negotiations negotiate with MCTI, RGA and other stakeholder agencies an establishment of working groups to support joint activities.</p>						

LGUs, RGA and the Tax Administration, RGA and the MCTI, RGA and the Notaries, MCTI and SBRA, MCTI and LGUs. There is a risk that these implementation arrangements fail in a number of occasions.	Resp: Bank	Status: In Progress	Stage Preparation	Recurrent:	Due Date: 31-Mar-2015	Frequency:
Social and Environmental	Rating	Low				
<p>Risk Description:</p> <p>The project will support minor construction rehabilitation/renovations of local RGA offices. The project will finance construction of new RGA Digital Archive Depot in Zemun.</p> <p>The project will have a broad social impact that will need to be carefully monitored to indicate corrective measures that might need to be put in place in order for the project to achieve the envisioned results.</p>	Risk Management:					
	The project related civil works activities will be managed by application of good engineering practice. Site specific EMPs and Environmental Checklists, which will be implemented as a part of the civil works-related contracts, will ensure mitigation of possible negative environmental impacts, which relate to construction dust, noise, vibration, waste management and general health and safety issues.					
	Resp: Client	Status: Not Yet Due	Stage: Implementation	Recurrent: <input checked="" type="checkbox"/>	Due Date	Frequency: CONTINUOUS
	Risk Management:					
There will be a regular customer and social surveys conducted. Public awareness activities will be designed and implemented to provide detailed guidance on developing more inclusive and more efficient services. Special set of activities will be designed and implemented to target vulnerable groups.						
Resp: Client	Status: Not Yet Due	Stage Implementation	Recurrent: <input checked="" type="checkbox"/>	Due Date	Frequency: Yearly	
Program and Donor	Rating	Low				
<p>Risk Description:</p> <p>Numerous donor funded activities implemented in partnership with RGA bring a risk of failure to coordinate, identify best utilize complementarities and avoid duplication of activities.</p>	Risk Management:					
	Coordination mechanism will be put in place by the creation of a donor coordination group. The meetings of the donor group would be chaired by RGA with meetings held quarterly.					
Resp: Both	Status: In Progress	Stage Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency: CONTINUOUS	
Delivery Monitoring and Sustainability	Rating	Substantial				

<p>Risk Description:</p> <p>There is a need to re-introduce M&E system in RGA to efficiently monitor and evaluate project results.</p> <p>This Project will support the implementation of a substantial and complex reform in more than one area (valuation, registration processes, e-Gov) results of which may take longer than anticipated to materialize.</p> <p>There remain concerns over the sustainability of the RGA as an organization. Current business model of RGA does not support its reform to client oriented, self-financing, executive agency and puts the sustainability of Project investments in equipment and human resources at risk. Current government funding does not cater for the RGA offices upkeep and equipment upgrading. As a major focus of the project relates to e-governance, it is essential that the new systems prove to be sustainable</p>	<p>Risk Management:</p> <p>This risk will be mitigated by technical assistance to RGA to upgrade their information systems for data collection and improve RGA's M&E capacity.</p>								
	Resp: Client	Status: In Progress	Stage Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency: CON	TIN	UO	US
	<p>Risk Management:</p> <p>An implementation plan, timeline and M&E system will be designed to ensure that the reforms are implemented in a timely manner.</p>								
	Resp: Client	Status: In Progress	Stage Both	Recurrent:	Due Date: 31-Dec-2015	Frequency:			
	<p>Risk Management:</p> <p>During preparation and negotiations seek agreement with RGA, MCTI and MoF to consider alternative financing models. During implementation support RGA in preparing a strategic business plan to develop a sustainable business model. Build a capacity in the financial management unit for corporate business planning.</p>								
Resp: Both	Status: In Progress	Stage Both	Recurrent: <input checked="" type="checkbox"/>	Due Date:	Frequency: CON	TIN	UO	US	
<p>Overall Risk</p>									
<p>Overall Implementation Risk Rating: Substantial</p>									
<p>Risk Description:</p> <p>There are no major policy reforms that are required for achieving the envisioned results. The key implementing agency is experienced with implementation of Bank projects. However, land projects are complex and difficult to implement. Furthermore, the project involves significant information technology needs, which is one area where the implementing agency failed to deliver under the previous project. Given these concerns, and the fact that stakeholder and design risks are substantial, the implementation risk assessed is 'substantial'.</p>									

Annex 5: Implementation Support Plan

Strategy and Approach for Implementation Support

1. **Implementation Strategy:** The strategy for the Implementation Support Plan would include regular dialogue with the Project Council, the Steering Committee, and the DCG as well as regular reviews of Project implementation and regular oversight of the Project fiduciary activities. Regular dialogue would facilitate early identification of problems and obstacles, which could delay implementation and would enable timely provision of technical advice and support to remove such obstacles. Implementation support visits would take place at least twice a year, aimed at reviewing the progress and achievement of agreed results, and one senior team member will be based in Belgrade to provide regular advice and support. During each of the reviews, the type of implementation support that is needed would be identified, followed by joint decisions on specific actions needed to successfully implement the project.

Fiduciary Requirements

2. **Financial Management.** During project implementation, the Bank will supervise the project's financial management arrangements in two main ways: (i) review the project's interim un-audited financial reports for each calendar quarter, as well as the project's annual audited financial statements and auditor's management letter; and (ii) perform on-site supervisions, review the project's financial management and disbursement arrangements to ensure compliance with the Bank's minimum requirements. The on-site supervision will include monitoring of agreed actions, review of FM arrangements and transactions review. Supervision will be performed by the Bank's accredited Financial Management Specialist.

3. **Procurement supervision.** Prior review supervision would be carried out by the Bank, in accordance with the procurement thresholds. In addition, in compliance with the results of the capacity assessment of the Implementing Agency, there will be one supervision mission every year to carry out post review of procurement actions. These missions would include informal training.

4. The PIU would maintain complete procurement files, which would be reviewed by Bank supervision missions. All procurement related documentation that requires Bank prior review would be cleared by Procurement Accredited Staff (PAS) and relevant technical staff. There are no packages under the project anticipated in a value above the mandatory review thresholds by RPM. Procurement information would be recorded by the Procurement Specialist at the PIU and submitted to the RGA and the Bank as part of the quarterly IFR and annual progress reports.

Other Risks

5. The Project's stakeholder risk has been identified as 'substantial.' This is because (a) the Project relies heavily on the cooperation of several ministries and agencies (including MCTI, MPALSG, MoF, RGA), (b) leadership changes can be frequent, and (c) some valuers may oppose the new valuation standards and licensing requirements proposed under the Project. The implementation support plan for these risks will include (a) the creation of a Project Council which will facilitate stakeholder coordination, (b) appointment of key technical experts to the Project Council to mitigate delays in case of leadership changes; and (c) awareness raising programs for valuers and the creation of an inclusive decision making process for the change.

6. The project’s capacity risk has also been identified as ‘substantial’ because of the risk that key project stakeholders lack the capacity to implement some of the more technical project activities related to property valuation. Implementation support will include technical assistance to build the necessary capacity in key stakeholder ministries and agencies as well as the establishment of necessary technical units, procedures, and regulations to carry out the reforms.

7. The project’s design risk is also rated ‘substantial’ because RGA’s IT department may not have sufficient capacity to manage the development and implementation of complex IT systems. Once again, the Bank will provide technical assistance and will help RGA develop an IT strategy and an HR strategy that focuses on the acquisition and retention of in-house IT experts.

8. The project’s delivery monitoring and sustainability risk is also rated ‘substantial.’ A new M&E system will need to be put in place to keep track of project activities and indicators. There are concerns about the overall sustainability of RGA and Component C will be dedicated to strengthening RGA’s institutional capacity.

9. This project will be closely monitored by the Land Administration Specialist based in Belgrade, with special attention to all aforementioned risks, during the first year of the project.

Implementation Support Plan:

1. Table 1: Implementation Timeline and Support

Time	Focus	Skills Needed	Partner Role
Bi-yearly	<u>Technical Review:</u> All components <u>Fiduciary Oversight:</u> Financial Management Procurement <u>Safeguards Oversight:</u> Environmental performance and socially responsible performance	Team Leader and locally based Land Administration Specialist plus specialists in Valuation and Property Taxation, Geodesy and Cadastral Survey, Land Law and Registration, Information Technology and Social Science. Financial Management Specialist/ Procurement Specialist Environmental Safeguards Specialist	Coordination with the DCG.
Regular remote support by TTL and technical specialist, and local support by field-based staff	<u>Technical Review:</u> All components <u>Fiduciary Oversight:</u> Financial Management Procurement <u>Safeguards Oversight:</u> Environmental performance and	The project is technically very challenging and all technical specialists will provide support remotely as needed. Financial Management Specialist/ Procurement Specialist Environmental Safeguards Specialist. Social scientist will be a regular team	N/A

Time	Focus	Skills Needed	Partner Role
	socially responsible performance	member for supervision and review of reports.	

Table 2: Skills Mix Required

Skills Needed	Number of Staff Weeks per FY	Number of Trips per FY	Comments
Task Team Leader	6	2	TTL based in Washington DC
Country Office based Land Administration Specialist	12	0	Providing regular in country support and most day-to-day interaction with the counterparts.
Land law and registration	4	2	Trips to be combined with other Project support
Information Technology	4	2	Specialist provided by FAO, travelling from Rome.
Geodesy and Cadastre	4	2	Specialist local within Europe.
Valuation and Property Taxation	4	2	Specialist provided by FAO, travelling from London.
Urban/ Planning Specialist	3	1	Trips to be combined with other Project support
Social Scientist	4	2	Staff based in Vienna HQ.
Economist	8	2	Staff based in Washington DC
Environmental Safeguards Specialist	2	0	Staff based in the field
Procurement Specialist	3	2	Staff based in Washington
Financial Management Specialist	3	0	Staff based in the field

Annex 6: Social Assessment

Introduction

1. The key social issues relevant to the REMP are anticipated to be: the affordability of property tax for the poor, particularly the disaster affected population after May 2014 floods; the need for transparency in valuation; and inclusion of vulnerable groups in land administration services. This annex explains how the project activities include mechanisms to address vulnerabilities, and how it would monitor and evaluate potential impacts on vulnerable groups.

Social Impact on the General Public

2. An improved real property valuation system would serve as a basis for more equitable, fairer property taxation system. In the long run, the revenue increase to local government would strengthen their capacity for better quality of public services. While the project merely intends to test an appropriate valuation methodology and supply information on properties, and assessing the secondary impact is beyond the scope of the project, potential issues need to be addressed particularly for vulnerable groups.

3. Due to the floods in May 2014, the project is also taking into consideration the needs of temporarily vulnerable group. The floods affected 1.6 million people in 24 municipalities¹⁵ across the central and western regions in Serbia, causing disruption in energy distribution, water supply, agriculture, and transport infrastructure. Due to these severe disruptions in the lives of affected people, the project will avoid piloting a mass appraisal program until the situation in these affected areas has settled. This will avoid any unintended negative impacts on these populations.

4. Strengthened e-governance to enhance access to real estate information would improve services for customers. The 2011 customer satisfaction survey (prepared under the RECRP) revealed that 36 percent of users of the REC and 34 percent of users of the Land Registry believe that more efficient procedures for processing applications are needed. Successful implementation of the project's e-governance initiatives would achieve this outcome by minimizing waiting time in queues and time spent at registration offices, as well as to provide access to documents through web services. E-governance would also deliver wider reach of information to customers, and better communication with rural and remote communities, and those who cannot easily visit registration offices. And responses to inquiries by on-line services would enable the customer service desk to provide faster service delivery. Further, efficient services and on-line service would reduce the incentive for customers to make informal payments in exchange of service delivery.

Vulnerabilities of People with Disabilities, the Elderly, Women in Rural Areas and Roma

5. Inclusive land administration is of primary importance for the vulnerable groups to obtain equal levels of convenience and access to services. Vulnerable groups make up a sizeable proportion of the population and therefore customers of RGA. For instance, more than 570,000 people in Serbia have disabilities¹⁶ and represent of eight percent of the population. The majority

¹⁵ The floods in May had a major impact on 24 municipalities, but there were 49 municipalities in total affected by floods.

¹⁶ 2011 Census of Population, Households and Dwellings in the Republic of Serbia, Statistical Office of Republic of Serbia, page 26.

of them have a difficulty in physical movement, sight or hearing impairments. Nonetheless, data acquired from RGA shows that out of 146 local registration offices, 91 offices are not equipped with physical access for those who need special assistance. The issues encountered by people with disabilities often also apply to elderly customers, particularly as the majority of the population with disabilities is above 60 years old.¹⁷

6. Increasing women's access to property rights is crucial to end extreme poverty and promote shared prosperity for the bottom 40 percent. A large volume of research shows that beneficial social impacts on households can be created when women have ownership over properties. Improved access to credit, amplified voice in household decision-making, and reduced domestic violence are some of the major impacts reported from other regions. Although Serbia adopted the Law on Gender Equality in 2009, which seeks to ensure equal status of women and men, there is a gap between the law and actual situations.¹⁸ The characteristics of women's access to land ownership in Serbia show a significant discrepancy between regions. RGA data on the percentage of women with ownership in property reveals that in the municipalities of the northern Serbia, women have almost equal access to ownership, particularly characterized by 51 percent of property owners are women in Subotica. On the contrary, in the south, the situation drastically differs where customary law remains in strong contrast to the formal laws. For example, only 13 percent of women have property ownership in Presevo. While the data is preliminary and needs to be treated with caution, it implies that gender issues still prevail in access to property rights and the registration of those rights. To address the issue and promote equitable access to property rights, the ECA land team and WBI in June 2013 hosted a conference to build capacity, raise awareness, and help national stakeholders develop a reform proposal for improved land administration for women and vulnerable. Serbia's proposal was developed to deliver: 1) mobile registration services; 2) renovation of selected local registration offices; 3) communications; and 4) capacity building for local registration staff. These reforms have been incorporated into this project.

7. As in many other countries in the region, Roma have weak access to land and property rights. While the government of Serbia joined the declaration of the Decade of Roma Inclusion, 2005-2015, 38 percent of Roma do not have access to secure housing.¹⁹ The social assessment for the RECRP concluded that, while the position of national minorities with regards to property is not different from the majority, Roma communities are an exception. Although Roma are generally known for their mobility, their way of life is diverse depending on individuals, communities and rural-urban setting. The inclusive service delivery to Roma communities would take into account the regional context, living standards, legal status and the size of the population.

Mechanisms to Address Vulnerabilities

8. *Mobile services:* The planned mobile service would not limit the service to a single target group. The service is intended to serve all those who have needs but who are unable to visit the local registration office due to various reasons including: social constraints; gender relations in households; lack of access to transportation; and aging or disabilities. Although this service is not

¹⁷ 2011 Census of Population, Households and Dwellings in the Republic of Serbia, Statistical Office of Republic of Serbia, page 21.

¹⁸ Men and Women in the Republic of Serbia, page 89.
http://www.gendernet.rs/files/RR_u_broj_kama/WomenAndMen.pdf

¹⁹ UNDP/WB/EC Regional Roma Survey, 2011

intended to specify target groups, the direct beneficiaries envisaged are people with disabilities, elderly, Roma, women in rural areas, other ethnic minorities and the general public. It would also be highly effective in providing services to those who are not aware of the importance and procedures of land administration services. With a view to making the service more inclusive for vulnerable groups, it is estimated that five mobile teams need to be operational in major registration offices, but the final number of mobile teams and their location will be agreed with Bank during implementation. Among those, the leading team would be based in Nis and would cover southern Serbia. The mobile team would coordinate with civil society and community leaders to gain support in reaching those who require services. The service would also be highly effective in raising awareness during public awareness campaign. The team would disseminate information materials directly to beneficiaries, explain the benefits and need of improved valuation standards, how to access more information, and how to register properties and transactions. Through the use of local networks, the mobile service could also be useful in supporting data quality improvement standardization in Component C. The team would inform owners and collect any missing data.

9. *Capacity building:* Training would be developed for staff members of local registration offices who are engaged in customer services, including mobile service teams. Particular attention would be paid to sensitizing them, with a view to service women and customers who come from vulnerable groups. Training would be designed in order to build capacity of staff in serving customers with respect, regardless of their ethnicity, age, sex or disabilities, and it would ensure the use of appropriate language and the use of non-discriminatory manners. Trainers from Roma communities or from groups representing people with disabilities should be involved to sensitize staff with a viewpoint of customers from vulnerable groups.

10. Training on the creation and use of gender-disaggregated data would be conducted to empower women to access, own and inherit properties. Data expected to be produced would include the percentage of women owners in land records and percentage of women who sell or buy properties and mortgage them. Once these data have been produced, they would be used to support public awareness campaigns, community outreach through mobile services, and training. The data would also serve as a catalyst for evidence-based innovation and investment in addressing vulnerabilities in land administration. Training on the collection of gender-disaggregated data is expected to result in increased awareness on gender and real property issues, providing guidance on regional and local policies and actions in the field of land and gender governance. Training on the creation and use of gender-disaggregated data would be conducted to empower women to access, own and inherit properties. The data includes the percentage of women owners in land records and percentage of women who sell or buy properties and mortgage them. The data would also be used to support public awareness campaigns, community outreach through mobile services, and in training. Additionally, statistics on the gender of those provided with training under the project would also be collected and presented on a gender disaggregated basis to ensure proper representation of men and women in training courses.

Citizens Engagement and Beneficiary Feedback Mechanism

11. *Grievance redress:* Transparency in valuation is important for people to understand the values attributed to their real estate, particularly how their property tax is calculated. Improved valuation would enable the public to pay property tax in accordance with the value of property, and be fairly compensated based on their property's value. At present, RGA and local registration offices do not have the means to make valuation information available to the general public. There

is an appeal mechanism against the property transfer tax, which is a central government tax collected by the Tax Administration, and annual property tax, which is a local government tax collected by local revenue offices. At the second instance a taxpayer can appeal to court. The project would support the valuation process to be more transparent by informing property owners of how the price was determined, where to inquire the valuation process, and how to appeal against the valuation.

12. *Customer satisfaction survey:* While social benefits are less tangible and non-monetary in nature, the abovementioned activities would be assessed in customer surveys. The customer surveys would obtain beneficiaries' perception on the quality of services and professional behavior of registration staff. The data collected would be disaggregated by gender.

13. *Communications:* The public awareness campaign would be designed in a way to support activities in the field. Mobile service delivery would be enhanced by a national level media campaign when they visit households in rural areas. Publicity materials produced during the public awareness campaign would be utilized as a tool to promote community participation in the project. It would address communication needs and identify strategic approaches to target audiences and stakeholders at local and national levels. The public awareness campaign strategy would set a vision, identify challenges, and specify means to overcome challenges. It would elaborate a plan of actions to achieve the campaign objectives and reach out to people in rural areas and minority communities.

Safeguards

14. Operational Policy 4.12 on Involuntary Resettlement is not be triggered since land acquisition that would lead to involuntary resettlement, relocation or loss of shelter, and other negative impact to people's livelihood would not be accrued. The planned site for the construction of digital archive belongs to the government's property, it is vacant and the use right has already been transferred to RGA. The construction of a temporary building in Sopot is on vacant land assigned by government to RGA and other properties that are to be renovated are already in government possession.

Annex 7: Economic and Financial Analysis

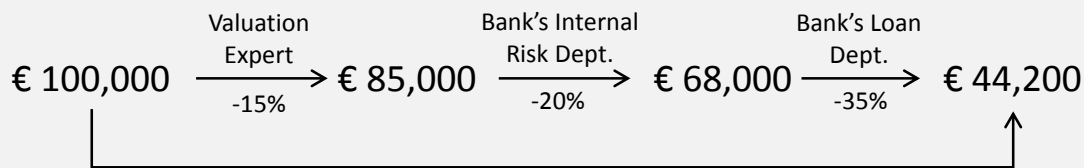
Introduction

1. The project has several important economic and financial benefits. First, property valuation and taxation activities will **enable fiscal consolidation, reduce the fiscal deficit**, and strengthen local governance. Second, e-governance for enabling access to real estate information will **improve the business climate, attract investors, and reduce transaction cost and time**. Third, the development of real estate markets will **boost small and medium enterprises** that use real estate as collateral. Fourth, the development of a National Spatial Data Infrastructure will **advance European integration** which, in turn, will bring Serbia several important economic benefits.
2. As is typical for land and real estate management projects, there are several areas within the public and private sector that will benefit from this project. However, it is not always easy to quantify all these benefits or fully attribute them to the project in question. For this reason, the Economic and Financial Analysis Annex will go over benefits from each component and quantify those where sufficient and reliable data is available.

Component A: Property Valuation and Taxation

3. *Purpose:* A major aim of Component A is to improve the quality and reliability of property valuations. Currently, there is no standard valuation methodology in Serbia. As a result, economic activities—mortgages, transactions, tax collection—that depend on property valuations are distorted. Collection rates vary widely between authorities and certain types of property, particularly commercial properties, are not valued for tax purposes on their market values.
4. *Economic Rationale:* Due to the absence of standard property valuations, commercial banks follow their own internal standards, applying several discounts to property values. Sometimes court valuation experts are contracted by banks and asked to follow the valuation standards of the European Group of Valuers' Associations (TEGoVA), Royal Institute of Chartered Surveyors (RICS), or International Valuation Standard Council (IVSC).²⁰ These experts then apply a 10-15 percent discount to the price of the property. Next, the bank's internal risk department applies an additional 20 percent discount to the price. Finally, the loan amount that is approved is roughly 65 percent of the value after the discounts have been applied. These discounts mean that on a property with a fair market value of EUR 100,000, for example, the borrower would get a loan of only EUR 44,200 or less than 45 percent of the property value. This is illustrated below.

²⁰ This applies to those court valuers who work as consultants for foreign, particularly European, banks. Typically, court valuers do not receive any such training meaning the typical valuations are not conducted with a standardized valuation methodology.



Loan value is less than 45% of the property value

5. As a result, the lack of reliable valuation standards does not necessarily mean that banks have taken on additional risk because of arbitrary valuations but rather that banks have put in place very stringent standards that significantly restrict the supply of credit. This directly affects potential home owners and existing owners those who wish to use the collateral in their property because they are unlikely to obtain mortgages up to the fair value of the property. Furthermore, in Serbia, commercial banks loans are insured by the National Mortgage Insurance Corporation (NKSOSK). This means that the banks' risk is in fact transferred to the Serbian government and the lack of valuation standards, therefore, contributes to greater fiscal risk.

6. The lack of a standardized and reliable valuation methodology also affects small and medium enterprises (SMEs) whose collaterals may not be considered good enough. In Serbia, between 50-60 percent of SMEs use property as collateral to get business loans. However, the restricted access to credit increases the cost of capital, i.e. the interest rate that the business pays in order to finance its operations. Assuming all else is equal, a business with a higher cost of capital will attract fewer investors than a business with a lower cost of capital. This is because, if a company cannot cover the cost of capital, investors will not be sure whether they will get a return on their investment, and therefore, shy away from such an investment. Moreover, the company will have cash for further investment and growth only if its profits exceed its cost of capital. Therefore, a high cost of capital not only makes it difficult for SMEs to be viable but also hampers investment, including foreign direct investment. The lack of available external finance may force companies to hold excess (and unprofitable) liquidity to mitigate risks of disruption to cash flow.

7. *Structural Impediments:* While improving property valuations is important and can help 'correct' some of the distortions in the economy, the existing structural (and other) impediments will remain.

8. In terms of mortgage lending and loans that use property as the collateral, there are other structural problems in the market. First, not all properties have been registered yet and there are an estimated 1 million buildings in Belgrade alone that lack the necessary permits or are not registered. While illegality does not prevent buying and selling of properties, higher discount rates reflect the greater risk associated with such properties. The lack of building permits is a problem as banks do not consider properties without all the proper documents. Second, unemployment is a significant problem. Overall, unemployment is 24 percent²¹ while youth unemployment is almost double that at 42.5 percent.²² This is a problem because the National Bank of Serbia requires a 20 percent down-payment on any mortgage loan, which means that standardized property valuations

²¹ <http://www.tradingeconomics.com/serbia/unemployment-rate>

²² <http://www.indexmundi.com/g/r.aspx?v=2229>

would not necessarily unlock the mortgage market. Even the NKOSK has had to pay banks for mortgage defaults where the borrower’s personal income was no longer adequate to continue the mortgage. (However, between 2004 and 2013, this happened to only less than 1 percent of the loans that the NKOSK insures.²³) Third, the size of the informal economy is estimated at 24 percent.²⁴ Cash transactions and informal financing will continue to dampen the growth and impede the maturity of Serbia’s mortgage market.

9. As for the SME market, access to credit is marred not only by collateral that is unacceptable to banks but also weaknesses in credit enforcement, weak regulatory incentives to lend to SMEs, and a lack of capacity along with poor communication skills to present business plans to lenders.²⁵

10. *Quantifying the Economic Impact:* The economic impact from improved valuations as envisaged in Component A comes from three main areas: an increase in mortgage lending, an increase in the credit available to SMEs, and an increase in fiscal revenues.

11. The main assumptions for **increase in mortgage lending** are:

S No.	Model Drivers	Without Project	With Project
1.	Growth rate of mortgages over the life of the project	Between 6.6% - 7.0%	Between 6.6% - 7.3%
2.	Average Property Price	Roughly EUR 54,000 in Year 1 with a decrease to EUR 53,000 in Year 2, and an increase to EUR 56,000 by Year 5. Property prices are the weighted average of prices in Belgrade (50%), Novi Sad (30%), and Nis (20%). This assumption is reasonable as much of mortgage lending is limited to Serbia’s three largest cities.	Same as ‘Without Project’
3.	Loan Value as % of Collateral Value	65%	65% in Year 1 increasing to 75% by end of project. Higher rate of increase is assumed for the last 2 years of the project
4.	Percentage of mortgages affected by the project	NA in ‘Without Project’ scenario	0% in first two years; 1% in Year 3; 2% in Year 4; 3% in Year 5; 4% in Year 6; 5% thereafter

²³ World Bank interview with NMIC representatives.

²⁴ USAID report: <http://www.fren.org.rs/sites/default/files/articles/attachments/the-shadow-economy-in-serbia-study.pdf>, Page 6. Weighted average of MIMIC and HTC methods from 2010, and a survey from 2012. The weights used are 25 percent, 25 percent and 50 percent respectively.

²⁵ USAID, “Financing the Growth of Small and Medium Sized Enterprises: A White Paper for the Government of Serbia,” 2012.

12. Using these assumptions, the credit injection of mortgages is calculated for both ‘Without Project’ and ‘With Project.’ The net increase is as follows:

	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>	<i>Year 6</i>
	2016	2017	2018	2019	2020	2021
Total Loans (EUR M)						
Without Project	0.0	0.0	49.6	108.2	177.1	258.1
With Project	0.0	0.0	51.2	117.0	205.7	300.4
Credit Injection (EUR M)	0.0	0.0	1.6	8.8	28.6	42.4

13. The main assumptions for an **increase in credit to SMEs** are:

S No.	Model Drivers	Without Project	With Project
1.	Increase in the number of SMEs	Number of micro enterprises increase at rates between 1.5% and 2.50% over the life of the project. Similarly, growth rates of small and medium enterprises are between 1.0%-1.8% and 0.25%-1.0% respectively.	Number of micro enterprises increase at rates between 1.5% and 2.75% over the life of the project. Similarly, growth rates of small and medium enterprises are between 1.0%-2.0% and 0.25%-1.25% respectively.
2.	Percentage of SMEs that use property as collateral	60%	Same as ‘Without Project’
3.	Fair value of collateral	Micro enterprises: €1,250; small enterprises: €10,000; and medium enterprises: €50,000	Same as ‘Without Project’
4.	Loan Value as % of Collateral Value	65%	65% in Year 1 increasing to 75% by end of project. Higher rate of increase is assumed for the last 2 years of the project

14. Using these assumptions, the increase in credit available to SMEs is calculated for both ‘Without Project’ and ‘With Project.’ The net increase is as follows:

	Year 1 2016	Year 2 2017	Year 3 2018	Year 4 2019	Year 5 2020	Year 6 2021
Total Loans (EUR M)						
Without Project						
Micro	37.8	38.5	39.3	40.2	41.2	42.2
Small	36.6	37.1	37.6	38.2	38.9	39.6
Medium-Sized	41.9	42.0	42.2	42.5	43.0	43.4
Total	116.4	117.6	119.1	120.9	123.0	125.2
With Project						
Micro	37.8	38.6	39.5	40.5	41.6	42.7
Small	36.6	37.2	37.8	38.5	39.3	40.1
Medium-Sized	41.9	42.1	42.4	42.8	43.4	43.9
Total	116.4	117.9	119.7	121.8	124.2	126.7
Credit Injection (EUR M)	0.0	0.3	0.6	0.9	1.2	1.5

15. The main assumptions for **increase in fiscal revenue** are:

S No.	Model Drivers	Without Project	With Project
1.	Property tax contribution to GDP	0.6%	0.6% for the first two years, increasing to 0.65% in Year 3, 0.75% in Year 4, and 0.90% by Year 5. This would mean property tax contribution to GDP in Serbia is half of the OECD average of 1.8%
2.	Property tax contribution of pilot municipalities (%)	NA in 'Without Project' scenario	0% in first two years; 1.0% in Year 3, increasing to 2.0% in Year 4, 4.0% in Year 5, 6% in Year 6, 8% in Year 7, and reaching 10.0% thereafter

16. Using these assumptions, the total tax collected in targeted municipalities is calculated for both 'Without Project' and 'With Project' scenarios. The additional tax collection is:

	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>	<i>Year 6</i>
	2016	2017	2018	2019	2020	2021
Tax Collected in Targeted Municipalities						
Without Project	0.0	0.0	0.3	0.6	1.3	2.1
With Project	0.0	0.0	0.3	0.8	2.0	3.2
Difference (RSD Billion)	0.0	0.0	0.0	0.2	0.7	1.1
Additional Tax Collection (EUR Million)	0.0	0.0	0.2	1.4	5.8	9.3

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

17. *Purpose:* A major aim of this component is to support the implementation of an ICT strategy for RGA under which the real estate cadastre and registration services would be digitized and additional, better quality services would be made available online. Additionally, a one stop shop (OSS) will be established to simplify the construction permitting process. The simplified process will be cheaper and quicker for those seeking to purchase construction permits and the increased transparency will in turn increase the number of permits issued.

18. *Economic Rationale:* With the expansion of e-governance for RGA services, this component would help make available data online and make many of the current transactions more efficient and transparent. Efficiency and transparency would have a positive impact in terms of reduced costs and time to both RGA customers and RGA itself. Moreover, it would help eliminate the loss in productivity for businesses when their employers have to spend time away from work to register their property or obtain a title search. It would also help increase transparency and reduce corruption opportunities that may arise in areas such as tax collection and property registration. This has been the experience of similar World Bank projects in many countries including FYR Macedonia, Russia, Ukraine and Kyrgyzstan. Furthermore, Component B would also reinforce the work being done under Component A as it would establish a reliable database and make it available to municipal tax authorities that currently do not have complete information about properties under their jurisdiction or comparative data for Serbia as a whole. This lack of information about properties means that they cannot be taxed fairly according to their market value. Finally, Component B will finance the establishment of a OSS for e-permitting. This new system will simplify the current process, making it quicker and more reliable for investors. Over time, this is likely to result in more investors purchasing construction permits and additional gains for other economic sectors that benefit from construction activity (e.g. housing, infrastructure, industrial etc). However, benefits emanating from the OSS will not be quantified because no change in pricing is expected and because other improvements in the overall investment climate must be made before faster processing can be expected to result in more requests for construction permits.

19. *Structural Impediments:* While the full impact of Component A activities is likely to be hampered by other structural issues in the market, Component B activities that pertain to e-governance can help serve as a positive externality for activities for other components within the project as well as activities being undertaken by other donors such as USAID, the EU, and the European Bank for Reconstruction and Development. For example, online property information would make it faster and cheaper for SMEs to provide proof of ownership in order to obtain credit. In this way, e-governance can help reduce the negative effect of some of the structural problems

that exist in the economy. Similarly, greater transparency will boost Serbia's Doing Business rankings where it currently ranks 186 out of 189 economies for issuing construction permits.

20. *Quantifying the Economic Impact:* The economic impact for Component B comes from time, cost, and productivity savings from the use of e-government. Other benefits like improvement in the business climate and increase in foreign investments will also exist but cannot be quantified accurately due to the lack of reliable data and the inability to isolate the project's effects from other positive steps being taken by the GoS. As a result only the time, cost, and productivity savings will be quantified.

21. In this economic analysis, savings from e-governance are quantified for two channels: savings to customers and businesses, and savings to RGA. The main assumptions for **RGA e-governance efficiency savings** are:

S No.	Model Drivers	Without Project	With Project
Savings to Customers and Businesses			
1.	Number of transactions at RGA	50,000 increasing at the rate of 0.2% every year	Same as 'Without Project'
2.	Percentage of transactions done using e-government	NA in 'Without Project' scenario	0% in Year 1, 10% in Year 2, 20% in Year 3, 50% in Year 4, and 80% in year 5
3.	Savings to customer with one less visit	NA in 'Without Project' scenario	€8.20 where €7.95 ²⁶ is loss one day's wage, and €0.25 is transport cost
4.	Loss of productivity to businesses (assuming wage = marginal productivity of labor)	NA in 'Without Project' scenario	€7.95 (same as the loss of daily wage discussed above)
Savings to RGA			
1.	Number of queries to RGA	NA in 'Without Project' scenario	1,000,000 in Year 1 increasing at 0.2% every year till the end of the project
2.	Percentage of queries answered using e-government	NA in 'Without Project' scenario	0% in Year 1, 5% in Year 2, 15% in Year 3, 25% in Year 4; and 40% in Year 5
3.	RGA savings per query	NA in 'Without Project' scenario	€3.00, which includes 1 hour cost of staff, system, premises, etc.

22. The total savings from the adoption of e-governance at RGA are as follows:

²⁶ The monthly wage of EUR 350 is divided by half to adjust it for the employment participation rate. The resulting EUR 175 is divided by 22 (number of working days per month) to give EUR 7.95.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	2016	2017	2018	2019	2020	2021
Savings to Customers	0.0	0.4	0.8	2.1	3.5	3.5
Productivity Savings to Businesses	0.0	0.4	0.8	2.1	3.4	3.4
Savings to RGA	0.0	0.2	0.5	0.8	1.3	1.6
Total Savings (EUR M)	0.0	1.0	2.1	5.0	8.1	8.5

Component C: Institutional Development of the Republic Geodetic Authority

23. *Purpose:* The major aim of this component is to devise a strategy for RGA that contributes the agency's sustainability in both financial and institutional terms.

24. *Economic Rationale:* Component C activities will help in the development of RGA's business plan. A full or partial self-financing plan will be put in place and it is expected to reduce government spending on RGA as the agency will be able to generate some of its revenues. Furthermore, the business plan will ensure the long-term sustainability of RGA. Indeed, it has been observed that land and real estate projects have long term benefits that accumulate over several decades. A sustainable RGA will allow the Project's benefits to be captured well beyond the project duration.

25. *Quantifying the Economic Impact:* The exact magnitude of the economic impact of Component C will depend on the RGA strategy and how revenues will change with respect to expenditures. For this reason, this benefit can be captured only after the strategy has been devised and will not be quantified in the PAD.

Component D: Project Management and Support Activities

26. *Purpose:* The main aim of this Component is to ensure efficient and effective project implementation that help cement gains stated under Components A, B, and C. Furthermore, some support activities like raising public awareness will ensure a more sustainable and consensus-based implementation of Project activities.

27. *Economic Rationale:* Even though there are no direct economic benefits of Component D, the indirect benefits stem from the fact that project gains from other components cannot be realized without Component D activities.

Total Economic and Financial Gains from the Project

28. In the previous sections, the different economic gains from the project have been modeled and quantified for the duration of the project. In this section, the total benefits will be shown for a 10-year period (till 2014). This is because several project benefits will last beyond the project duration, and even beyond 2024. Therefore, the net present value (NPV) and internal rate of return (IRR) calculations are based on a 10-year analysis. The individual models shown below are the same as what was shown earlier for the individual line items.

29. The overall analysis makes a distinction between the fiscal gains to the government and overall gains to the economy. The reason is that the fiscal gains help provide a financial justification for

this project as the GoS will be able to recoup its initial investment (the loan). The overall economic benefits show the impact this Project will have on the different sectors of the Serbian economy.

30. These gains are summarized below.

31. The total impact of these activities is shown in the table below. More details on each of the underlying models appear in the detailed models paper in the project file.

	Cumulative Benefits (EUR M)	Return on Investment	Net Present Value (EUR M)	Internal Rate of Return
Fiscal Gains Only	84.9	134%	10.2	20.8%
Total Benefits	464.4	1183%	185.4	99.8%

32. Over the ten-year period from 2015-2024, **the project’s fiscal gains** cumulatively amount to EUR 84.9 million. For an investment of EUR 36.2 million (USD 44 million loan), this amounts to a return on investment of 134 percent. Using a discount rate of 12.5 percent, the Project’s fiscal gains over the same 2015-2024 period have a net present value (NPV) of EUR 10.2 million, and an internal rate of return (IRR) of 20.8 percent.

<i>Investment Date</i>	1-Jan-16	1-Jan-17	1-Jan-18	1-Jan-19	1-Jan-20	1-Jan-21	1-Jan-22	1-Jan-23	1-Jan-24	1-Jan-25		
<i>Project Year</i>	1	2	3	4	5	6	7	8	9	10	Cumulative Benefits	NPV
EUR M	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		
Fiscal Gains (Increase in Property Tax)	0.0	0.0	0.2	1.4	5.8	9.3	13.1	17.4	18.4	19.4	84.9	37.8
Discount rate	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%		
PV of Cash Flows	0.0	0.0	0.1	0.9	3.2	4.6	5.8	6.8	6.4	6.0		
Loan Disbursement (EUR 38.5M estimated)	-4	-5	-9	-9	-9						-36.2	-27.6
<i>Loan Disbursement % (Estimated)</i>	10%	15%	25%	25%	25%							
<i>Loan Disbursement Cumulative % (Estimated)</i>	10%	25%	50%	75%	100%							
Net Cash Flows	-3.6	-5.4	-8.8	-7.7	-3.2	9.3	13.1	17.4	18.4	19.4		
Total NPV (Fiscal Only)	10.2											10.2
IRR (Fiscal Only)	20.8%											

33. Over the ten-year period from 2015-2024, **the project's total gains** (including fiscal gains) cumulatively amount to EUR 464.4 million. For an investment of EUR 36.2 million (USD 44 million loan), this amounts to a return on investment of over 1000 percent. Using a discount rate of 12.5 percent, the project's total gains (including fiscal gains) over the same 2015-2024 period have a net present value (NPV) of EUR 185.4 million, and an internal rate of return (IRR) of 99.8 percent.

<i>Investment Date</i>	1-Jan-16	1-Jan-17	1-Jan-18	1-Jan-19	1-Jan-20	1-Jan-21	1-Jan-22	1-Jan-23	1-Jan-24	1-Jan-25		
<i>Project Year</i>	1	2	3	4	5	6	7	8	9	10		
EUR M	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Cumulative Benefits	NPV
Fiscal Gains (Increase in Property Tax)	0.0	0.0	0.2	1.4	5.8	9.3	13.1	17.4	18.4	19.4	84.9	37.8
Credit Injection through Mortgages	0.0	0.0	1.6	8.8	28.6	28.6	42.4	58.9	65.5	72.9	307.3	138.6
Credit Injection for SMEs	0.0	0.3	0.6	0.9	1.2	1.2	1.5	1.9	2.2	2.6	12.5	6.2
Savings from E-Governance	0.0	1.0	2.1	5.0	8.1	8.5	8.6	8.7	8.8	8.9	59.7	30.4
Total Gains from the Project	0.00	1.26	4.57	16.05	43.69	47.58	65.63	86.84	94.92	103.84	464.4	213.0
Discount rate	12.5%	12.5%	12.5%	12.5%	12.5%	13%	13%	13%	13%	13%		
PV of Cash Flows	0.0	1.0	3.2	10.0	24.2	23.5	28.8	33.8	32.9	32.0		
Loan Disbursement (EUR 38.5M estimated)	-4	-5	-9	-9	-9						-36.2	-27.6
<i>Loan Disbursement % (Estimated)</i>	<i>10%</i>	<i>15%</i>	<i>25%</i>	<i>25%</i>	<i>25%</i>							
<i>Loan Disbursement Cumulative % (Estimated)</i>	<i>10%</i>	<i>25%</i>	<i>50%</i>	<i>75%</i>	<i>100%</i>							
Net Cash Flows	-3.6	-4.2	-4.5	7.0	34.6	47.6	65.6	86.8	94.9	103.8		
NPV of Cash Flows	-3.2	-3.3	-3.1	4.4	19.2	23.5	28.8	33.8	32.9	32.0		
Total NPV	185.4											185.4
IRR	99.8%											