

SIMULTANEOUS DISCLOSURE

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

## **URUGUAY**

### **ROAD INFRASTRUCTURE PROGRAM II**

**(UR-L1067)**

#### **LOAN PROPOSAL**

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## ELECTRONIC LINKS

### REQUIRED

1. Procurement plan  
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36448658>
2. Annual work plan (AWP)  
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36446997>
3. Monitoring and evaluation arrangements  
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36447974>
4. Program Environmental and Social Management Report (ESMR)  
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36447775>

### OPTIONAL

1. Eligibility criteria  
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36448462>
2. Economic evaluation  
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36448490>
3. Institutional Capacity Assessment System (ICAS)  
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36448419>
4. Technical report on highways  
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36448487>
5. Technical report on railways  
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36448491>
6. Technical report on road safety  
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36448357>
7. Report on rail transport demand  
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36448489>
8. Technical note on transportation  
<http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36448488>

## ABBREVIATIONS

AADT	Annual average daily traffic
AFE	Administración de Ferrocarriles del Estado [Government Railway Administration]
AGESIC	Agencia para el Desarrollo del Gobierno de Gestión Electrónica y la Sociedad de la Información y del Conocimiento [Agency for the Development of Electronic Government Management and the Information and Knowledge Society]
BROU	Banco de la República Oriental del Uruguay
CGN	Contaduría General de la Nación [General Accounting Office]
CND	Corporación Nacional para el Desarrollo [National Development Corporation]
CUN	Cuenta Única Nacional [General Treasury Account]
CVU	Corporación Vial del Uruguay S.A. [Road Corporation of Uruguay]
DNPL	Dirección Nacional de Planificación y Logística [National Planning and Logistics Department]
DNV	Dirección Nacional de Vialidad [National Highways Department]
EIRR	Economic internal rate of return
ESMP	Environmental and Social Management Plan
FOCEM	Fondo de Convergencia Estructural del Mercosur [Mercosur Structural Convergence Fund]
IRI	International Roughness Index
MTOP	Ministry of Transportation and Public Works
NPV	Net present value
PDL	Performance-driven loan
PPP	Public-private partnership
RMG	Risk Management Guide for Sovereign-guaranteed Projects
SCI	Surface condition index
SIIF	Sistema integrado de información financiera [Integrated financial information system]
TCR	Tribunal de Cuentas de la República [Auditor General's Office]
TGN	Tesorería General de la Nación [National Treasury]

## PROJECT SUMMARY

### URUGUAY ROAD INFRASTRUCTURE PROGRAM II (UR-L1067)

Financial Terms and Conditions					
<b>Borrower:</b> Eastern Republic of Uruguay			Amortization period:		25 years
			Grace period:		5 years
<b>Executing agency:</b> Ministry of Transportation and Public Works (MTOF)			Disbursement period:		5 years
Source	Amount (US\$)	%	Inspection and supervision fee:		*
IDB (OC)	80,000,000	80	Interest rate:		LIBOR-based
Local contribution	<u>20,000,000</u>	<u>20</u>	Credit fee:		*
			Currency:		U.S. dollars from the Single Currency Facility of the Bank's Ordinary Capital. Option to convert to Uruguayan pesos, Local Currency Facility
Total	100,000,000	100			
Project at a Glance					
<b>Objective and description.</b> The program's general objective is to support efficient maintenance and management of the country's surface transport infrastructure, now under considerable pressure due to the sharp agriculture- and forest-based economic growth and the resulting impact of increased heavy vehicle traffic. Specific objectives include: (i) to support National Highways Department (DNV) financing of maintenance of the road system under its jurisdiction, while developing the DNV's technical and institutional capacities; (ii) to improve road safety conditions in the interurban road system; and (iii) to help raise the railway system's share of the cargo matrix.					
<b>Special condition of execution:</b> In order to execute Component 4, Geographic systems, the borrower will be required to submit a study to the Bank reviewing the project's uses, benefits, and beneficiaries, as well as the project implementation alternatives, and explaining the rationale for selecting one of the alternatives. The indicators, baseline, and targets for this output will be determined on the basis of the selected alternative (paragraph 1.39).					
<b>Exceptions to Bank policies:</b> None					
<b>Project consistent with country strategy:</b>					
	Yes [ X ]	No [ ]			
<b>Project qualifies as:</b>	SEQ [ ]	PTI [ ]	Sector [ ]	Geographic [ ]	Headcount [ ]
<b>Procurement:</b> Paragraph 3.4					

\* The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable provisions of the Bank's policy on lending rate methodology for Ordinary Capital loans. In no case will the credit fee exceed 0.75% or the inspection and supervision fee exceed, in a given six-month period, the amount that would result from applying 1% to the loan amount divided by the number of six-month periods included in the original disbursement period.

## I. DESCRIPTION AND RESULTS MONITORING

### A. Background, problem to be addressed, and rationale

- 1.1 In the past seven years Uruguay has grown at an average rate exceeding 6%, stepping up the trend of the preceding 30 years, which witnessed average growth of less than 2%. One of the engines of this recent growth is the increase in agroindustrial exports, resulting in a steep rise in demand for freight transport services and infrastructure.
- 1.2 **Sharp growth in forest and agricultural production.** The forest development policy initiated in the mid-1990s led to forest production growth of more than 400% between 2000 and the present, from barely three million m<sup>3</sup> to the current 12 million m<sup>3</sup>. This growth has been driven by roundwood production for industrial use, basically wood pulp, which in 2000 accounted for 54% of total production and now represents 80%. In the 2005-2010 period alone, wood production for processing grew by more than 200%, reaching the harvest peak with more than half the surface yet to be planted.<sup>1</sup>
- 1.3 In addition to the significant growth in forest production, there was a productive explosion in rainfed agriculture, which in the last five years experienced a 90% production increase, from three million tons in 2005 to almost six million tons in 2010. This was due to the marked development of soy and wheat farming, which rose from 350,000 tons in 2000 to more than 3.6 million tons at present.<sup>2</sup>
- 1.4 **Impact of the increase in freight on the transportation sector.** This rise in production has created greater demand for infrastructure and transportation services. Government data indicate that traffic on national highways increased by 40% from 2005 to 2010, with a close to 10% annual increase in heavy vehicle traffic, well in excess of the 3% annual trend that the country was experiencing little more than five years ago. The highway system has had to absorb the entire impact of this new situation, given the scant development of rail transportation in the country.
- 1.5 In the past decade, not only has heavy vehicle traffic increased but the origin-destination matrix of trips has changed. Vehicular flow on the historical main road system<sup>3</sup> has risen but, at the same time, a second, transverse system has developed that connects the country's rural hinterland with the demand centers on the coastline, the port of Nueva Palmira, and the wood-pulp production plant in Fray Bentos.
- 1.6 Roundwood transportation for pulp production is behind the increase in current demand for infrastructure, not only because of the significant vehicular volume

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<sup>1</sup> Source: Statistics and markets. Forestry Office, MGAP.

<sup>2</sup> Technical note on the agriculture sector, prepared for the Bank's Country Strategy with Uruguay, 2011 (GN-2626).

<sup>3</sup> The historical main road system is that which connects border crossings and departmental capitals with Montevideo.

involved but because the tonnage it generates far exceeds what the surface structure of these productive corridors<sup>4</sup> is able to bear. These vehicles use secondary or low-standard primary roads that were designed essentially for automobile traffic (generally AADT below 400 vehicles) but that have recently seen an upsurge in demand of 50% or more from truck traffic alone. The UPM pulp mill located in Fray Bentos requires 3.4 million tons of wood per year, approximately 350 trucks per day. These trucks come from locations at least 200 km away and use transverse highway corridors from the country's center and north. The Montes del Plata pulp mill, located in the country's southwest and currently under construction, will introduce an additional demand for four million tons, to be transported on the same transverse corridors plus the transverse corridors located in the south of the country.<sup>5</sup> Agricultural production is exported through the ports of Nueva Palmira (southwest) and Montevideo (south). Nueva Palmira is an agricultural port complex that moves more than three million tons of bulk grain exports per year and is accessible only through a long transverse secondary road system in significant disrepair. One million tons of bulk cargo is exported through the port of Montevideo; the port itself is reached through the historical main road system which, while also in need of rehabilitation, is generally in better condition than the transverse system.

- 1.7 **Road system maintenance.**<sup>6</sup> Uruguay's road system is 60,000 km long. The National Highways Department (DNV) has jurisdiction over 8,800 km of this system, specifically, the portion that connects the country's capital with the major border crossings and the departmental capitals; this is the system that supports the nationwide flow of goods and passengers. The rest is under the jurisdiction of the departmental governments and essentially consists of urban and rural feeder roads. Of the 8,800-km system under DNV jurisdiction, 7,200 km are managed solely by the DNV, while the remaining 1,600 km are managed jointly with Corporación Vial

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<sup>4</sup> A productive corridor is a set of sections of one or more highways linking a production area with its demand points (port, industrial facilities, or border crossing).

<sup>5</sup> IDB. Uruguay: Analysis of railway potential and market demand 2015.

<sup>6</sup> The main road system is divided into: (i) 2,408 km of international corridors, connecting the major border crossings with Montevideo; (ii) 1,551 km of primary system roads, complementing the above and connecting the departmental capitals with Montevideo; this is the system that ensures basic mobility within the country; (iii) 3,813 km of secondary system roads, connecting secondary towns with the departmental capitals and providing regional mobility as a complement to the primary system; and (iv) 1,005 km of tertiary rural feeder roads.

del Uruguay [Road Corporation of Uruguay] (CVU).<sup>7</sup> Private-sector concessions are not well developed and currently comprise only 120 km of highways.

- 1.8 **Maintenance strategy.** The country adopted a maintenance paradigm early on that takes into account the high economic value of road maintenance expenditures, as reflected in the quick and widespread adoption of rehabilitation and maintenance contracts, and has sought to establish financial mechanisms designed to ensure financing for these maintenance arrangements. Yet despite these strategies, the substantial increase in loads in recent years has exerted significant pressure on the infrastructure and a large portion of this system is at risk of disrepair, leading to fears that this problem could impair economic development.<sup>8</sup>
- 1.9 Currently, 34% of the main road system (international corridors and primary roads) is not in good condition; this percentage has remained unchanged over the past five years. Slightly more than 40% of this system is under concession (to CVU and others) but only 18% exhibits maintenance problems, and most of the primary road system in fair or poor condition is managed by the DNV. These sections are in such disrepair that they cannot be maintained under maintenance structures based on service levels, even through partial or low-standard upgrades; instead, they first require full rehabilitation. Part of this stretch in inadequate structural condition is composed of the transverse road systems that have had to absorb the new demand.
- 1.10 The secondary and tertiary road systems have historically had long sections in poor structural condition, generally close to 60% of their full length. In the past five years, the portion of the secondary road system in deficient maintenance condition has grown by approximately 10%. Almost all of this loss has resulted from an increase in road surfaces in poor condition, which cannot be serviced through road maintenance activities and instead require rehabilitation before they can continue maintenance by service level. The roads involved are basically the transverse and trunk corridors of the main road system, which are bearing the brunt of the new demand. They include the highways in the corridors carrying forest products to Fray Bentos and bulk commodities to Nueva Palmira.
- 1.11 In addition, in part of the roadway system, geometric conditions are irregular or unsuitable for the composition and volume of traffic. Aside from rehabilitation

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<sup>7</sup> In a formal sense, the DNV granted CVU a concession over 1,600 km of primary system roads and international corridors. CVU is an enterprise organized under private law and owned by Corporación Nacional para el Desarrollo [National Development Corporation] (CND), a government entity organized under private law. The DNV continues to be responsible for technical management of the road system under concession, while CVU is responsible for administrative and financial management. Maintenance of the CVU road system is performed under level of service contracts with third parties. From the financial standpoint, CVU/CND has obtained sovereign-guaranteed multilateral financing (in particular, from the IDB, PDL loan 2041/OC-UR, in the amount of US\$100 million) and non-sovereign guaranteed capital market financing. It should be noted that CVU is responsible for the repayment of any debt it contracts. CVU revenues come from toll collections and a government subsidy paid from the DNV regular budget.

<sup>8</sup> IDB. Support for preparation of the Bank's country strategy with Uruguay. Technical report on the transportation sector. 2010.



needs due to maintenance conditions, the platform also needs to be geometrically adapted. In international corridors and primary system roads, the purpose of this adaptation is to provide homogeneous treatment to the various sections of a single stretch of highway. In the secondary road system, it is to widen the road and, in particular, to create broad and passable shoulders, thus enhancing road safety.

- 1.12 **Strategy of the Government of Uruguay.** Facing the challenge of expanding road infrastructure to meet new and growing demand, the Government of Uruguay is planning to adapt the existing infrastructure—either by upgrading the support structure of highly deteriorated road sections or by adopting platform dimensions that can accommodate the volume and composition of current traffic flows—in order to make it suitable for service level maintenance. These actions are expected to be implemented by means of public-private partnership (PPP) contracts. On a complementary basis, plans call for promoting the development of railways and raising their share of heavy freight transport, with a view to reducing the pressure on the road system.
- 1.13 **Institutional structure of the public-private partnerships.** The Public-Private Partnership Act was approved in July 2011 and its implementing regulations are in the process of being issued. The proposed institutional arrangement assumes two main actors: (i) the entities awarding the concessions (which in the case of road-related PPPs would be the Ministry of Transportation and Public Works (MTOP)), which are responsible for controlling and regulating the contracts; and (ii) Corporación Nacional para el Desarrollo [National Development Corporation] (CND), a government entity with crosscutting capacities, responsible for the technical, institutional, and financial design of the PPPs. The government is betting heavily on developing this execution and financing mechanism, and particularly on the possibilities of applying it to the transport infrastructure: CND is currently analyzing some 10 potential road-related PPP projects spanning approximately 3,400 km of the road system.
- 1.14 Using the PPP model will entail a significant change with respect to the traditional mechanisms employed for these activities, and it requires perfecting the institutional machinery to face the new, long-term relations with private agents. Moreover, the type of corridors to be developed under PPPs in Uruguay will require the government to provide strong fiscal support, which will be backed by the DNV budget, the medium- and long-term fiscal effects of which will have to be quantified and assessed. Thus, the proposed strategy poses a major institutional challenge in view of the magnitude of the road-related PPP program that the Uruguayan government plans to develop.
- 1.15 **DNV organization and capacities.** The public sector's role in providing road infrastructure has been changing as the public sector reduces its involvement in the direct execution of activities (which are being gradually transferred to the private sector) and assumes greater planning, regulatory, and control responsibilities. Yet there is currently an imbalance between the essential public roles in the sector and

the DNV's organizational structure, which prevents the DNV from acting efficiently.

- 1.16 The changing role of the DNV has been accompanied by a continuous shrinking of its technical staff, resulting not only from a persistent migration of employees to the private sector but also because hardly any revenue has been generated. In addition, the staff focuses on contract supervision<sup>9</sup> to the detriment of policy planning, analysis, innovation, and development.
- 1.17 These difficulties are also partially due to the DNV's use of dated management software tools. This set of systems is based on a model developed more than 10 years ago, when the institution's reform process had not yet started, and has multiple operating weaknesses because of the age of its platform. Improving management efficiency requires a technological update, based on a new management model that uses processes aligned with the DNV's new strategic role and the realities of resource availability.
- 1.18 **The role of railways.** Rail transportation in Uruguay is provided by the Government Railway Administration (AFE), a vertically integrated public enterprise that provides freight and passenger transportation services and is responsible for managing the railway infrastructure and operating trains. While the legal and regulatory framework in effect allows other operators to participate, regulatory and operational control aspects are an AFE prerogative; furthermore, conditions on the ground are not conducive to the development of competition in service offerings.
- 1.19 Poor railway infrastructure. The railway system consists of approximately 3,000 km of single standard-gauge tracks, of which only 1,641 km are currently in operation. The general operating condition of the tracks is poor, as a result of insufficient investment over the course of decades and failure to perform minimum maintenance. The first stage in the rehabilitation of 400 km on the Rivera line (which originates in Montevideo and crosses the country from south to north) was recently completed. This will make it possible to operate with fewer precautions due to the better conditions of the tracks, and without any weight-per-axle restrictions (18 tons/axle).<sup>10</sup>
- 1.20 Stagnant cargo attraction and a very low standard of production efficiency in transport. Since the second half of the 1980s, having discontinued all passenger services, AFE has focused its efforts on freight transport without however improving its capacity to attract cargo. Over the past decade, AFE traffic in terms of tonnage has remained unchanged at approximately 1.3 million tons/year. Furthermore, AFE has high operating costs (US\$ 1.97 per t-km), associated with

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<sup>9</sup> In Uruguay, works contracts are supervised by DNV professionals and technical experts.

<sup>10</sup> These works were financed through the national budget and executed by Corporación Ferroviaria del Uruguay [Railway Corporation of Uruguay] (CFU). The rehabilitation of this section is expected to be completed at a second stage, financed by the Mercosur Structural Convergence Fund (FOCEM), making it possible to entirely eliminate all precautions and allowing for mechanized maintenance.

very low production efficiency indicators,<sup>11</sup> therefore requiring significant subsidies (currently US\$12 million per year) in order to operate.

- 1.21 There is potential for developing freight rail operations. Studies conducted by the Bank for the Government of Uruguay<sup>12</sup> show that the potential exists to triple current demand if the railway succeeds in operating under production standards resembling those of private railway companies in the region (which would require substantive changes in the operating regulations in addition to other operational, commercial, and management practices) and if the infrastructure is upgraded for travel at 40 km/hr with 18 tons/axle.
- 1.22 The Government of Uruguay's rail transport strategy. The Government of Uruguay has decided to relaunch rail transport activity in the country. This process, which began with the rehabilitation of the Rivera line, will continue with infrastructure investment in the lines with the highest current and potential demand, either as public works (with FOCEM financing, as proposed) or within the new legal and regulatory PPP framework.
- 1.23 Institutionally, creating an operating company separate from the infrastructure management entity will allow operations to be governed by private law. This company will be a partnership between AFE and CND, and AFE will transfer to it all of its locomotives, rolling stock, and shops, only retaining responsibility for tasks associated with the development and maintenance of railway infrastructure. The operational and management reform will be addressed through business plans for the new operating company and for AFE in its new role. In addition, a rail transport regulatory entity has been created under the MTOP.
- 1.24 **Road safety.** The increase in general mobility and particularly in heavy vehicle traffic has led to a rise in accident rates on the nation's roads. Government statistics show that the number of accidents grew by 25% from 2005 to 2010, with a 45% rise in injury victims and a 40% rise in fatalities. A full 70% of accidents occur in the main road system (international corridors and primary system roads), with 70% of the injured and 84% of the fatalities. The secondary road system accounts for 20% of accidents and injury victims but for only 13% of fatalities.
- 1.25 In addition, the increased traffic and greater presence of heavy vehicles have created a growing danger along urban streets and in certain highway junctions next to areas of urban development. While the low circulation speed has prevented the accident rate from rising considerably, the fact is that residents of many communities perceive the danger to be greater than before. Nighttime accidents account for 60% of the total and for a similar proportion of injury victims, while nighttime fatalities on urban through roads already account for 75% of the total.<sup>13</sup>

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<sup>11</sup> Information in optional electronic link 5.

<sup>12</sup> IDB. Uruguay: Analysis of railway potential and market demand 2015.

<sup>13</sup> Technical report on road safety – Optional electronic link 6.

- 1.26 **The Bank's country strategy with Uruguay.** The Bank's country strategy (GN-2626) establishes that the Bank, in the area of road transport, will participate in maintenance of the primary, secondary, and tertiary road systems; furthermore, it will support the institutional strengthening of: (i) the MTOP in its planning and policy-making roles; and (ii) the DNV in its road maintenance management capacity. In terms of outcomes, the program is entirely consistent with the Bank's country strategy in that both list improvement of the national road system's state of repair as an expected outcome.
- 1.27 **GCI-9 commitments.** The program addresses two of the Bank's strategic institutional priorities (Report on the Ninth General Increase in the Resources of the IDB, GCI-9): "(b) infrastructure for competitiveness and social welfare;" and "(d) competitive regional and global international integration." In terms of integration, improving the national road system's state of repair, including the main international productive corridors, helps to maintain connectivity with the rest of the region while also contributing to other countries' foreign trade. At the same time, lowering transportation costs enhances the economy's competitiveness.
- 1.28 **Program rationale.** Maintaining the road system in a condition of reasonable quality, and thus preventing logistics costs in the agroindustrial sector from skyrocketing, is important for the continued development of this engine of growth. The program contributes to this objective by financing the rehabilitation of deteriorated sections of the main productive corridors, thus making their subsequent maintenance by service level possible. The impact of these interventions will be felt in the form of lower vehicle operating costs and, ultimately, lower logistics costs for the main agriculture-based products. Furthermore, the program seeks to support actions aimed at mitigating the negative effects of the increase in heavy vehicle traffic (rise in accident rates). In particular, it will address the problems of accidents in urban area junctions and road junctions in rural areas, by improving lighting and signage as well as supporting identification of the best forms of intervention. In addition, the program is aimed at changing the modal transport matrix, increasing the railway system's capacity in the medium term to attract heavy freight in situations of identified comparative advantage and potential demand. This will reduce the pressure on the road system as well as the system's financial needs for maintenance and the negative externalities deriving from its use. Lastly, the program will support the implementation of institutional, organizational, and technical changes in the DNV that are necessary to enable it to carry out its new functions effectively.

## **B. Objectives, components, and costs**

- 1.29 **Objectives.** The program's general objective is to support efficient maintenance and development of the surface transport infrastructure, now under considerable pressure due to sharp agriculture- and forest-based economic growth and the resulting impact of increased heavy vehicle traffic. Specific objectives include: (i) to support DNV financing of maintenance of the road system under its jurisdiction, while developing the DNV's technical and institutional capacities;

- (ii) to improve road safety conditions in the interurban road system; and (iii) to help raise the railway system's share of the cargo matrix by altering the current institutional structure.
- 1.30 The actions supported by this program are framed in the following five components:
- 1.31 **Component 1. Engineering and other studies (US\$1.5 million).** This component will finance the engineering, environmental, and economic studies required for implementing the road program and facilitating development of the railway sector.
- 1.32 **Component 2. Road rehabilitation (US\$55.0 million).** This component will finance rehabilitation of road sections belonging to the national road system under DNV jurisdiction. These sections may form a part of the international corridors, primary system roads, or secondary system roads with AADT exceeding 500 vehicles per day, or exceeding 350 vehicles per day of which at least 25% are trucks.
- 1.33 Rehabilitation works are aimed at restoring the structure and surface regularity of existing paved roads. These works are generally limited to the right of way, are essentially performed on the existing structure, and do not involve planimetric or altimetric adjustments. In the case of asphalt pavement, they also include prior patching and shoulder reinforcement, and in the case of bituminous surface dressing, prior patching and granular reinforcement as needed. Pavement replacement works designed to obtain a greater structure (by converting bituminous surface dressing into asphalt or concrete surfaces), including widening the platform and reshaping the base, are also considered rehabilitation works. These works are aimed at ensuring the road's level of service and providing greater traffic safety, but increasing the road's capacity is not their objective. In some cases, the work may include planimetric and altimetric adjustments aimed at adapting the geometric layout to traffic safety standards based on traffic volume and composition. These layout adjustments will be performed without affecting any areas outside the right of way, except when modifying a road or highway junction that requires appropriating a greater surface area, which, under Uruguayan legal provisions, may not exceed 10 hectares.
- 1.34 From a socioenvironmental standpoint, all of these works are very simple and traditional in a road engineering sense, and are generally executed on land with virtually flat topography. The rehabilitation works included in this component will be eligible for financing provided they fulfill the criteria established in [optional link 1](#).<sup>14</sup>

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<sup>14</sup> The eligibility criteria essentially require: (i) that the sections be part of a high-priority and/or high-traffic road; (ii) that the work constitute rehabilitation of the existing road; (iii) that it comply with the country's and the Bank's environmental standards as well as with the Bank's safeguard policies; and (iv) that it be economically profitable.

- 1.35 **Component 3. Road safety (US\$10.0 million).** This component will finance works aimed at improving safety conditions, particularly lighting works on urban roads (through streets and bypasses) and highway intersections in rural areas. The lighting works will be eligible for financing under the program provided they fulfill the criteria established in [optional link 1](#).<sup>15</sup> Financing will also cover pavement marking works or the replacement of signage on international corridors, primary system roads, or secondary system roads forming a part of a productive corridor. Lastly, the financing will cover the drafting of technical design standards for interventions in urban junctions and the implementation of up to two pilot projects applying these standards.
- 1.36 **Component 4. Geographic systems (US\$5.0 millions).** The MTOP is committed to a process of updating the technological base it needs to perform its tasks. In this context, there will be financing for a high-detail topographic survey of urban-rural interface areas in 22 cities (not including Montevideo). This information will be used to create a base cartography for the public information system managed by the Agency for the Development of Electronic Government Management and the Information and Knowledge Society (AGESIC). The MTOP will carefully review the project's uses, benefits, and beneficiaries, as well as the project implementation alternatives, and adopt the alternative that is most efficient for the government. Performing this study and justifying the adoption of a specific alternative will be conditions precedent to the execution of this component.
- 1.37 **Component 5. Institutional strengthening (US\$ 8.5 million).** This component is divided into two subcomponents. The first (US\$3.5 million), to be executed by the DNV, will finance activities aimed at conducting a strategic review of DNV processes and systems as well as at proposing and implementing restructuring alternatives, including the redesign and implementation of new planning and management information systems.<sup>16</sup> In addition, it will finance DNV strengthening activities in the area of road safety, including regulatory updating and performance of road safety audits. The second subcomponent (US\$5.0 million), to be executed by the National Planning and Logistics Department (DNPL), will finance activities supporting the implementation of institutional and organizational railway sector reforms, including the development of a business plan for the infrastructure and transportation companies, and will monitor their implementation.
- 1.38 **Cost and financing.** The total cost of the program is U\$100 million, of which U\$80 million will be financed by the Bank and be chargeable to the resources of the Single Currency Facility of the Bank's Ordinary Capital, and U\$20 million will be financed with local counterpart resources.

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<sup>15</sup> Urban through streets and bypasses and road intersections and junctions will be eligible if they are: (i) part of a traffic corridor where other contiguous urban junctions or through streets and bypasses already have lighting, with a view to achieving uniform treatment of the section; (ii) intersections or junctions between international corridor or primary system highways and other highways or roads with a danger index equal to or greater than 35 in the past three years.

<sup>16</sup> Execution managed via PPPs and by force account. See optional electronic link 8.

TABLE I- COSTS (in millions of U.S. dollars)					
COMPONENT			IDB	LOCAL CONTRIBUTION	TOTAL
1	Engineering and other studies		1.5	0.3	1.8
2	Road rehabilitation		55.0	14.2	69.2
	2.1	International corridors and primary system roads	40.0	10.3	50.3
	2.2	Secondary system roads	15.0	3.9	18.9
3	Road safety		10.0	2.5	12.5
	3.1	Lighting	4.0	1.0	5.0
	3.2	Signage	4.0	1.0	5.0
	3.3	Urban through streets and bypasses	2.0	0.5	2.5
4	Geographic systems		5.0	1.1	6.1
5	Institutional strengthening		8.5	1.9	10.4
	5.1	Institutional and organizational adaptation of the DNV and DNV strengthening in road safety	3.5	0.8	4.3
	5.2	Development and implementation of business plan for railway companies	5.0	1.1	6.1
TOTAL			80.0	20.0	100.0

1.39 **Special contractual conditions.** Since this is a relatively simple and traditional operation, and in view of the executing agency's satisfactory performance in Road Infrastructure Program I, the only suggested special contractual condition is that, for Component 4 – Geographic systems, the borrower submit a study to the Bank reviewing the project's uses, benefits, and beneficiaries, as well as the implementation alternatives, and explaining the rationale for selecting one of the alternatives.

### C. Results framework with key indicators

1.40 **Outcomes and their indicators.** The program's main outcomes relate to: (i) lower vehicle operating costs on partially rehabilitated corridors; (ii) a lower international roughness index (IRI) on partially rehabilitated corridors; (iii) improved surface condition on partially rehabilitated corridors; (iv) an effective maintenance policy based on weighted road asset value in partially rehabilitated corridors; (v) lower accident rates on productive corridors; (vi) institutional restructuring of policy, regulatory, and operating matters in the railway sector; and (vii) increased productive efficiency in the railway sector.

1.41 **Representative sample.** A representative sample of the sections to be rehabilitated under the program was selected. An economic evaluation was performed on one of the two projects comprising the representative sample, namely the rehabilitation of a section of Route 26 (between Arroyo Sauce del Cañote and Río Tacuarembó; 20.9 km in length; estimated cost, US\$ 5 million). While this highway is defined as a primary system road, its pavement, transverse profile, planimetry, and altimetry features resemble those of highways defined as secondary system roads. The

second section selected for the sample belongs to the Route 3 international corridor (between kms 128 and 153; 25 km in length; estimated cost, US\$ 16 million). These works are reasonably representative of the universe of works eligible for financing, and their estimated cost is equivalent to 28% of the program amount under Component 2 and 38% of the Bank's contribution to this component.

- 1.42 **Economic evaluation.** The DNV conducted an economic evaluation (cost-benefit analysis) of these works using HDM-4, the standard model for the sector. The evaluation yielded an economic IRR of 17.4% and an economic NPV of US\$940,000 at 12%, thus justifying the intervention. The results of the analysis are set forth in the program's economic evaluation document included in [optional link 2](#), and are summarized in the following table. An economic evaluation of the second project in the representative sample is under way, and the results will be available by the time the proposal is presented to the Board of Executive Directors.

Table II. Economic evaluation – Route 26 (Sauce del Cañote – Río Tacuarembó)				
Indicator	Base case	20% benefit reduction	20% cost increase	20% benefit reduction and 20% cost increase
NPV (US\$)	940,000	670,000	860,000	580,000
EIRR (%)	17.4	15.9	16.1	14.9

## II. FINANCIAL STRUCTURE AND MAIN RISKS

### A. Financial instruments

- 2.1 The cost of the program is US\$ 100 million, to be financed in accordance with the breakdown indicated in the cost table. Bank financing will be provided through an investment loan for multiple works. The execution period will be five years, pursuant to the following timetable.

Table III- Disbursement schedule (in millions of U.S. dollars)						
	2012	2013	2014	2015	2016	Total
IDB	9.6	17.6	25.6	17.6	9.6	80.0
Local	2.4	4.4	6.4	4.4	2.4	20.0
Total	12.0	22.0	32.0	22.0	12.0	100.0

### B. Environmental and social risks

- 2.2 In view of the Environment and Safeguards Compliance Policy (OP-703), the program's nature and objectives, and its environmental and sociocultural impacts and risks, this program was classified as a category B operation. Thus, it only requires an Environmental and Social Management Plan (ESMP) focused on specific construction issues. Moreover, the program's activities and works do not



require a prior environmental permit under Uruguayan environmental legislation (Decree 349/05).

- 2.3 The proposed program will have positive economic as well as social and environmental impacts. The initial improvement in and subsequent maintenance of wearing surface conditions will preserve the country's road assets and reduce transport costs and travel times not only for freight but also for passengers.
- 2.4 Due to the simplicity and small scale of the works to be financed, the potential negative environmental impacts associated with their execution are limited to localized water, soil, or air pollution caused by construction debris or materials. These materials will be restricted to the work sites and be present only during the construction period, and their effects can be prevented or mitigated through well-known and easily applied environmental management measures. The program's works will be supported by an ESMP identifying the environmental management measures to be incorporated into the bidding documents and the respective works execution contracts. The DNV is responsible for supervising the works.
- 2.5 All DNV road works follow the technical and environmental procedures and specifications contained in the Environmental Manual for Road Sector Works and Activities. These procedures and specifications were reviewed and deemed appropriate by the project team, and were therefore fully incorporated into the ESMP. This means that when the manual is applied, so is the ESMP. The general specifications for the environment (GSE), contained in the second part of the manual, are considered an integral part of all contracts governed by the DNV document known as Pliego de Condiciones Generales [general terms and conditions]. In addition, the works will be under an environmental monitoring and control system that will apply to all signed contracts, in accordance with the DNV's internal procedures.
- 2.6 The works will be performed within the current right of way; consequently, no properties, homes, environmental or socially sensitive areas, or indigenous areas should be affected. In the event that environmental or socially sensitive areas are affected, the Environment and Safeguards Compliance Policy (OP-703) will apply. In the event that structures are affected, requiring the relocation of populations or economic activities, the appropriate mitigation measures will be applied based on the Bank's Involuntary Resettlement Policy (OP-710).
- 2.7 The DNV has the required capacity to ensure the program's sustainable implementation and to supervise the works from an environmental standpoint. Each project has a director of works who ensures that all work associated with the project is properly performed, including the environmental aspects, which under Uruguayan legislation are assigned a value equal to at least 3% of each project's total value.
- 2.8 The DNV acknowledges, as agreed upon with the Bank, that in the event that road works to be implemented are included in the list contained in article two of Decree 349/2005, a prior environmental permit will have to be obtained from the National

Environmental Protection Department (DINAMA) and sent to the Bank upon commencement of the works and an environmental permit will have to be similarly obtained and submitted upon commencement of operations.

**C. Fiduciary risk**

- 2.9 As part of the program's preparation, the MTOP's performance as executing agency for the preceding loan (1582/OC-UR), now in its closing stage, was taken into account and the Institutional Capacity Assessment System (ICAS) method was implemented. The ICAS report concluded that the MTOP has satisfactory institutional capacity, with a satisfactory degree of development and low risk. In view of these results, no risk or improvement matrices were generated by the ICAS tool. The low risk result gives rise only to minor measures consisting in suggestions for efficient and effective management of program resources. See [optional link 3](#).

**D. Other special aspects and risks**

- 2.10 A risk management analysis was conducted and identified risks were classified as low. This analysis determined accordingly that mitigation measures did not need to be implemented.

### **III. EXECUTION AND MANAGEMENT PLAN**

**A. Execution mechanism**

- 3.1 **Borrower and executing agency.** The borrower will be the Eastern Republic of Uruguay. The program's executing agency will be the MTOP, acting through three of its national departments, as follows:
- a. Component 1, the National Planning and Logistics Department (DNPL) for railway-related issues and the National Highways Department (DNV) for the rest of the component.
  - b. Components 2 and 3, the DNV.
  - c. Component 4, the National Topography Department.
  - d. Component 5, the DNPL for railway-related issues and the DNV for the rest of the component.
- 3.2 The MTOP has implemented programs financed by multilateral lending agencies in the past and continues to do so. These programs have financed activities included in the basic scope of tasks and responsibilities of the MTOP, which the MTOP carries out with its own funds and with external financial assistance. Through officials within its own structure, the MTOP prepares bidding documents, issues calls for national and international competitive bidding, and supervises and controls the execution of consulting contracts and works contracts arising from bidding processes.<sup>17</sup>

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<sup>17</sup> ICAS report, optional electronic link 3

- 3.3 The MTOP observes the forms required by the multistage public spending process. Thus, its organizational structure includes an External Financing Advisory Office reporting directly to the minister, which will coordinate program execution and be responsible for relations with the Bank, and an International Loans Office reporting to the Accounting and Finance Division.
- 3.4 **Procurement.** Given the identified level of risk, reviews will be ex post for the thresholds listed in Table 1 of the Fiduciary Agreements and Requirements annex.
- 3.5 **Disbursements.** The program's resources will be disbursed as advances based on the project's actual liquidity needs. Supervision will be performed on an ex post basis, since this is how it was done with the preceding loan (1582/OC-UR) without giving rise to comments from the external audits in the annual reviews.
- 3.6 **Retroactive financing.** The Government of Uruguay has requested retroactive financing from the Bank to cover program progress in the Route 26 rehabilitation works and with the consulting services to provide support and assistance for actions aimed at strengthening railway activity in Uruguay. The loan will finance eligible expenditures for works and consulting services incurred during the 18 months preceding its approval and up to 25 August 2011 (project profile approval date), provided they satisfied requirements substantially similar to those established in the loan contract, in accordance with OP-504. The estimated amount of such expenditures totals US\$4 million.

## **B. Summary of monitoring and evaluation measures**

- 3.7 The purpose of the monitoring plan is to monitor the program's execution, the performance of the proposed activities, and the physical and financial execution of the outputs. The plan focuses on three main elements: (i) administrative monitoring and control; (ii) monitoring of activities and outputs; and (iii) monitoring of program outcomes.
- 3.8 Before and after models and ex post cost-benefit analyses will be used to monitor and evaluate the program's expected outcomes. The evaluation is primarily based on the use of the Highway Development and Management (HDM-4) model. The ex post cost-benefit analysis of each of the works financed by the program will be a replica of the model used ex ante as part of the feasibility studies for these projects. This analysis is expected to involve two stages. In the first, the program's expected benefits are updated while maintaining the costs constant; this makes it possible to measure whether, with the costs as planned, the benefits are sufficient to recover the investment. In the second stage, both the benefits and the costs are updated, thus obtaining a measure of whether the project has been a profitable investment given the actual costs and benefits. This staged analysis makes it possible to isolate the effect of a potential exogenous cost increase from the effect of changes in the realized benefits. In the case of design and construction of road safety countermeasures in up to two pilot projects, a method will be developed to identify the most appropriate indicators for measuring the impact of the implemented measures.

Development Effectiveness Matrix			
Summary			
I. Strategic Alignment			
1. IDB Strategic Development Objectives	Aligned		
Lending Program	The intervention contributes to (i) the lending program for small and vulnerable countries, and (ii) to support regional cooperation and integration.		
Regional Development Goals	The intervention contributes to Paved road coverage (Km/Km <sup>2</sup> ).		
Bank Output Contribution (as defined in Results Framework of IDB-9)	The intervention contributes to following Bank output "Km of inter-urban roads build or maintained/upgraded".		
2. Country Strategy Development Objectives	Aligned		
Country Strategy Results Matrix	GN-2626	The intervention contributes to improving maintenance of the road network.	
Country Program Results Matrix	GN-2617	In preparation.	
Relevance of this project to country development challenges (If not aligned to country strategy or country program)			
II. Development Outcomes - Evaluability	Highly Evaluable	Weight	Maximum Score
	9.0		10
3. Evidence-based Assessment & Solution	8.3	25%	10
4. Ex ante Economic Analysis	10.0	25%	10
5. Monitoring and Evaluation	7.9	25%	10
6. Risks & Mitigation Monitoring Matrix	10.0	25%	10
Overall risks rate = magnitude of risks*likelihood	Low		
Environmental & social risk classification	B		
III. IDB's Role - Additionality			
The project relies on the use of country systems (VPC/PDP criteria)	Yes	Financial Management: Budget, Treasury, External Control. Procurement: Information System, Shopping Method, National Public Bidding.	
The project uses another country system different from the ones above for implementing the program			
The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions:			
Gender Equality			
Labor			
Environment	Yes	In the middle run, the project should have positive environmental effects related to the reduction of GHG and, eventually to the solution of environmental liabilities.	
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	A TC is in preparation in order to strengthen the institutional capacity of the Government of Uruguay for the improvement of planning, execution and financing activities relatad to the update and preservation of the national road network. All this should allow to reach efficient quality standards.	
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan.	Yes	The impact evaluation of the progam should measure if the intervation succeded in: (i) creating value for the society ; (ii) implementing efficient preservation policies ; (iii) implementing effective preservation policies; and (iv) implementing effective road security interventions.	

"The Program's objective is to support the conservation and efficient management of road infrastructure whose capacity is being put under pressure by the high economic growth rate related to agricultural and forestry activity, and the consequent impact on heavy weight traffic. The specific objectives of the Program are: (i) Sustain the financing needs of the National Road Authority in conservation activity of the road network under its supervision, as well as strengthen its technical and institutional capacities; (ii) Improve road network safety in inter-urban areas; (iii) Contribute to increase the participation of the railroad in the transportation system ."The intervention contributes to the loan program for reducing poverty and promoting equity as well as to support regional cooperation and integration. In terms of regional goals, it contributes to the coverage of paved roads (km/km<sup>2</sup>). It contributes to the Bank product related to Km of inter-urban roads build or maintained/upgraded. The intervention is aligned with the strategic objective "improving maintenance of the road network".

The diagnosis clearly identifies, based on empirical evidence, the main problem and the factors that determine it. The logic of the proposed intervention is clear. Results and products indicators are SMART, with baselines, targets and specific information sources. The program has a cost-benefit analysis ex ante for one of the projects included in the representative sample, using reasonable assumptions that will be applied to each of the projects funded under the program. The intervention includes a monitoring and evaluation plan in accordance with the guidelines of the Bank and the characteristics of road infrastructure projects. Through the evaluation, the ex post cost-benefit analysis is expected to be replicated of each of the projects.

The risks have been identified, as well as mitigation measures and metrics to monitor its implementation.

## RESULTS MATRIX

<b>Project objective</b>	To support efficient maintenance and development of surface transport infrastructure, particularly by: (i) supporting DNV financing of maintenance of the road system under its jurisdiction, while developing the DNV's technical and institutional capacities; (ii) improving road safety conditions in the interurban network; and (iii) helping to raise the railway system's share of the cargo matrix.
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Indicators	Baseline	Target
<b>Expected outcome: road maintenance in productive corridors on sections of the main road system (integration corridors and primary road system) and secondary road system</b>		
Vehicle operating costs (VOC) on rehabilitated sections. <sup>1</sup>	0.197 U\$/km; (2011 US\$) (Measured for private vehicles. During execution, the indicator will also be measured for passenger buses, light trucks, and heavy trucks on each rehabilitated section.)	At least 2.5% reduction in VOC on the rehabilitated section
Maintenance condition <sup>2</sup> (percentage)	<p>Maintenance condition<sup>2</sup> international corridors and primary road system</p> <p>Very good 49 Good 17 Fair 18 Poor 16</p> <p>Maintenance condition<sup>2</sup> secondary road system</p> <p>Very good 6 Good 19 Fair 40 Poor 35</p>	<p>Maintenance condition<sup>2</sup> international corridors and primary road system</p> <p>Very good 54 Good 22 Fair 13 Poor 11</p> <p>Maintenance condition<sup>2</sup> secondary road system</p> <p>Very good 11 Good 24 Fair 35 Poor 30</p>

<sup>1</sup> The value is for an average theoretical section of the system, built as the weighted average of the VOC for the sections included in the representative sample. As the specific sections to be targeted are identified and analyzed, the baseline for each specific section will be redefined. The goal is defined as a 2.5% reduction in VOC on the selected section of the corridor, although it could be redefined based on the magnitude of the works and their impact on the specific corridor.

<sup>2</sup> The values for this baseline and target are for the current and expected median condition of the international corridors, primary road system, and secondary road system. As the corridors and sections to be targeted are selected over the course of program execution, these values will be replaced by the values for the specific sections and corridors.

Indicators	Baseline	Target
Weighted road asset value in rehabilitated sections. <sup>3</sup>	International corridors and primary road system: 103.4% Secondary road system: 91.7% Tertiary road system: 98.1% Total road system: 99.6%	100% in each of the rehabilitated corridors
Maximum IRI (international roughness index) on rehabilitated concrete-paved sections. <sup>4</sup>		2 m/km
Maximum IRI on rehabilitated asphalt-paved sections		1.8 m/km +/- 15% at provisional acceptance 2 m/km +/- 15% at final acceptance
Maximum IRI on rehabilitated sections with bituminous surface dressing		2,5 m/km +/- 15% at provisional acceptance 2,8 m/km +/- 15% at final acceptance

<sup>3</sup> Weighted road asset value (PRAV/MRAV). The present road asset value (PRAV) is the economic value of building the existing road infrastructure in its current state. In addition, minimum road asset value is defined as infrastructure value in its worst admissible condition; maximum road asset value is defined as the value of all-new infrastructure; and median road asset value (MRAV) is defined as the average of the minimum and maximum road asset values. Studies conducted by ECLAC establish that aggregate transport costs (infrastructure maintenance costs plus vehicle operating costs) are lowest when the road asset value slightly exceeds the median road asset value. The objective of this program is to maintain this value above 100% in the corridors to be targeted, as this would indicate that a successful road maintenance policy is being pursued.

The value equivalent to the average for the various types of road systems is presented as a baseline for reference purposes. As the specific sections to be targeted under the program are identified, a specific baseline will be defined for each corridor to be targeted. The minimum target is for each targeted corridor to attain a weighted road asset value of 100%, thus reflecting a successful maintenance policy. However, a higher target could be established if the corridor's pre-upgrade values are above average.

<sup>4</sup> A baseline will be determined for each targeted corridor.

<b>Expected outcome: improve road safety conditions in the interurban road system</b>		
Accidents with victims (dead or injured) <sup>5</sup> (based on a preliminary list of locations to be targeted: rural highway crossings and urban through roads)	64 (in 2010)	20% reduction in accidents with victims at the targeted locations
<b>Expected outcome: Institutional restructuring of the railway sector</b>		
Creation and start of operations of: (i) the railway infrastructure and transportation companies; (ii) the Department of Rail Transportation.	Vertically integrated company (transportation and infrastructure); absence of regulatory agency or agency responsible for railway policy.	(Rail transportation and infrastructure) companies created and operating according to a design proposed by the Government of Uruguay; new operating regulations implemented; Department of Rail Transportation created and operating.
Productive efficiency in the railway sector (measured by tons-km transported per available car)	0.239	0.570 <sup>6</sup>
<b>Expected outcome: access to and use of accurate geographic information<sup>7</sup></b>		
% of originally identified users who, 24 months after having the geographic information at their disposal, use it (in addition to MTOP users).	0	60%

<sup>5</sup> Accidents with victims, average for the last four years at the locations in the reference list of interventions. The method to be used for measuring and evaluating accidents will be perfected and expanded as part of program monitoring and evaluation.

<sup>6</sup> If the institutional reform is successful, railway transport should operate at higher technical efficiency levels; a technical efficiency indicator is selected, and the target or the loan execution period is established as halving the productive efficiency gap with the Argentine railway system average.

<sup>7</sup> As a condition precedent to the execution of the program's Component 4, the users of the geographic information to be provided must be identified; once they are identified, the proposed target is for 60% of them to have used or be using the information generated.

Expected project outputs						
<b>Component 1: Engineering and other studies</b>	Program management, evaluation, and monitoring. Technical and environmental supervision of works and audits. Consulting studies to evaluate the institutional, technical, socioeconomic, and environmental feasibility of works not included in the sample and detailed designs.					
	Baseline	Year 1	Year 2	Year 3	Target	Comments
Number of feasibility studies and final engineering designs available for calls for bids approved	0	2	2	2	6	To be redefined according to the selected sections
Number of financial audit reports with the Bank's no objection.	0	1	1	1	3	
Number of completed works contracts	0	1	2	3	6	
Number of program evaluation reports approved.	0		1	1	2	



Component 2: Road rehabilitation	Road maintenance in productive corridors on sections of the main road system (integration corridors and primary road system) and secondary road system					
	Baseline	Year 1	Year 2	Year 3	Target	Comments
<b>Outputs</b>						
Length of rehabilitated international corridors or primary system roads (km)	0	21	21	21	63	
Length of rehabilitated secondary system roads (km)	0	21	21	21	63	

Component 3: Road safety	Improvement of road safety conditions in the interurban road system					
	Baseline	Year 1	Year 2	Year 3	Target	Comments
<b>Outputs</b>						
Length of highway with lighting (km)	0				57	
Regulatory study for treatment of urban through roads delivered to the DNV by the consultant	0		1		1	
Urban through road pilot performed	0		1	1	2	

<b>Component 4: Geographic systems</b>	<b>Access to and use of accurate geographic information</b>					
	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Target</b>	<b>Comments</b>
<b>Outputs</b>						
Survey carried out	0		1		1	
Processed information available to internal and external MTOP users <sup>8</sup>	0			1	1	
<b>Component 5: Institutional strengthening</b>	<b>Institutional strengthening of the DNV and the railway sector</b>					
	<b>Baseline</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Target</b>	<b>Comments</b>
<b>Outputs</b>						
Road safety audits conducted	0		5	5	10	
DNV restructuring proposal designed and approved by the MTOP	0		1		1	
DNV planning and management systems implemented and operational	0		1	1	2	
Railway business plans approved and implemented	0				1	
Number of consulting supervision contracts completed.	0	1			1	

<sup>8</sup> As a condition precedent to execution of this component, the MTOP will establish the scope of this component; at that point, the scope of the baseline and target for this output will be determined.

## **FIDUCIARY AGREEMENTS AND REQUIREMENTS**

**Country:** Uruguay  
**Project number:** UR-L1067  
**Name:** Road Infrastructure Program II  
**Executing agency:** Ministry of Transportation and Public Works (MTOP)  
**Prepared by:** Nadia Rauschert and Gabriele M. del Monte

### **I. THE COUNTRY'S FIDUCIARY CONTEXT**

- 1.1 The Fiduciary Agreements and Requirements for this program are based on the 2005 Country Financial Accountability Assessment (CFAA) for Uruguay, on the knowledge of the executing agency (MTOP) in charge of the preceding loan 1582/OC-UR Road Infrastructure Program (UR-L1001), the final disbursement of which is scheduled for 17 November 2011, and on the ICAS report on the executing agency dated September 2011.
- 1.2 Uruguay's fiduciary risk is considered low, i.e., there is little likelihood that public and donor funds will be used for unauthorized purposes. In general, public financial administration in Uruguay is considered responsible and transparent, although excessively bureaucratized. As for public procurement, although the country has a respected legal and institutional framework with a sound legal foundation, its weaknesses foster inefficient practices that undermine effectiveness and generate higher costs. In this context, Uruguay is considered to be "medium risk." Studies conducted in 2005 and 2008 show that corruption is not perceived as a problem.
- 1.3 The estimated total cost of the program is US\$100 million (US\$80 million in IDB financing and US\$20 million from the local counterpart). The borrower and guarantor for the operation will be the Eastern Republic of Uruguay, and the executing agency will be the MTOP, through the National Highways Department, which will execute all components except for Component 4, to be executed by the National Topography Department, and the railway subcomponents of Components 1 and 5, to be executed by the National Planning and Logistics Department. The External Financing Advisory Office, which reports directly to the Minister, will continue to be in charge of program coordination. The International Loan Department of the MTOP's Accounting and Finance Division will continue to be responsible for accounting and disbursements.

### **II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY**

- 2.1 The executing agency for this loan is the same as for loan 1582/OC-UR and prior Bank operations, and its fiduciary context is satisfactory. Since June 2007, the

- aforementioned loan is subject to ex post review of disbursements, while ex post review of procurement was provided for under clause 4.01 of the loan contract.
- 2.2 Budget: The project and its corresponding loans must be included in the 2010-2014 Five-year Budget.
  - 2.3 Treasury: The General Treasury Account (CUN) is used, through a specific bank account to be opened by the project at the Central Bank of Uruguay;
  - 2.4 For accounting and financial reporting, the budget execution module of the integrated financial information system (SIIF) will be used, and the new SIIF module for loans with external financing will be used for accounting or parallel accounting software if the SIIF module is not ready for implementation at the start of execution. The executing agency will prepare its annual financial statements in accordance with suitable accounting standards.
  - 2.5 Internal control: The executing agency will operate in the central administration's internal control environment.
  - 2.6 External control: It will be performed by the Auditor General's Office (TCR), which has a level one eligibility rating.

### **III. FIDUCIARY RISK EVALUATION AND MITIGATION MEASURES**

- 3.1 The RMG methodology was applied to the loan during the analysis mission to identify the operation's risks, including fiduciary risk. Due to the experience acquired with loan 1582/OC-UR, the operation has a **low risk** profile, so fiduciary mitigation actions will be those typical for this level of risk (see the Financial Supervision Plan at the end of this annex).
- 3.2 Components that are not related to the construction of works, using staff that has no experience with IDB standards, could contribute an element of uncertainty. However, this potential risk is mitigated through the very good performance of the DNV's planning area and through the procurement workshops to be conducted before proceeding with the procurement processes for these components.
- 3.3 The RMG report did not reveal any specific procurement problems. The works are essentially procured under ICB but are of a standard type without any of the technical complexities that could lead to higher costs or create competitiveness issues.
- 3.4 In addition, an ICAS analysis performed in September 2011 showed that the executing agency has satisfactory institutional capacity, which is associated with a low risk level. However, with regard to its control capacity, the assessment yielded mixed results: medium for internal control and satisfactory for external control. This could have a slight impact on effective and efficient use of project resources. In the procurement area, the ICAS tool's Goods and Services Administration System also produced a satisfactory score. Consequently, this area is deemed to be LOW RISK.

#### IV. CONSIDERATIONS FOR THE SPECIAL CONDITIONS OF CONTRACTS

4.1 Below are the agreements and requirements to be reflected in the Special Conditions:

- **Exchange rate:** The executing agency has opted for pesofication, i.e., the exchange rate used in converting the U.S. dollars transferred by the Bank into local currency.
- **Financial statements:** They must be presented at the end of each year and audited by the TCR. Also, the TCR should report on its review of disbursement processes and requests, the evaluation of the internal control system, and potential noncompliance with provisions of the loan contract.
- **Taxes:** Regarding their financing (whether they are to be charged to the loan or paid with general revenues, the executing agency reported that 60% of the VAT withholding is paid with local contribution resources and the remaining 40% is chargeable to the loan.
- **Interest:** In agreement with the Ministry of Economy and Finance (MEF), the executing agency reported that interest will be paid with general revenues rather than from the loan proceeds.

#### V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

5.1 The procurement policies applicable to this loan are GN-2349-9 and GN-2350-9.

5.2 Procurement execution

- (i) Prior to the start of procurement, the procurement plan for the first 18 months must be entered in the Procurement Plan Execution System and be kept up to date by the executing agency.
- (ii) The appropriateness of the expenditure, i.e., the terms of reference, technical specifications, bidding documents, and budget, is the responsibility of the project's sector specialist, and always requires this specialist's prior no objection, for the start of the procurement process, regardless of the type of procurement process review (whether ex ante or ex post).

5.3 Procurement of works, goods, and nonconsulting services:<sup>1</sup> Contracts generated and subject to international competitive bidding will be executed using the Bank-issued standard bidding documents. Bidding processes subject to national competitive bidding will use bidding documents satisfactory to the Bank.

- (i) Without detriment to the relevant IDB policies, direct contracting may be used for technically simple services and inputs of minor economic value (minor cost) up to a limit of US\$5,000 or the equivalent. For higher amounts, the procurement process will follow the appropriate competitive method.

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<sup>1</sup> "Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank" (document GN-2349-9), paragraph 1.1: Nonconsulting services are treated as goods.

- 5.4 Procurement, selection and contracting of consultants
- (i) Consulting firms: Will be selected and contracted in accordance with IDB policies.
  - (ii) **Individual consultants:**<sup>2</sup> Will be selected and contracted in accordance with IDB policies.
- 5.5 Training: Direct contracting will be used when the individual cost of each instance of procurement is less than US\$5,000. For higher amounts, the procurement process will follow the appropriate competitive method.
- 5.6 Advance procurement: There are two instances of advance procurement: one, for approximately US\$5 million, relating to the works on Route 26, to be carried out under international competitive bidding and for which suggested bidding documents have been sent to facilitate favorable acceptance after the signing of the loan contract; and another, for an estimated amount of US\$2.7 million, relating to the selection of a consulting firm to provide support and assistance for actions aimed at strengthening railway activity in Uruguay. In the latter case, there has been close collaboration and the bidding documents are essentially the Bank's.
- 5.7 Recognition of expenditures: Expenditures incurred prior to the signing of the loan contract will be recognized provided they are incurred in connection with the contracts described in the preceding item and do not exceed US\$4 million.

**1. Threshold amounts (US\$000s) applicable to Uruguay**

Works			Goods <sup>3</sup>			Consulting services	
ICB	NCB	Shopping	ICB	NCB	Shopping	International publicity	Short list, 100% national
≥ 3,000	250-3,000	≤ 250	≥ 250	50-250	≤ 50	> 200	≤ 200

<sup>2</sup> According to Section V of document GN-2350-9, short lists are not required, and the standard request for proposals is not used.

<sup>3</sup> Includes nonconsulting services.

Ex post review threshold for project UR -L1067		
Works	Goods and nonconsulting services	Consulting firms and individual consultants
<ul style="list-style-type: none"> <li>Shopping up to US\$250,000</li> <li>NCB up to US\$3,000,000</li> </ul>	<ul style="list-style-type: none"> <li>Shopping up to US\$50,000</li> <li>ICB up to US\$250,000</li> </ul>	<ul style="list-style-type: none"> <li>Firms: QCBS up to US\$200,000 (NCB)</li> <li>Individual consultants up to a contract amount of US\$50,000</li> </ul>

5.8 Others: not applicable (n/a)

5.9 Main procurement processes. The procurement processes for the first 18 months are described in the procurement plan set forth in the mandatory annex to the loan proposal. Most involve international competitive bidding for works that are not technically complex or procedures that do not warrant specific mention.

5.10 Recurring costs and funds awarded by competition: n/a.

5.11 Procurement supervision

(i) In view of the identified level of risk, the review method is ex post (for application thresholds, please refer to Table 1 and will be immediately applicable.

(ii) The ex post review<sup>4</sup> of the processes will be conducted every 12 months in accordance with the loan's supervision plan. Before the start of procurement, the execution unit staff will participate in a workshop on ex post review to ensure uniform criteria and to answer questions.

(iii) Ex post review reports will provide for physical inspection visits.<sup>5</sup> Consequently, the proper budgetary allocation must be included in the annual fiduciary transactional budget.

(iv) Notwithstanding the foregoing, the appropriateness of an expense will be determined as set forth in paragraph 1.2 above.

## VI. FINANCIAL MANAGEMENT

6.1 Programming and budget

(i) For preparation of the Executive Branch's National (Five-year) Budget, the central government agencies present their proposal to the MEF prior to 31 July in the first year of the administration. The MEF coordinates the budget preparation process with support from the Office of Planning and Budget (OPP) and the National Civil Service Office (ONSC) and submits a draft national budget to the Executive Branch, which approves it and sends it to the Legislature prior to 31 August of the same year. The Legislature is given

<sup>4</sup> The responsibility, review support, and methodology are described in the document [Ex post guidelines for procurement](#).

<sup>5</sup> The inspections verify the existence of the procurement, leaving verification of quality and of compliance with specifications to the sector specialist.

120 days to review, approve, and comment on the amounts, without making any changes that entail higher expenditures. Any budget reprogramming and expansion, as the case may be, is submitted by the Executive Branch on an annual basis when presenting the rendering of accounts and budget execution report.

- (ii) For this project, the local counterpart is US\$20 million (20% of the program cost). By the end of February of each year, the execution unit will demonstrate to the Bank that the local counterpart resources have been allocated, and for the first year of the program this will be done by the executing agency upon the fulfillment of conditions precedent.

## 6.2 Accounting and information systems

- (i) The budget appropriations approved for the project under the Five-year Budget Law are allocated and executed through the SIIF of the General Accounting Office (CGN). Consequently, the relevant CGN procedures will be followed to process commitments and payments related to the project. Regarding accounting records, the CGN is now developing a SIIF accounting module for transactions with international agencies. Development and testing of this module is expected to be completed by the end of this year, and the module is to be tried in two or three pilot projects. The MTOP's executing unit will be asked to consent to be a pilot for this new system, provided the execution start times are in line with the module's development. Otherwise, other systems will need to be used in parallel to SIIF to keep accounting records of the transactions.
- (ii) Financial statements will be delivered on at least an annual basis, in accordance with relevant accounting standards and the Bank's guidelines for financial reports and external audits, and must be audited by the TCR.

## 6.3 Disbursements and cash flow

- (i) For the purpose of executing project funds, the National Treasury (TGN), at the request of the project executing unit, will open a special account at the Central Bank of Uruguay (BCU). This account will receive the funds disbursed by the Bank, but because of its nominative nature, it cannot be used to make payments. Consequently, a specific bank account will be opened for the project at the State-owned commercial bank (Banco de la República Oriental del Uruguay – BROU) for purposes of making the corresponding payments. The procedure for making a payment is as follows:
  - the executing agency enters the payment request in the SIIF;
  - the TCR preaudits the request;
  - the TGN requests a transfer from the project's special account at BCU to the commercial bank account;
  - upon receipt of the funds in the account, the executing agency transfers the funds or issues a check to the payment's beneficiary.



- (ii) However, it has been indicated to the executing agency that the TGN is making improvements in its payments system to allow payments for expenses charged to the loan to be processed in the same way as is currently done with payments from general revenues, i.e., from Treasury-administered bank accounts forming a part of the General Treasury Account (CUN). This would eliminate the operating accounts at BROU, which generate high usage and maintenance costs. It is expected that the system will be updated and the new procedure implemented by the time of execution of this program.
- (iii) Disbursements will be made in the form of advances, based on actual liquidity needs supported by sound financial and disbursement projections. Preferably, these advances will be disbursed every six months, after an accounting has been provided for at least 80% of the amount advanced. The accounting reports and the financial planning form must be submitted as documentation. The MTOP has announced that disbursements under the new loans will be made using e-disbursements.
- 6.4 Internal control and internal audit
- (i) The internal control system is based on the country system established by laws and regulations in force. In accordance with the Amended Accounting and Financial Administration Code (TOCAF), the TCR conducts a preventive intervention for all project-related expenditures. The level of reliability for the execution of this operation is high.
- 6.5 External control and reports
- (i) The country external control system is managed by the TCR. The previous operation with the MTOP (1582/OC-UR) was audited by the TCR, with timely delivery and unqualified opinions for the corresponding annual reports. On this project, the executing agency's intention is for the TCR to continue to audit its financial statements.
- (ii) The annual financial audit reports and the review of disbursement processes and requests will be delivered for each fiscal year during the disbursement phase, by 30 April of the following year. The audit rules issued by the International Organization of Supreme Audit Institutions (INTOASI) will be taken into consideration. The audit costs will be agreed upon in the Service Agreement Letter of the TCR, and will be financed with local counterpart resources.
- 6.6 Financial supervision plan
- (i) The initial financial supervision plan includes the following:
- Participation in the launch workshop structured by the project team, with a brief presentation of issues relating to the fiduciary reform.
  - Review of the financial conditions precedent (chart of accounts, agreement with the TCR, evidence of budgetary allocation of the resources).

- Review of the annual work plan and the initial financial plan prepared by the executing unit as support for the first advance to be requested after program eligibility.
- In addition to the annual review of the audited financial statements issued by the TCR, one financial visit per year will be conducted during project execution to evaluate such matters as: reconciliation of the advance and investment account, implementation of recommendations from the external audit, quality and timeliness of accounting records, and storage of documentation.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/11

Uruguay. Loan \_\_\_/OC-UR to the Eastern Republic of Uruguay  
Road Infrastructure Program II

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Eastern Republic of Uruguay, as Borrower, for the purpose of granting it a financing to cooperate in the execution of the Road Infrastructure Program II. Such financing will be for an amount of up to US\$80,000,000 from the Single Currency Facility of the Ordinary Capital resources of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

Conditional provision: This resolution will enter into force on January 1, 2012.

(Adopted on \_\_\_\_\_)

LEG/SGO/CSC/IDBDOCS#36516135  
UR-L1067