

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

URUGUAY

CITY OF MONTEVIDEO DRAINAGE AND SANITATION SYSTEM EXPANSION AND IMPROVEMENT PROJECT

(UR-L1069)

LOAN PROPOSAL

This document was prepared by the project team consisting of: Sergio Campos (WSA/CAR), Project Team Leader; Kleber Machado (INE/WSA), Alternate Project Team Leader; Cynthia Nuques (INE/WSA); Omar Garzonio (WSA/CAR); Tania Paez (WSA/CUR); Nadia Rauschert (PDP/CUR); Gabrielle del Monte (PDP/CUR); Javier Cayo (LEG/SGO); Oscar Camé (VPS/ESG); and Camilo Garzon (consultant).

This document is being released to the public and distributed to the Bank's Board of Executive Directors simultaneously. The Board may or may not approve the document, or may approve it with modifications. If the document is subsequently updated, the updated document will be made publicly available in accordance with the Bank's Access to Information Policy.

CONTENTS

PROJECT SUMMARY

| | | |
|------|---|----|
| I. | DESCRIPTION AND RESULTS MONITORING | 1 |
| A. | Background, problem addressed, and rationale..... | 1 |
| II. | OBJECTIVE, EXPECTED RESULTS, COMPONENTS, AND COST | 5 |
| A. | Objective and components..... | 5 |
| B. | Cost and financing | 6 |
| C. | Key results indicators..... | 7 |
| III. | FINANCING STRUCTURE AND RISKS..... | 8 |
| A. | Financing structure..... | 8 |
| B. | Social and environmental safeguards | 9 |
| C. | Other aspects and risks..... | 9 |
| IV. | EXECUTION AND MONITORING PLAN..... | 13 |
| A. | Execution mechanism | 13 |

| ANNEXES | |
|-----------|--|
| Annex I | Summary Development Effectiveness Matrix (DEM) |
| Annex II | Results matrix |
| Annex III | Fiduciary agreements and requirements |

| ELECTRONIC LINKS | |
|------------------|---|
| REQUIRED | |
| 1. | Annual work plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36440267 |
| 2. | Monitoring and evaluation plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36475051 |
| 3. | Procurement plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36440278 |
| 4. | Environmental and Social Management Report http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36475052 |
| 5. | Safeguard Screening Form for classification of projects http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36475665 |
| OPTIONAL | |
| 1. | Technical report http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36475050 |
| 2. | Economic assessment report http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36441183 |
| 3. | Financial report http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36475236 |
| 4. | Institutional capacity assessment http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36442411 |
| 5. | Supporting documentation for the request for financing http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36475047 |
| 6. | Supporting documentation for the request for supplementary financing http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36475048 |
| 7. | Progress monitoring report http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36475054 |
| 8. | Study of alternatives and works in first stage http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36440390 |
| 9. | Environmental and social analysis http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36475053 |

ABBREVIATIONS

| | |
|--------|--|
| EIRR | Economic internal rate of return |
| ESMP | Environmental and Social Management Plan |
| GCI-9 | Ninth General Increase in the Resources of the Inter-American Development Bank |
| ICAS | Institutional Capacity Assessment System |
| ICB | International competitive |
| NCB | National competitive bidding |
| O&M | Operation and maintenance |
| PSU IV | Montevideo Sanitation Program |
| PTIC | Parque Tecnológico Industrial del Cerro [El Cerro Industrial Technology Park] |
| TCR | Tribunal de Cuentas de la República [State Audit Office] |
| UES | Unidad Ejecutora de Saneamiento [Sanitation Execution Unit] |

PROJECT SUMMARY

URUGUAY CITY OF MONTEVIDEO DRAINAGE AND SANITATION SYSTEM EXPANSION AND IMPROVEMENT PROJECT (UR-L1069)

| Financial Terms and Conditions | | | | | |
|--|----------------------|--|-----------|--|---------------------------------------|
| Borrower: Eastern Republic of Uruguay | | Amortization period: | | 25 years | |
| | | Grace period: | | 4 years | |
| | | Disbursement period: | | 4 years | |
| Executing agency: Municipal Government of Montevideo | | Disbursement period: | | 4 years | |
| Source | Amount (US\$) | Inspection and supervision fee: | | * | |
| IDB (Ordinary Capital) | US\$20.5 million | Interest rate: | | LIBOR | |
| Local | US\$10.0 million | Credit fee: | | * | |
| Total | US\$30.5 million | Currency: | | U.S. dollars from the Single Currency Facility of the Ordinary Capital. LCF ** | |
| Project at a Glance | | | | | |
| Program objective and description: The objective of the project is to minimize impacts from the lack of, or insufficient, urban drainage infrastructure in critical areas of the city of Montevideo. The project will finance storm drainage works, including: detention tanks to contain floodwaters, sewers to increase hydraulic capacity, spillways to divert excess water to pre-established waterways, and complementary structures. Of a universe of roughly 11 critical urban areas, three priority areas were selected based on the frequency of flooding and the magnitude of the impact on residents, buildings, homes, and local roads. These three areas are: (i) the upper watershed of Arroyo Seco (in Barrio Krüger), where 525 homes are affected; (ii) the upper watershed of Arroyo Quitacalzones (in Barrio Jacinto Vera), located in the central section of the city, where 610 homes, a school, and several city streets are affected by flooding; and (iii) the upper watershed of Cañada Peabody (in Barrio Lezica), particularly the areas adjacent to Calle Peabody, in the northern section of the city, where 357 homes have been damaged in the frequent flooding as a result of increasing population density and a gradual decrease in the ground’s capacity to absorb water in urban areas. The operation will also finance a smaller component that includes storm drainage, sanitation, and water systems for El Cerro Industrial Technology Park (PTIC), which at present are inadequate and/or in poor condition. | | | | | |
| Special contractual conditions precedent to the first disbursement: (i) evidence that a subsidiary agreement has been signed for the transfer of loan proceeds between the borrower and the executing agency (paragraph 3.1); (ii) evidence of a commitment by the Municipal Government of Montevideo to appoint the program coordinator and his/her work team, including a description of functions and of the professional qualifications needed to perform them (paragraph 4.1); and (iii) presentation of the program execution plan (paragraph 4.4). | | | | | |
| During execution: As an execution condition, the executing agency will be required to (i) meet the performance indicators included in Table II.2 (paragraph 3.11); and (ii) fulfill operation and maintenance obligations (paragraph 4.5). | | | | | |
| The program is consistent with the Bank’s country strategy: The program is consistent with the Bank’s country strategy inasmuch as it will contribute to the strategic objective of achieving greater sanitation and drainage coverage. | | | | | |
| Other financial conditions: None | | | | | |
| Exceptions to Bank policies: None | | | | | |
| Project qualifies as: | | SEQ [X] | PTI [X] | Sector [] | Geographic [X] Headcount [] |
| Procurement: The procurement of goods and works and the selection and contracting of consultants with proceeds from the loan will be handled in accordance with the applicable Bank policies, contained in documents GN-2349-9 and GN-2350-9. | | | | | |

* 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.

** Local Currency Facility.

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and rationale

- 1.1 The city of Montevideo, located on the left bank of the River Plate, is the country's largest urban area, with more than 1.3 million inhabitants (40% of the nation's population).¹ Urban sanitation and storm drainage services, provided by the Sanitation Division of the Municipal Government of Montevideo,² reach 1.1 million people through a 2,700-kilometer system of water mains and sewers covering an area of 14,000 hectares. Montevideo has one of the highest rates of coverage in the region for sanitation and storm drainage; however, due to the age of the system (construction began in 1856), it is mostly (64%)³ a combined system, i.e., the same sewers that carry storm water also collect and carry residential and industrial wastewater. This feature of the urban drainage infrastructure is particularly relevant to the issue of protecting public health, and lends urgency to the need to find solutions to the flooding problems caused by overflow and lack of capacity.
- 1.2 In order to address this situation, the Sanitation Division developed the Montevideo Sanitation Master Plan between 1992 and 1995, which analyzed the carrying capacity of the main combined collector sewers and identified overflow problems along public thoroughfares at various points in the city. However, these problems did not receive the attention they merited, given that other problems were considered at the time to be of greater urgency. These included issues such as expanding the sanitary sewer infrastructure using separate systems for unserved areas, in order to provide service to more people, prevent sewers from overflowing into waterways, promote the environmental recovery of Montevideo Bay, and protect the adjacent beaches.⁴ Since 2005, when the country and particularly Montevideo were struck by an exceptionally strong storm, it has been clear that the problems of urban flooding need to be addressed. As a result, the Sanitation Division: (i) began to develop hydrodynamic models to analyze a variety of climatic conditions (storms and extreme events); (ii) established guidelines and a work plan to update the Drainage Master Plan; (iii) examined solutions involving not only an expansion of the carrying capacity of the sewers, but also the buffering of high-volume flows; and (iv) implemented three pilot projects to buffer or contain

¹ National Statistics Institute, 1996 Census.

² The functions of oversight, regulation, and provision of services have been effectively separated and pertain to Dirección Nacional de Aguas y Saneamiento [National Water and Sanitation Directorate] (oversight entity), Unidad Reguladora de Servicios de Energía y Agua [Power and Water Service Regulatory Unit] (regulatory entity), and two service providers: Administración de Obras Sanitarias del Estado [State Sanitation Works Administration] and the Municipal Government of Montevideo. The latter of these operates through the Sanitation Division attached to the Environmental Development Department, responsible for managing sanitation and storm drainage services in the city of Montevideo.

³ Information provided by the Municipal Government of Montevideo.

⁴ Investments made during this period, which were partially financed with Bank resources, contributed substantially to the cited objective.

surges in water levels in Chon and Aparicio Saravia, Barrio San Nicolás (Carrasco Norte), and at the Torres Diamantis Plaza ([see optional link 5](#)).

- 1.3 Studies indicate that there are 11 critical urban areas where street and sidewalk flooding occurs, affecting homes as well as vehicle and foot traffic, and an estimated investment of US\$80 million is needed to provide solutions. Because these are relatively small urban watersheds, the flooding is sudden and short-lived, usually lasting less than two hours. However, the material and quality-of-life losses are significant, particularly when the waters enter homes, with levels often rising to more than a meter above street level. The Sanitation Division has prioritized residential areas for interventions, based on cost/benefit criteria and the severity of the damage caused by rain events (flooding of homes, types of flooding, effect on transportation, and presence of educational and health care institutions in the area). Using this analysis, a list of priority projects was drawn up. The three watersheds found to be in the most urgent need of attention were: (i) the upper and middle watershed of Arroyo Seco (in Barrio Krüger), where 525 homes are in jeopardy; (ii) the upper watershed of Arroyo Quitacalzones (in Barrio Jacinto Vera), located in the central area of the city, with 610 homes, a school, and several city streets at risk; and (iii) the watershed of Cañada Peabody (in Barrio Lezica), in the northern section of the city, where 357 homes have been damaged in the frequent flooding caused by increasing population density and a gradual decrease in the ground's capacity to absorb water (see [optional link 6](#)).
- 1.4 Two of these areas have a combined drainage system that was built before 1940, a period in which there was a tendency to underestimate the necessary size of the water mains and sewers, owing to the use of simplistic design criteria that were developed for other conditions.⁵ Moreover, these are densely populated urban areas, and the numerous structures and networks of other urban services, as well as the poor condition of the existing drainage infrastructure, make it difficult to construct the necessary physical solutions. The third case is a recently developed area, where due to the density of housing and the decreased capacity of the ground to absorb water, the carrying capacity of the existing sewers, gutters, and natural waterways have gradually been exceeded. In addition to major precipitation events (which occur at intervals of between two and ten years), a further contributing factor is the potential effect of climate change on rain patterns, an issue that is the subject of intense analysis by the Municipal Government of Montevideo (see paragraph 3.6).
- 1.5 **The municipal government's drainage and sanitation strategy.** This strategy has focused on: (i) expanding the coverage of sanitary sewer and storm drainage systems in areas where economically feasible; (ii) improving water quality in the receiving bodies of water consistent with their desired use; (iii) improving service in the areas currently being served; (iv) serving customer needs in a timely manner, and carrying forward educational programs to promote environmentally sustainable

⁵ These criteria did not take adequate account of local conditions with regard to intensity, duration, and frequency of rains, or of the use of the land and the resulting surface runoff.

- behaviors; (v) improving operational and commercial efficiency; and (vi) generating enough revenue to cover the costs of providing the service. The Municipal Government of Montevideo has been deploying this strategy since 1996, through implementation of the Montevideo Sanitation Master Plan. By the end of 2006, the city's drainage area had been expanded from 11,000 hectares to 13,700 hectares. The Municipal Government is updating the Master Plan, now known as the Montevideo Urban Sanitation and Drainage Master Plan, whose initial basic studies have served as the foundation for identifying and designing the proposed storm drainage solutions to be financed with proceeds from this operation.
- 1.6 **Project design.** The analysis of the problem of flooding in the urban area of Montevideo led to the identification of 11 critical areas (see paragraph 1.3), for which the solution is estimated to cost US\$80 million. Considering that this amount exceeds the available resources that can be allocated for this purpose, the Municipal Government of Montevideo decided to move forward with an operation which, while smaller in scale, would involve individual projects: (i) that address the most critical problems within the scope of the budget allocated; (ii) that have the final designs or studies needed to properly scale the solutions and estimate their cost; and (iii) that represent the most socioeconomically beneficial alternatives. This operation will allow the Municipal Government's Sanitation Division to gain valuable experiences in using hydrodynamic models and in applying solutions that involve the use of storm water storage tanks, structures that have only recently come into use in the city. The individual projects with priority achieve the right balance between the need to expand the limited capacity of the existing infrastructure, on the one hand, and the need to expand storm drainage service to newly developed urban areas that are strongly affected by the absence of such infrastructure, on the other. The proposed operation also includes a smaller-scale component aimed at providing sanitation services to a group of small industries that are currently contributing to the pollution of Arroyo Pantanoso. Financing will be provided for storm drainage, sanitation, and water works for El Cerro Industrial Technology Park (PTIC), whose infrastructure is in poor repair and lacks sufficient capacity, due to the fact that it was originally constructed to serve a cold-storage plant. The PTIC covers an area of 26 hectares and is host to 67 industrial facilities of various types, plus another 12 currently awaiting authorization.
- 1.7 **Consistency with the Bank's country strategy and with the GCI-9.** This loan is consistent with the Bank's country strategy with Uruguay (document GN-2626), approved on 2 August 2011, since it contributes to the country's development goal of "Ensuring Infrastructure for the Water and Sanitation Sector" by increasing coverage and access to sanitation and storm drainage services, and to the results indicator related to reducing areas vulnerable to flooding in Montevideo. This operation is also consistent with the priority area of support for infrastructure for competitiveness and social welfare, while at the same time contributing to the GCI-9 lending targets related to "small and vulnerable countries," "poverty reduction and equity enhancement," and "support for climate change, sustainable (including renewable) energy, and environmental sustainability initiatives" to create

a sustainable environment. The project will finance physical works and nonstructural measures to control flooding and mitigate its effects, and involves watershed planning and land use management. Its direct effect will be to reduce vulnerability by reducing the costs and damages caused by flooding and to reduce the exposure of people in the areas of intervention to chemicals, pathogens, and disease vectors, thus promoting environmental sustainability.

- 1.8 **Bank participation.** The Bank has enjoyed a productive partnership with the Municipal Government of Montevideo in the sanitation sector since 1981. Table I-1 shows the operations that have helped to expand coverage, reduce pollution levels, and improve management of the services provided.

Table I-1. Urban Sanitation Projects in the City of Montevideo

| Stage | Loan number | Year | Loan (US\$ millions) | No. of connections | Coverage (%) ¹ | Disposal (%) ² |
|-------|-------------|------|-------------------------|-----------------------|------------------------------|------------------------------|
| I | 76/OC-UR | 1981 | 65.0 | 140,000 | 44.3 | 0 |
| II | 575/OC-UR | 1990 | 26.1 | 152,000 | 48.1 | 35 |
| III | 948/OC-UR | 1996 | 140.0 | 253,000 | 80.0 | 45 |
| IV | 1819/OC-UR | 2006 | 118.6 | 275,000 | 86.0 | 67 |

¹ Coverage as a percentage of the total population of Montevideo.

² Disposal of all waters collected.

- 1.9 In developing the country strategy and preparing this project, consideration was given to the recommendations presented in the Country Program Evaluation: Uruguay 2005-2009 (document RE-3898) (see Annex V to the country strategy). Moreover, the design of this project took into account lessons learned and best practices obtained during execution of other Bank-financed projects, as well as: (i) the existence of feasibility studies presented with the preliminary designs, of the works to be financed with proceeds from this project, completed and prepared by a specialized consulting firm, in order to mitigate potential risks associated with delays in execution (see paragraph 3.5); (ii) the importance of strengthening commercial management (see paragraph 4.1), with the Municipal Government of Montevideo set to implement a Commercial Management and Planning Unit; and (iii) the inclusion in the direct costs of up to 15% for contingencies and cost escalation, in order to mitigate possible cost increases.
- 1.10 In December 2006, the Bank's Board of Executive Directors approved loan 1819/OC-UR for a total of US\$118.6 million to finance the Montevideo Sanitation Program (PSU IV), to be implemented over a period of six years. The program was conceived as the first operation under a conditional credit line for investment projects, with the goal of reducing pollution in Montevideo Bay and adjacent beaches, expanding the coverage of sanitary sewer and storm drainage systems, increasing the amount of sewage adequately treated and disposed of, and improving the management of these services. The program experienced some initial delays in execution, and recently it became necessary to request supplementary financing of

US\$42.8 million (2605/OC-UR, UR-L1063) to deal with the increase in estimated costs. As of 30 September 2011, 43.2% of the original loan proceeds had been committed and 33% had been disbursed. The operation proposed here is intended to help mitigate urban flooding and complements the actions envisaged under the PSU IV.

II. OBJECTIVE, EXPECTED RESULTS, COMPONENTS, AND COST

A. Objective and components

- 2.1 **Objective.** The objective of the project is to minimize impacts from the lack of, or insufficient, urban drainage infrastructure in critical areas of the city of Montevideo, through the construction of storm drainage works. Following the Montevideo Urban Sanitation and Drainage Master Plan, which is currently being updated, three urban areas were given priority based on the frequency of flooding and the magnitude of the impact on residents, homes, and local roads. The project will benefit approximately 1,500 homes that currently experience flooding every two to five years.
- 2.2 **Project description.** The project will finance storm drainage works, including: detention tanks or areas to contain floodwaters, sewers with adequate carrying capacity, spillways to discharge excess water into pre-established waterways, pumping stations, as needed, and complementary structures. Following is a description of the individual projects involved:
- a. **Storm drainage works in the Arroyo Seco watershed** (US\$6.8 million). The proposal is to build 1,600 m³- and 9,600 m³-capacity detention tanks, two parallel collector sewers or reinforcing structures totaling 270 meters in length, along with complementary intake and discharge structures for the tanks. These works will directly benefit 525 homes that experience periodic flooding.
 - b. **Storm drainage works in the Arroyo Quitacalzones watershed** (US\$10.1 million). The proposal is to build three 6,000 m³-, 7,500 m³-, and 11,100 m³-capacity detention tanks, intake and discharge structures for the tanks, and complementary works. These interventions will directly benefit 610 homes that experience periodic flooding.
 - c. **Storm drainage works in the Cañada Peabody watershed** (US\$5.1 million). The proposal is to build two open detention basins with total of capacity of 7,000 m³, 3,050 meters of rectangular and circular collector sewers, and 2,038 meters of gutters and other complementary structures such as inspection chambers and spillways. These works will directly benefit 360 homes that experience periodic flooding.
 - d. **Storm drainage, sanitation, and water works in the PTIC** (US\$1.1 million). The proposal is to build 480 meters of collector sewers and 2,200 meters of storm gutters, a 1,900-meter sanitation system, and a

1,750-meter water system. It also includes a wastewater pumping station, inspection chambers, and other complementary structures. The proposed works will benefit 67 industrial plants that currently lack adequate infrastructure.

- e. **Hydrometeorological stations** (US\$50,000). The proposal is to install and outfit 12 meteorological stations to strengthen the city's precipitation measurement system. These stations will provide information useful in designing future works and in detecting changes in rainfall that could be the result of climate change.
- 2.3 **Benefits and beneficiaries.** The direct beneficiaries of the storm drainage works will be the residents of the selected neighborhoods (Barrios Krüger, Jacinto Vera, and Lezica), where there are nearly 1,500 homes (approximately 4,500 residents)⁶ that are periodically damaged by flooding. However, due to the nature of the problem, there will also be indirect benefits for adjacent areas of the city that are impacted by the environmental and urban degradation caused by floodwaters containing rain and wastewater and by disruptions to traffic on the affected streets.
- B. Cost and financing**
- 2.4 **Cost and financing.** The operation will be processed as a specific works project for up to US\$30.5 million. Financing for the project will require a Bank loan of US\$20.5 million and a local contribution of US\$10 million. The total amount was increased from the initial figure of US\$22.5 million due to: (i) a more accurate estimate of costs, as a result of progress in preparing the final designs for program works, and of engineering and administrative costs associated with those works; and (ii) a larger allocation for contingencies (see Table II-1).

⁶ The findings of the socioeconomic survey conducted in July and August 2011 indicate that in the areas subject to flooding in the intervention area of the project, there are on average three people per home (see Annex III to the Socioeconomic Analysis optional link).

Table II-1. Cost and financing of the program (US\$ thousands)

| | Categories | IDB | Local contribution | Total | % |
|------------|---------------------------------------|---------------|--------------------|---------------|---------------|
| I | Engineering and administration | - | 1,978 | 1,978 | 6.49 |
| 1.1 | Execution unit | - | 1,300 | 1,300 | 4.26 |
| 1.2 | Studies and designs | - | 578 | 578 | 1.90 |
| 1.3 | Auditing, monitoring, and evaluation | - | 100 | 100 | 0.33 |
| II | Direct costs | 16,234 | 6,958 | 23,192 | 76.04 |
| 2.1 | Drainage in Peabody | 3,560 | 1,526 | 5,086 | 16.68 |
| 2.2 | Drainage in Quitacalzones | 7,833 | 2,296 | 10,129 | 33.21 |
| 2.3 | Drainage in Arroyo Seco | 4,791 | 2,053 | 6,844 | 22.44 |
| 2.4 | Hydrometeorological stations | 50 | - | 50 | 0.16 |
| 2.5 | Environmental sanitation for PTIC | - | 1,083 | 1,083 | 3.55 |
| III | Associated costs | 671 | - | 671 | 2.20 |
| 3.1 | Land | 671 | - | 671 | 2.20 |
| IV | Unallocated | 2,190 | 878 | 3,068 | 10.06 |
| 4.1 | Contingencies | 1,205 | 856 | 2,061 | 6.76 |
| 4.2 | Cost escalation | 985 | 22 | 1,007 | 3.30 |
| V | Financial costs | 1,405 | 186 | 1,591 | 5.22 |
| 5.1 | Interest during construction | 1,405 | - | 1,405 | 4.61 |
| 5.2 | Commitment fee | - | 186 | 186 | 0.61 |
| 5.3 | Inspection and supervision | - | - | - | - |
| | TOTAL | 20,500 | 10,000 | 30,500 | 100.00 |
| | PERCENTAGES | 67.21 | 32.79 | 100.00 | 33% |

C. Key results indicators

- 2.5 The results matrix (see Annex II) describes the outputs and outcomes of each component. Table II-2 presents the program's main indicators, as well as the performance indicators for the Sanitation Division, which will be used to monitor the executing agency.

Table II-2. Matrix of project indicators (Values at end of calendar year)

| Project indicators | Base 2011 | Year 1 | Year 2 | Year 3 | Year 4 |
|--|------------------|---------------|---------------|---------------|---------------|
| Homes affected by floods with 10-year return periods in the program intervention areas | 1,500 | 1,500 | 1,500 | 700 | 0 |
| Public areas in Montevideo subject to floods with 10-year return periods [1] [2] | 11 | 11 | 11 | 9 | 8 |
| Performance indicators for the Sanitation | Base 2011 | Year 1 | Year 2 | Year 3 | Year 4 |
| Cost coverage rate [3] | 90% | 95% | 95% | 95% | 95% |
| Net internal generation [4] / Annual investments | 15% | 15% | 15% | 15% | 15% |
| Annual collection rate (collections/billings) | 85% | 85% | 85% | 85% | 85% |

[1] Contributes to indicator 2.5.2 of the GCI-9.

[2] Indicator from the 2010-2015 country strategy.

[3] Revenues / (Operating and maintenance costs + payment of principal + local counterpart contribution).

[4] Collections – operating costs – debt service – local contribution.

III. FINANCING STRUCTURE AND RISKS

A. Financing structure

- 3.1 **Borrower and executing agency.** The borrower for the operation will be the Eastern Republic of Uruguay, and the executing agency will be the Municipal Government of Montevideo, acting through the Sanitation Execution Unit (UES) established under the Bank-financed Montevideo Sanitation Program, currently in execution. The UES will be responsible for administering the loan proceeds, as well as for managing the timely financing of local counterpart contributions and ensuring compliance with the Environmental and Social Management Plan (ESMP). **A condition precedent to the first disbursement will be evidence that a subsidiary agreement has been signed for the transfer of loan proceeds between the borrower and the executing agency.**

Table III-I
Disbursement schedule (US\$ millions)

| Source | IDB | Local | TOTAL | |
|---------------|---------------|---------------|---------------|-------------|
| Year 1 | 1,344 | 656 | 2,000 | 7% |
| Year 2 | 6,452 | 3,148 | 9,600 | 31% |
| Year 3 | 9,007 | 4,393 | 13,400 | 44% |
| Year 4 | 3,697 | 1,803 | 5,500 | 18% |
| TOTAL | 20,500 | 10,000 | 30,500 | 100% |
| | 67% | 33% | 100% | |

- 3.2 **Type of financing.** The program is a specific-works operation. The works called for in the investment projects to be financed were prioritized and adjusted in order to meet urgent needs.
- 3.3 **Financial conditions.** The loan will be made with resources from the Bank's Ordinary Capital. This will be a 25-year loan with execution and disbursement periods of up to four years. These periods were established taking into account the readiness of the final project designs and the estimated time required to complete the works. The local counterpart funds and debt repayment will be guaranteed by the national government. The disbursement schedule is presented in Table III.1.

B. Social and environmental safeguards

- 3.4 The program is expected to have a net positive social and environmental effect, given that it will improve the living conditions of the population and the environmental quality of the intervention areas. In accordance with the guidelines of the Environment and Safeguards Compliance Policy (OP-703), the program was classified by the project team as a category "B" operation, since the negative environmental and social effects it is expected to cause will be limited to localized, short-term impacts, and since there are effective mitigation measures in place. These negative effects will be produced by the construction of civil works and will include increased noise, dust, solid and liquid waste from the construction sites, interruption of traffic and of access to homes, public buildings, and services, as well as the risk of work-related accidents. During the design process, an environmental and social analysis was conducted and found that the project complies with the applicable directives of OP-703 and with the relevant provisions of other Bank policies, such as OP-102 (Access to Information), OP-270 (Gender Equity in Development), OP-704 (Natural Disaster Risk Management), and OP-710 (Involuntary Resettlement). The project complies with the following directives of Policy OP-703: directive B.02 (country laws and regulations), directive B.03 (screening and classification), directive B.05 (environmental assessment), directive B.06 (consultation), and directive B.07 (supervision and compliance). The ESMP will contain measures for mitigating environmental, social, health and work safety impacts and risks; an environmental and social management model, including the personnel responsible for implementing the mitigation measures; and the schedule and budget (see link [Environmental and Social Analysis](#)).

C. Other aspects and risks

- 3.5 **Technical viability.** The proposed operation proposes to construct a variety of works to improve storm drainage in three priority urban watersheds (Arroyos Seco, Quitacalzones, and Peabody) that currently experience periodic flooding, which damages homes in the areas and interferes with vehicle and foot traffic. Depending on local conditions, the plan is to build closed tanks or open basins to contain surges in water levels, sewers or trenches to increase the carrying capacity of existing systems, spillways to divert excess water into pre-established waterways, and complementary hydraulic structures. The basic designs for these works have

been completed, and in one case the final designs are in the final stage of preparation. In the other two cases, the final designs are being prepared by a specialized consulting firm. The basic designs have been developed according to generally accepted engineering standards and principles, and take advantage of experience acquired during the recent execution of three projects with a similar purpose, as well as drawing on relevant international experiences. The studies that have been conducted have helped to ascertain technical viability, estimate the investment costs, and establish an execution schedule for the works. The other components of the operation are smaller in scope and less complex. The necessary studies have been conducted to establish the most appropriate solutions and estimate the corresponding costs (see [technical viability link](#)).

- 3.6 One factor that requires special consideration is climate change and its potential effect on the functioning of the urban drainage infrastructure. Due to the lack of specific information on local hydrological trends, particularly with regard to extreme precipitation events, an analysis was made of the potential effects of increases in the intensity of rains, by testing functioning using longer intervals (return period = 20 years) than those used in designing the works (return period = 10 years). The operation also seeks to support activities to collect rainfall data, in order to be able to quantify the effects and reduce medium- and long-term uncertainty concerning this phenomenon.
- 3.7 **Socioeconomic viability.** A socioeconomic evaluation of the package of works to be financed under the project was carried out. The investments were analyzed in terms of the flow of expected net benefits (expected incremental benefits minus costs, under “with” and “without” scenarios). The storm drainage interventions were subjected to an analysis of alternatives, so the least-cost solution could be selected. The cost-benefit analysis for the projects was based on the least-cost solution, comparing the net present value of the costs and the net present value of the benefits. The costs used in the evaluation were the incremental investment and operation and maintenance costs, valued at shadow prices. The benefits of storm drainage and flood control were determined on the basis of the socioeconomic surveys administered between July and August 2011. The values of the benefits were calculated based on the magnitude of the real property valuation expected as a result of implementing the works, which in turn was calculated adjusting a hedonic price function for each area affected by the works. The results of the analysis show that the program is socioeconomically viable at the level of each project, with economic internal rates of return above 12% per year. In addition, the benefit-cost ratio is greater than 1. Details on the analysis and the method used are presented in the Economic Analysis Annex ([socioeconomic viability link](#)).

**Table III-2. Economic Cost-Benefit Analysis
Priority Projects**

| Storm Drainage Works | Economic Net Present Value (US\$ thousands) | | | | EIRR | B/C |
|----------------------|---|------------|--------|-------------|--------|------|
| | Benefit | Investment | O&M | Net benefit | | |
| Arroyo Seco | 7,079.94 | 5,250.39 | 61.14 | 1,768.42 | 25.51% | 1.33 |
| Arroyo Quitacalzones | 10,988.97 | 9,252.43 | 70.27 | 1,666.27 | 19.57% | 1.18 |
| Cañada Peabody | 6,391.75 | 4,395.63 | 249.03 | 1,747.08 | 33.09% | 1.38 |

- 3.8 **Sensitivity analysis.** The sensitivity analysis included variations in the values obtained for real property valuations and cost increases. The storm drainage projects are robust and allow for cost increases of up to 30% and benefit reductions of up to 25%, except for the Arroyo Quitacalzones watershed project, which only allows for cost increases of up to 15% and benefit reductions of up to 15%.
- 3.9 **Social equity and poverty reduction.** This operation qualifies as a social equity-enhancing project (SEQ) and a poverty-targeted investment (PTI), as described in the Report on the Ninth General Increase in the Resources of the Bank (document AB-2764). It also qualifies based on geographical criteria since the poverty rate in the intervention areas is higher than the national average (12.6%, Ongoing Household Survey, 2010). According to the results of the surveys conducted ([socioeconomic viability](#) link), in the Arroyo Seco watershed 20% of homes located in flood zones have per capita incomes below the poverty line set by the National Statistics Institute.⁷ Likewise, for the Arroyo Quitacalzones and Cañada Peabody watersheds, 18.7% and 64.1%, respectively, of homes in flood zones have per capita incomes below the poverty line. On average, 30.02% of the program's direct beneficiaries have incomes below the poverty line.
- 3.10 **Financial viability.** The financial analysis was conducted using a model developed internally by the Bank's Water and Sanitation Division (INE/WSA), which was based on the corresponding financial statements of the last three fiscal years and on historical operational information. The projections were calculated in 2010 U.S. dollars for a period of up to 10 years, and include revenues and operating costs, capital investment, external financing, fixed assets, and working capital (see [financial link](#)). The financial sustainability of Montevideo's Sanitation Division is based on: effective implementation of a rate increase approved as part of municipal government's five-year plan of February 2011,⁸ which will allow the Sanitation Division to cover all of its operating costs and debt service with own resources; and the timely transfer of financial resources by the municipal government (in addition to the real-property contribution for the storm drainage system) and by the National

⁷ National Statistics Institute. Estimate of poverty using the income method, 2010. March 2011.

⁸ The Municipal Government of Montevideo, in accordance with the management commitments assumed under loan 1819/OC-UR, agreed to a rate increase of 25% in real terms over a period of five years. Through Resolution 536/11 of 7 February 2011, it approved the first scheduled rate adjustment, increasing the sanitation rate by 5.6% in February 2011. <http://www.montevideo.gub.uy/aplicacion/resoluciones-0>.

Treasury. In this regard, the Municipal Government of Montevideo has conducted excellent programming so far, both in the execution of its Montevideo Sanitation Master Plan and in aspects related to the implementation of rate increases, which has enabled it to adequately cover the operating costs associated with providing service. The projections indicate that: (i) operating revenues will enable the Sanitation Division to cover 100% of its operating, maintenance, and depreciation costs; (ii) internal generation of funds net of debt service for the next five years would be sufficient to finance over 20% of its total investment plan; (iii) and the rate of collection would be above 85%. Fulfillment of these indicators will be monitored through the matrix of indicators (Table II-2).

- 3.11 The sanitation service fee, in effect as of 2001, includes a fixed fee and a variable fee. The fixed fee is 23.98 Uruguayan pesos (US\$1.20) per month and is for administrative and marketing costs. The variable fee averages 13.46 Uruguayan pesos/m³ (US\$0.67/m³), with lower bulk rates for large nonresidential customers. For low-income residential customers, the variable rate is subsidized for the first 10 m³.⁹ The first rate increase of 5.6%, in real terms, went into effect in February 2011. This increase will help finance operating and maintenance costs, as well as debt service. As an execution condition, the executing agency will be required to meet the performance indicators included in Table II.2. Revenues from sanitation fees account for 75% of the Sanitation Division's total revenues. The remaining 25% comes from the "additional real-property contribution" collected for storm drainage, which covers the costs of operating and maintaining the drainage system.
- 3.12 **Institutional viability.** The institutional viability of the program was determined based on a comprehensive analysis of risk management, using the Institutional Capacity Assessment System. The institutional capacity of the UES and the Sanitation Division was evaluated, including planning of activities, administrative organization, human resources management, administration of goods and services, financial management, and internal and external control. The results indicate that the UES and the Sanitation Division have a "low" weighted level of risk for program execution and for the subsequent administration of the works.
- 3.13 The legal framework for the provision of sanitation services includes performance oversight and control mechanisms (see paragraph 1.1) and clearly assigns to the Sanitation Division the functions of planning, organization, management, and control, including the provision of services and the responsibility for achieving economic and financial balance, based on efficiency criteria. The UES management and technical staff, who were selected on the basis of their professional skills and experience, are given the necessary autonomy in their respective areas of authority. From its creation, the Sanitation Division has demonstrated a capacity to implement major institutional reforms, which have translated into improved service and will

⁹ Thirty-two percent of the homes billed receive the subsidy, representing 8% of the billed amount for that group.

have a positive impact on the sustainability of the services over the medium and long term.

- 3.14 **Risks.** In Barrio Lezica, some homes have established clandestine storm drain connections, from internal roofs and courtyards, to the existing sanitary sewer system, in response to the lack of a storm drainage system with adequate capacity. This practice has caused overflow problems inside some homes, owing to the fact that the sanitary sewer system does not have the carrying capacity to handle surges in water levels from heavy rains. In order to ensure that these anomalies are corrected, and to take full advantage of the proposed storm drainage system, the Sanitation Division will develop a plan to identify and intercept clandestine connections, so as to mitigate this risk. The Sanitation Division possesses the human and financial resources to carry out this task.

IV. EXECUTION AND MONITORING PLAN

A. Execution mechanism

- 4.1 **Sanitation Execution Unit.** The Municipal Government of Montevideo will execute the program in the framework of its current organizational structure. The Sanitation Division, acting through the UES, will be responsible for coordinating all technical and operational activities during program implementation and monitoring, including reporting necessary expenditures and estimated expenses, keeping program accounts, and arranging for timely delivery of the local contribution. The proposed execution mechanism consists of a professional team that will include a project team coordinated by the director of the executing agency. This director will serve as the coordinator of the UES responsible for execution of the operation and will also be responsible to the Bank for the progress and proper execution of the program and for processing all official documentation related to the projects. The Sanitation Division will be strengthened through: (i) implementation of a Commercial Management and Planning Unit, whose main objective will be to plan, identify, and monitor commercial measures to promote the sanitation and storm drainage service with the right economic and financial balance;¹⁰ and (ii) contracting of technical staff to assist in the task of managing the works, as well as in planning and design. **A condition precedent to the first disbursement will be evidence of a commitment by the Municipal Government of Montevideo to appoint the program coordinator and his/her work team, including a description of functions and of the professional qualifications needed to perform them.**
- 4.2 **Procurement of works, goods, and consulting services.** Goods and works will be procured and consultants will be selected and contracted pursuant to current Bank policies, specifically those set forth in document GN-2349-9 (goods and works) and in document GN-2350-9 (consulting services), using the same methods established

¹⁰ The contract has already been awarded, and the consulting firm is expected to sign by early November.

- in loan contract 1819/OC-UR. The procurement of works and goods and the selection and contracting of consultants will be carried out in accordance with the agreed upon procurement plan (see Annex III). The thresholds for international competitive bidding and short lists of consultants will be those currently in force for Uruguay.
- 4.3 **Execution of works.** The works will be executed by contracting engineering firms specializing in the type of project involved. Inspection of the works will be conducted by the UES, for which the corresponding work plan will be presented to the Bank. Necessary costs for executing and supervising the works will be included in the program budget.
- 4.4 **Disbursements.** Bank resources will be disbursed through an advance of funds mechanism, based on a financial plan prepared in accordance with the liquidity needs and pursuant to the project execution plan. The executing agency will arrange for a special account to be opened at the Central Bank of Uruguay for exclusive use in paying obligations derived from execution of the program. **As a condition precedent to the first disbursement, the program execution plan will be presented to the Bank.**
- 4.5 **Operation and maintenance.** The works included in this program will be operated and maintained by the Sanitation Division, which has the technical personnel and means necessary to accomplish the task. In order to ensure effective monitoring of the condition of the works, the Sanitation Division will present to the Bank in the first quarter of each year, for a period of three years beginning with the completion of the first of the program's works, an annual maintenance plan for the systems financed with program resources. The plan will include a report on management activities during the preceding year and on the actions envisaged for the subsequent period. An execution condition will be fulfillment of operation and maintenance obligations.
- 4.6 **Land and easements.** The proposed program is not expected to pose any significant problems with regard to acquiring the necessary land, since nearly all of the works are to be built on public property. No difficulties or conflicts are expected in acquiring the land needed to execute the program, since the law permits the expropriation of land for public use. Two families have been identified that will need to be resettled before the start of the Cañada Peabody work. The UES will conduct this process according to the provisions of OP-710, and will present evidence of legal ownership of the land needed to build the works.
- 4.7 **Accounting and financial management, audits, and inspections.** The UES will be responsible for program accounting and financial management. Each year it will present audited financial statements for the project. External audits for the project will be commissioned and conducted in accordance with the policies and requirements stipulated in the guidelines for financial reports and external audits of operations financed by the Bank and the terms of reference previously approved by the Bank, and will be conducted by independent auditors acceptable to the Bank.

The external audits of the project will be of a financial and operational nature, and will require the delivery of an annual report during the program execution period. The delivery and other deadlines can be found via the [monitoring and evaluation plan](#) link.

- 4.8 **Monitoring and evaluation.** Monitoring will be supported by the following Bank supervision instruments: the program execution plan, the annual work plan, the procurement plan, the results matrix agreed upon with the executing agency, and the risk management plan. A midterm and final review will be carried out to verify fulfillment of the performance indicators and to measure progress in program execution. Monitoring will be conducted at the level of administrative, financial, and operational efficiency using the indicators provided in the matrix of indicators (see Table II-2) and the indicators established for each component. The operation will be evaluated by means of a midterm and a final evaluation, which will be execution conditions of the loan. The midterm evaluation will be performed 18 months in the program, counting from the effective date of the contract. It will serve as an input for preparing the loan review report. These evaluations will serve as a basis for the twice-yearly update to the progress monitoring report, a draft version of which has been agreed upon with the executing agency (see [electronic link](#)). It has also been agreed that an ex post socioeconomic evaluation of the program will be conducted.

| Development Effectiveness Matrix | | | | |
|--|--|--|--|---------------|
| Summary | | | | |
| I. Strategic Alignment | | | | |
| 1. IDB Strategic Development Objectives | | | | |
| Lending Program | Contributes to the lending program (i) to small and vulnerable countries, (ii) to reduce poverty and enhance equity, and (iii) to increase the proportion of terrestrial and marine areas protected to total territorial area. | | | |
| Regional Development Goals | Contributes to (i) Reduce incidence of waterborne diseases, and (ii) Proportion of terrestrial and marine areas protected to total territorial area (%). | | | |
| Bank Output Contribution (as defined in Results Framework of IDB-9) | | | | |
| 2. Country Strategy Development Objectives | | | | |
| Country Strategy Results Matrix | GN-2626 | Contributes to increase coverage of sanitation and drainage. | | |
| 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 | | 8.4 | 25% | 10 |
| 4. Ex ante Economic Analysis | | 10.0 | 25% | 10 |
| 5. Monitoring and Evaluation | | 7.5 | 25% | 10 |
| 6. Risks & Mitigation Monitoring Matrix | | 10.0 | 25% | 10 |
| Overall risks rate = magnitude of risks*likelihood | | Medium-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. | |
| 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 | During project preparation a study was commissioned to support the City of Montevideo in their processes to prepare environmental records. | |
| 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 | | | | |
| 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 program will measure changes in the values of the determinants of socioeconomic feasibility of the projects to determine whether projects remain feasible. | |

This is an investment loan for a small and vulnerable country that has as objective to minimize the impacts caused by the lack or limits of the drainage infrastructure in critical areas of Montevideo, contributing to poverty reduction and equity enhancing and also promoting sustainable practices related to climate change policies . The project is included in the most recent country strategy, and it is aligned to the country's and Bank's priorities.

The loan document adequately identifies the problem of floods in Montevideo, and the antecedents related to the drainage system and the policies and institutions of the sector. It includes an analysis of the eleven critical points in terms of flooding, and the criteria to prioritize in order to select the ones that will be financed by the project. It also includes solid financial and economic analysis. The stated objective is well defined and the proposed interventions are directly linked to the problems identified in the diagnosis.

The results matrix is well constructed, with adequate impact, outcome and output indicators. The project has a solid economic analysis and the monitoring and evaluation arrangements are also well specified, and it defines how the data for the ex post economic analysis will be measured in the evaluation plan. The risk matrix is complete and it includes indicators to monitor mitigation measures.

RESULTS MATRIX

| | |
|-------------------------------|---|
| Impact of the program | The general objective of the program is to minimize impacts from the lack of, or insufficient, urban drainage infrastructure in critical areas of the city of Montevideo. |
| Purpose of the program | (i) Improve storm drainage systems in three critical areas of Montevideo. (ii) Consider the effects of climate change in the design of infrastructure. |

| Impact indicators | Baseline (2011) | Target | Means of verification | | | | |
|---|------------------------|------------------|--|------------------|------------------|------------------|-------------------------------|
| 1. Homes affected by floods with 10-year return periods in the program intervention areas | 1,500 | 0 | Survey of households following the event with the specified return period | | | | |
| Outcome indicators (Purpose) | Baseline (2011) | Target | Means of verification | | | | |
| 1. Public areas in Montevideo subject to floods with 10-year return periods [1] [2] | 11 | 8 | Work certifications | | | | |
| 2. Organic load discharged into Arroyo Pantanoso from the PTIC (kg BOD5/day) | 94 | 0 | Environmental quality laboratory of the Municipal Government of Montevideo | | | | |
| Output indicators by subcomponent | Baseline (2011) | Year 2011 | Year 2012 | Year 2013 | Year 2014 | Year 2015 | End of program - Total |
| Component 1: Storm drainage works in the Arroyo Seco watershed | | | | | | | |
| 1.1 Flood control works | | | | | | | |
| Detention tanks/reservoirs constructed (tanks) | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| Component 2: Storm drainage works in the Arroyo Quitacalzones watershed | | | | | | | |
| 2.1 Flood control works | | | | | | | |
| Detention tanks/reservoirs constructed (tanks) | 0 | 0 | 0 | 1 | 1 | 1 | 3 |

| Output indicators by subcomponent | Baseline (2011) | Year 2011 | Year 2012 | Year 2013 | Year 2014 | Year 2015 | End of program - Total |
|--|--------------------|--------------|--------------|--------------|--------------|--------------|------------------------|
| Component 3: Storm drainage works in the Cañada Peabody watershed | | | | | | | |
| 3.1 Output: Storm drainage sewer networks constructed or expanded | | | | | | | |
| Macro-drainage systems executed (km) | 0 | 0 | 0 | 0.38 | 0.77 | - | 1.15 |
| Micro-drainage systems executed (km) | 0 | 0 | 0 | 1.32 | 2.63 | - | 3.95 |
| 3.2 Flood control works | | | | | | | |
| Detention tanks/reservoirs constructed (tanks) | 0 | 0 | 0 | 1 | - | - | 1 |
| Component 4: Environmental sanitation for the PTIC | | | | | | | |
| 4.1 Environmental sanitation for the PTIC | | | | | | | |
| Environmental sanitation and micro-drainage systems executed (km) | 0 | 0 | 0 | 5.1 | - | - | 5.1 |
| Pumping stations (stations) | 0 | 0 | 0 | 1 | - | - | 1 |
| Component 5: Hydrometeorological stations | | | | | | | |
| 5.1 Hydrometeorological stations | 0 | 0 | 12 | - | - | - | 12 |

- (1) Contributes to indicator 2.5.2 of the GCI-9.
(2) Indicator from the 2010-2015 country strategy.

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country: Uruguay

Project number: UR-L1069

Name: City of Montevideo Drainage and Sanitation System Expansion and Improvement Project

Executing agency: Municipal Government of Montevideo

Prepared by: Gabriele M. del Monte and Nadia Rauschert

I. FIDUCIARY CONTEXT OF THE COUNTRY

- 1.1 The fiduciary agreements and requirements for this program are based on the 2005 Country Financial Accountability Assessment for Uruguay, on the 2004 Country Procurement Assessment Report, on the knowledge of the executing agency (Municipal Government of Montevideo), which has been responsible for several loans (76/IC-UR, 575/OC-UR, 948/OC-UR, 1425/OC-UR, 1819/OC-UR, and 2040/OC-UR, the last two of which are in execution), and on the 2011 Institutional Capacity Assessment System (ICAS) analysis and the project risk management report for loan 1819/OC-UR of 2010.
- 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 bureaucratic. As for public procurement, although the country has a recognized legal and institutional framework with a sound legal foundation, its weaknesses foster inefficient practices that undermine effectiveness and generate higher costs. Studies conducted in 2005 and 2008 show that corruption is not perceived as a problem. Procurement-related risk in Uruguay is considered to be "medium."
- 1.3 The estimated total cost of the program is US\$30.5 million (US\$20.5 million in Bank financing and US\$10 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 Municipal Government of Montevideo, which will maintain an administrative/financial structure responsible for administering the operation's resources and funding the local counterpart contributions in a timely manner.

II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

- 2.1 From a fiduciary perspective, the executing agency is considered LOW RISK, based on the June 2011 ICAS analysis and the knowledge of the executing agency, which has matured in recent years, with the following notable characteristics:
- a. The executing agency's capacity for planning and organization was rated as "highly satisfactory" in the ICAS analysis. This is directly related to the execution of projects regularly supervised and monitored by the Bank in accordance with its policies, or rules that the borrower is required to follow under the loan contract.
 - b. The external control system has received the same rating in connection with fiduciary considerations that are regularly monitored by the Bank.
 - c. The executing agency has consolidated previous experience in procurement activities conducted in accordance with Bank policies using ex ante reviews.
 - d. The executing agency staff have solid experience with the Bank's procurement and contracting processes and identify closely with the mission.
 - e. The SABS yields a value of 89%, indicating that the executing agency is rated as "highly satisfactory" (low risk) for procurement and a candidate for the use of ex post reviews in procurement processes up to the threshold for international competitive bidding (ICB).
 - f. For the budget, the project and its corresponding loans must be included in the Municipal Government of Montevideo's annual general budget.
 - g. For cash management, the General Treasury Account will be used through the specific bank account that should be set up for the project at the Central Bank of Uruguay.
 - h. For accounting and financial reports, records parallel to those of the Municipal Government of Montevideo's Financial/Economic System (SEFI) are being maintained.
 - i. For internal control, the Municipal Government of Montevideo operates in an environment of satisfactory, low-risk internal controls.
 - j. External control is performed by the State Audit Office (TCR), which has an eligibility rating of "I."

III. FIDUCIARY RISK EVALUATION AND MITIGATION MEASURES

- 3.1 The Municipal Government of Montevideo 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), supplemented by the following:

- a. There are two potential procurement-related risks: first, the slow pace of the approval process for contracting individual consultants (approximately 3 to 4 months); second, the high demand in the marketplace for construction of medium-sized works, which supply may be unable to meet, resulting in higher costs than planned and/or longer construction times, due to lack of competitiveness. The mitigation actions in the first case cut across the Bank's entire portfolio in Uruguay and include actions with the National Civil Service Office¹ and the TCR that the Country Office is pursuing. In the latter case, attempts will be made to develop budgets that are as accurate as possible, aligned with the current realities in which the bidding is to occur.
- 3.2 Lastly, in this loan, ICB contracts will not be subject to the major cost increases of the previous loan, since it does not involve highly specialized works.

IV. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF CONTRACTS

- 4.1 Below are the agreements and requirements to be reflected in the special provisions:
 - a. Exchange rate: For dollar-based accounting, the same criterion will be used as in operations 1819/OC-UR (in execution) and 2605/OC-UR (UR-L1063, approved on 26 October 2011), i.e., for conversion to dollars, the rate will be the base exchange rate published by the Central Bank of Uruguay on the day prior to the payment date.
 - b. Financial statements: These must be submitted at the end of each year and audited by the TCR. The TCR must also report on its review of disbursement processes and requests, evaluation of the internal control environment, and potential noncompliance with conditions of the loan contract.
 - c. Taxes: The same criterion will be used as in loans 1819/OC-UR (in execution) and 2605/OC-UR with regard to financing. The sanitation works are exempt; other expenditures are being financed by the local counterpart.
 - d. Bank account: For operational management, a specific account will be opened at the Central Bank of Uruguay to receive funds, along with two payment orders in the name of the execution unit (one in local currency, the other in U.S. dollars).
 - e. Interest: Interest will be capitalized for program costs, as is being done for loan 1819/OC-UR and as is envisaged for loan 2605/OC-UR.

¹ Given that the Bank merely undertakes actions on behalf of third parties in matters concerning State control, the specific mitigation action consists of the planned coordination between the National Civil Service Office and the executing agencies, in order to ensure that both use standardized processes, in terms of presentation of documents and analysis for approval, so as to reduce down time.

V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENTS

5.1 The procurement policies applicable to this loan are the policies set forth in document GN-2349-9.

A. Execution of procurements

5.2 The execution unit will update the Procurement Plan Execution System with the new amounts, and will keep it updated with timely details on each procurement required by the system.

5.3 The relevance 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 prior no objection before the start of the procurement process, in accordance with the operational criteria of the Project Team Leader.

B. Procurement of works, goods, and nonconsulting services²

5.4 Contracts generated by and subject to ICB will be executed using the bidding documents issued by the Bank. Bids subject to national competitive bidding (NCB) will be executed using bidding documents satisfactory to the Bank.

C. Procurement and selection and contracting of consultants

5.5 **Consulting firms:** Consulting firms will be selected and contracted in accordance with Bank policies. Contracts with international publicity (for amounts above US\$200,000) will be subject to ex ante review.

5.6 **Selection of individual consultants:**³ Individual consultants will be selected and contracted in accordance with Bank policies.

5.7 **Training:** N/A

5.8 **Advance procurement/Retroactive financing:** N/A

² Policies for the procurement of goods and works financed by the Inter-American Development Bank (document [GN-2349-9](#)), paragraph 1.1: Services other than consulting services are treated the same as goods.

³ In accordance with Section V of the Bank's policies set forth in document GN-2350-9, neither the use of a short list nor of the Standard Request for Proposals is required.

Table of threshold amounts (in US\$ thousands) applicable to Uruguay

| Works | | | Goods ⁴ | | | 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 |
| Ex post review threshold for project UR-L1069 | | | | | | | |
| Works | | Goods and consulting services | | Consulting firms and individual consultants | | | |
| <ul style="list-style-type: none"> Shopping up to US\$250,000 NCB up to US\$3,000,000 | | <ul style="list-style-type: none"> Shopping up to US\$50,000 ICB up to US\$250,000 | | <ul style="list-style-type: none"> Firms with QCBS: up to US\$200,000 (national calls for bids) Individual consultants: up to a contract amount of US\$50,000 | | | |

To view the procurement plan for the 18 months, see [link](#).

- 5.9 **Main procurements.** The procurements for the first 18 months are included in the procurement plan. In general, they do not involve technical complexity or procedures that warrant special mention, beyond what has already been detailed for agreements and direct contracting of consulting firms.
- 5.10 This involves: Works whose estimated total is US\$23,141,000 and goods whose estimated total is US\$50,000.
- 5.11 **Recurrent costs, retroactive expenditures, and advance procurement:** N/A
- 5.12 **Funds awarded by competition:** N/A
- 5.13 **Procurement supervision:** Given the level of risk identified, the ex post review method (for the thresholds given in Table 1) will be applied, on an immediate basis.
- 5.14 Ex post reviews⁵ of procurements will occur every 12 months and pursuant to the loan supervision plan. Before procurements begin, a workshop will be held for execution unit staff to standardize criteria and answer any questions.
- 5.15 Ex post review reports will require physical inspection visits.⁶ For this purpose, an adequate budget item should be inserted in the annual fiduciary transactional budget.
- 5.16 Without prejudice to the foregoing, for matters concerning the relevance of expenditures, refer to paragraph 5.3 above.

⁴ Includes nonconsulting services.

⁵ Responsibilities, support for the review, and the methodology are described in the [Ex Post Guidelines for Procurements](#) document.

⁶ The inspection verifies that the procurements have actually been made, leaving to the sector specialist the task of verifying quality and compliance with specifications.

VI. FINANCIAL MANAGEMENT

A. Programming and budget

- 6.1 For preparation of the Municipal Government of Montevideo's departmental budget, the Constitution establishes deadlines for the mayor to submit the budget for payroll, expenditures, and capital investments for the current year to the Departmental Council. Once approved by the Departmental Council, the budget goes into effect and its line items for execution of program UR-L1069 will be authorized for use in accordance with the program execution plan and the annual work plan of the respective operation.
- 6.2 For this project, the local counterpart contribution is US\$10 million, or 11% of the total. The executing agency will demonstrate to the Bank that the local counterpart resources for the first year of the program have been allocated upon the fulfillment of conditions precedent and subsequently on an annual basis (by the end of February).

B. Accounting and information systems

- 6.3 An accounting system parallel to the municipal government's Financial/Economic System (SEFI) will be used to keep records of project operations.
- 6.4 Financial statements will be delivered on at least an annual basis, in accordance with the relevant accounting standards and the Bank's guidelines for financial reports and external audits.

C. Disbursements and cash flow

- 6.5 For the purpose of executing project funds, the National Treasury Office, at the request of the project execution unit, will open a special account at the Central Bank of Uruguay.
- 6.6 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. For documentation, presentation of the accounting reports and the financial planning chart will be required. The exchange rate agreed upon for converting payments in local or other currency to United States dollars will be the rate on the day prior to the day on which payment to the beneficiary is made.

D. Internal control and internal auditing

- 6.7 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 should conduct a preventive intervention for all project-related expenditures. The level of reliability for the execution of this operation is high.

E. External control and reports

- 6.8 The national external control system is managed by the TCR. Loan 1819/OC-UR, now in execution, is audited by the TCR with timely delivery and unqualified opinions for the corresponding annual reports. For this project, the executing agency's intention is for the TCR to continue to provide these services, which has an eligibility rating of "I."
- 6.9 The reports on the annual financial audit, review of disbursement processes and requests, compliance with contractual conditions, and the internal control evaluation will be delivered for each fiscal year during the disbursement period, by 30 April of the following year. The audit rules issued by the International Organization of Supreme Audit Institutions 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.

F. Financial supervision plan

- 6.10 The initial financial supervision plan includes the following:
- a. Review of the annual work plan and the initial financial plan prepared by the execution unit as support for the first advance to be requested after program eligibility.
 - b. One financial visit per year will be carried out during project execution (jointly with the financial visit for loans 1819/OC-UR and 2605/OC-UR), and will evaluate such matters as: reconciliation of the advance and investment account, implementation of recommendations of the external audit, quality and timeliness of accounting records, and storage of documentation.

G. Execution mechanism

- 6.11 The borrower for the program will be the Eastern Republic of Uruguay. The Municipal Government of Montevideo will have basic responsibility to the Bank, maintaining a direct relationship with it and determining the course of action to be taken. The program will be executed on the basis of the Municipal Government of Montevideo's successful experience in previous programs.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-____/11

Uruguay. Loan ____/OC-UR to the Eastern Republic of Uruguay
City of Montevideo Drainage and Sanitation System
Expansion and Improvement Project

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 City of Montevideo Drainage and Sanitation System Expansion and Improvement Project. Such financing will be for an amount of up to US\$20,500,000 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.

(Adopted on _____)

LEG/SGO/CSC/IDBDOCS#36493462
UR-L1069