DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

ARGENTINA

WATER AND SANITATION SERVICES DEVELOPMENT PROGRAM – BELGRANO PLAN

(AR L1258)

LOAN PROPOSAL

This document was prepared by the project team consisting of: Henry A. Moreno, Project Team Leader (WSA/CAR); Maria Julia Bocco, Alternate Project Team Leader (INE/WSA); Jorge Oyamada and Gustavo Gonnelli (WSA/CAR); Tania Páez Rubio (WSA/CUR); Javier García Merino and Irene Cartín (INE/WSA); Luca Marini (VPS/ESG); Sofia García and Natalia Benasso (CSC/CAR); Alonso Chaverri-Suarez (LEG/SGO); and Brenda Álvarez and Juan Carlos Lazo (FMP/CAR).

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ELECTRONIC LINKS

REQUIRED

- 1. Multiyear execution plan and annual work plan
- 2. Monitoring and evaluation plan
- 3. Environmental and social management report (ESMR)
- 4. Procurement plan

OPTIONAL

- 1. Technical viability
- 2. Socioeconomic viability
- 3. Institutional capacity assessment of the executing agency
- 4. Financial and institutional viability
- 5. <u>Draft program Operating Regulations</u>
- 6. Compliance with the Bank's Public Utilities Policy
- 7. Projected disbursements
- 8. <u>Draft progress monitoring report</u>
- 9. Midterm evaluation of loan 2776/OC-AR

ABBREVIATIONS

AFD Agence Française de Développement

AGN Auditoría General de la Nación [Office of the Auditor General]

CAF Andean Development Corporation

ESIA Environmental and Social Impact Assessment
ESMF Environmental and Social Management Framework

ESMP Environmental and Social Management Plan
ESMR Environmental and Social Management Report
ICAS Institutional Capacity Assessment System

ICB International competitive bidding

INDEC National Institute of Statistics and Census

MIOPyV Ministry of the Interior, Public Works, and Housing

NCB National competitive bidding PEU Program execution unit

QCBS Quality- and cost-based selection RBMP Results-based management plan

SIGEN Sindicatura General de la Nación [Office of the Comptroller General]
UCPyPFE Coordination Unit for Externally Financed Programs and Projects

UEPEX Execution units of projects with external financing

PROJECT SUMMARY ARGENTINA

WATER AND SANITATION DEVELOPMENT PROGRAM - BELGRANO PLAN (AR-L1258) Financial Terms and Conditions

Borrower: Argentine Rep	ublic		Flexible Financing Facility ^(a)							
-			Amortization period:	25 years						
Executing agency: The big Ministry of the Interior, Pu			Original weighted average life:	15.25 years						
(MIOPyV)			Disbursement period:	5 years						
Source	Source Amount (US\$) %		Grace period:	5.5 years						
IDB (Ordinary Capital):	200 million	74.1	Inspection and supervision fee:	(b)						
Local:	70 million	25.9	Interest rate:	LIBOR-based						
Local	70 million	25.9	Credit fee:	(b)						
Total:	270 million	100.0	Currency of approval:	U.S. dollars from the						
Total.	270 111111011	100.0		Ordinary Capital						
	Project at a Glance									
improving the operational Plan. The specific objecti	and financial perforr ves are: (i) to expar itions through waste	mance of ser nd water and	am is to increase access to water vice operators, mainly in the provides sewer service coverage; (ii) to dent; and (iii) to improve the manager.	inces covered by the Belgrano optimize environmental, public						
Special contractual con the following: (i) the creati entry into force of the prod Special environmental a Report (ESMR) (required Deadline to start the wo	Special contractual conditions precedent to the first disbursement: Provide evidence, to the Bank's satisfaction, of the following: (i) the creation of the program execution unit (PEU) within the executing agency (paragraph 3.1); and (ii) the entry into force of the program Operating Regulations under terms previously approved by the Bank (paragraph 3.3). Special environmental and social contractual clauses of execution: See Environmental and Social Management Report (ESMR) (required electronic link 3). Deadline to start the works: The deadline for the physical start of all works included in the program will be three years from the effective date of the loan contract (paragraph 3.8).									
Exceptions to Bank poin	0.00. 140110	Strateg	ic alignment							
Challenges:(c)	Ç	SI V	PI 🗆	EI 🗆						

(a) Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency and interest rate conversions. The Bank will take operational and risk management considerations into account when weighing such requests.

CC

- (b) 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 applicable policies.
- (c) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

GD

Crosscutting topics:(d)

(d) GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and rationale

- 1.1 **Background**. Argentina has a population of 44 million, based on data from the 2010 Census.¹ The northwest and northeast regions of Argentina are made up of the provinces of Catamarca, Chaco, Corrientes, Formosa, Jujuy, La Rioja, Misiones, Santiago del Estero, Salta, and Tucumán. They represent 20% of the country's area (850,000 square kilometers) and are home to 20% of its population (9.5 million people). This region is known for its high rates of poverty, marginalization, and underdevelopment.² In general, its production structure is disjointed, with poor infrastructure and limited access to services for the population. These provinces are in the coverage area of the Belgrano Plan, an investment program for regional social and economic development established by the Argentine government.
- 1.2 Diagnostic assessment of the problem. According to the 2010 Census, 85.9% of Argentina's urban dwellers have access to the public water system and 52.7% to sewer systems. For the northwest and northeast regions, the water system coverage rate at the urban level was 92.4%, above the national average. This is mainly because of increased investments in water projects over the past few years. However, the urban coverage rate for the sewer system was 46.7%, with the most underserved areas being the provinces of Chaco (24%), Formosa (30%), Misiones (17%), and Santiago del Estero (19%). Some of the factors that explain the low coverage levels are lack of prioritization of investments in the sector,3 lack of planning to support population growth,4 and insufficient resources to address maintenance and expansion needs (paragraph 1.4). In the rest of the country (not including the province of Buenos Aires or the autonomous city of Buenos Aires). water and sewer coverage levels for urban areas are 93.9% and 55.5%. respectively. In addition, it is estimated that only 15% to 20% of the wastewater collected in the country receives some type of treatment. In the provinces of the northwest and northeast regions, wastewater treatment is basically nonexistent.5 The little infrastructure that exists, in general, is over capacity and is reported to be poorly operated and maintained.6
- 1.3 The coverage gaps in sewer service, affecting more than half of the population, and the low rates of wastewater treatment are indicators of exposure to health risks, a situation that is aggravated by the fact that these areas have the highest rates of

¹ 2010 National Population and Housing Census, National Institute of Statistics and Census (INDEC).

According to INDEC data, in 2016 over 37% of the population was living below the poverty line and 6% was living in indigence (nationwide, the rates were 32% and 6%). Together, the northwest and northeast regions generate 10% of the GDP and 7% of the country's exports. The illiteracy rate is 3.6%, almost double the national average, and the infant mortality rate is 12.3 per thousand, versus a national average of 10.6 per thousand (2014 data).

Argentina's economic instability during recent decades, as well as shifting sector policies, has impeded coordinated, sustainable development of the sector. As a result, expansion through infrastructure investments was curtailed, and a major portion of the services were left with insufficient funding. National Water and Sanitation Plan (MIOPyV).

⁴ According to INDEC data, both regions have grown at an annual average rate of 1%, with high concentration in urban areas.

⁵ National Water and Sanitation Plan (MIOPyV).

The situation of the wastewater treatment plan in the city of Salta, which was analyzed as part of the sample for this operation, is an example of the condition of this type of infrastructure.

poverty and indigence. Therefore, coverage gaps get wider and affect the most vulnerable social sectors. In the northwest and northeast regions, the water system coverage for households with unmet basic needs is 71.7%, while for households without unmet basic needs, coverage increases to 85.8% (versus 73% and 85% nationwide). For sewer coverage, the indicators are 25.5% and 45.4% respectively (31% and 56% nationwide). This is relevant because of the positive relationship between environmental quality, health, and access to water and sanitation. Based on Ministry of Health data for 2012, out of Argentina's 10 departments with the highest incidence of diarrhea (between 6,800 and 12,900 cases per 100,000 inhabitants), 9 are in provinces in the northwest and northeast regions (Salta, Misiones, Jujuy, Formosa, Chaco, and Tucumán).

- 1.4 In the northwest and northeast regions, there are 10 main water and sanitation operators, 10 serving more than 1.5 million users. Most of these operators face challenges in their operations and financial management that include needing to increase household metering rates, 11 decrease levels of unaccounted-for water, 12 and strengthen the capacities of their personnel. 13 This impacts each operator's financial situation, as demonstrated by the small number of companies that are covering operating costs with rate revenues. 14 In addition, these operators lack strategic planning and institutional strengthening plans that include annual monitoring of management indicators (see optional electronic link 4).
- Institutional framework for the sector. The agency with nationwide jurisdiction over the water and sanitation sector is the Ministry of the Interior, Public Works, and Housing (MIOPyV). National policy and planning for services is set by the Water Resources Division, which also allocates the largest proportion of financial resources in the sector for investments and current expenditures. Estimates show that Argentina has 1,828 providers in urban locations (23 at the provincial or regional level; 19 at the state level serving 60% of the population, and 4 private providers serving 10% of the population; the rest are municipal providers or cooperatives, which serve 30% of the population). At the provincial level, the institutional structure consists of an agency responsible for sector planning and fundraising (ministry, department, or division) and a regulatory body (see optional electronic link 4).

This has been documented through numerous studies, such as those reviewed by A. Brenneman and M. Kerf, "Infrastructure & Poverty Linkages: A Literature Review," The World Bank, 2002. Other studies included: Annette Prüss-Ustün et al., "Burden of disease from inadequate water, sanitation and hygiene in low- and middle-income settings: a retrospective analysis of data from 145 countries," Tropical Medicine & International Health, Volume 19, Issue 8, pages 894–905, August 2014; and Michael Kremer and Alix Peterson Zwane (2007), "What Works in Fighting Diarrheal Diseases in Developing Countries? A Critical Review," CID Working Paper No. 140, March 2007.

⁹ Source: *Boletín integrado de vigilancia No.129*, Ministry of Health.

- Seven provincial government-owned companies and three private operators (Misiones, Corrientes, and Santiago del Estero).
- ¹¹ Salta (2015): 25%; Catamarca (2015): 28%; Chaco (2015): 37%; Santiago (2015): 3%.
- ¹² Salta (2015): 40%; Catamarca (2011): 47%; Chaco (2014): 45%.
- ¹³ The companies lack ongoing training plans for personnel to develop management and operations capacities.
- Based on applicable financial statements: Salta (2016): 71%; Catamarca (2015): 35%; Chaco (2015): 46%; Jujuy (2015): 97%. Operators that have operating deficits receive subsidies from provincial governments to cover them.
- ¹⁵ National Water and Sanitation Plan, 2016.

National Water and Sanitation Plan (MIOPyV).

- 1.6 **Rationale and proposed interventions.** Addressing coverage deficits in the northwest and northeast regions, in order to close existing inequality gaps, would require works to provide water services to 730,000 people and sewer services to 4.4 million people. According to official estimates, this would require US\$4.6 billion in medium-term investments. At the same time, the quality and management of these services needs to be improved, so this operation will also finance activities to improve infrastructure maintenance and operator management. To fund these necessary investments, in addition to the remaining proceeds from loan 2776/AR-OC (paragraph 1.9) and from other sources of financing, the Argentine government has asked the Bank to provide resources through this new operation and is also working to obtain financing from other donors and local contributors. This operation will be implemented following the same guidelines and execution mechanism of loan 2776/OC-AR.
- 1.7 The effectiveness of the proposed interventions for water and sewer infrastructure¹⁷ (paragraph 1.17) and institutional development¹⁸ (paragraph1.18) has been demonstrated through various studies conducted in similar contexts.
- 1.8 The Bank's experience in the sector. This operation continues the work performed within the framework of the Norte Grande Provinces Development Program: Water and Sanitation Infrastructure II (2776/OC-AR), whose objective is to help expand access to water and sanitation services in these provinces. It is also associated with a Bank strategy of comprehensive support for improving water and sanitation services throughout the country. In the case of the Buenos Aires Metropolitan Area, this strategy includes conditional credit lines for investment projects (CCLIPs) AR-X1013 and AR-O0004, as well as the Reconquista River Basin Environmental Sanitation Program (3256/OC-AR). For the rest of the country, there are CCLIPs for water and sanitation programs in small communities (AR-X1005) and urban centers (AR-X1017). In addition, several technical cooperation operations are currently being executed: two to prepare Comprehensive Drainage and Flood Control Management Plans (ATN/OC-14213-AR and ATN/LA-15934-AR); one to support the Modernization of the Water and Sanitation Sector (ATN/OC-15932-AR); and one to improve transparency policies for more effective management in the Belgrano

At present, financing from multilateral and bilateral organizations represents approximately 15% of the necessary investments.

Evidence of the effectiveness of environmental quality actions: Avaliação Projeto Belém-Pará. Estudo da Bacia UNA, 2011 (link); Ex post evaluation of loan 649/OC-BR (link A and link B). There is also evidence of the effectiveness of interventions on reducing the incidence of waterborne diseases, which was studied in Argentina by Galiani et al. (2002) (link). This study examined the effects of expanding a drinking water system in urban settlements. The researchers found that the presence, frequency, and severity of diarrheal episodes in children greatly decreased as a result of expanded water service, compared with children in the control groups. Expanded service led to savings in water costs (and time), since families were able to use water systems instead of more expensive and remote water sources. The effects on health and savings were also significant for households with illegal connections to the water system, which were free but of low quality.

Evidence of the effectiveness of installing household meters can be seen in Nilce Regina Da Silva, Estudo Metodologico para Avaliação de Submedição de Hidrometros Domiciliares em Sistemas de Agua, master's thesis, University of Brasilia, published, PTARH-DM-2008 (link). Evidence of the effectiveness of interventions to control unaccounted-for water can be seen in Alex Rizzo, David Pearson, Matthew Stephenson, and Neil Harper, "Apparent Water Loss Control: A Practical Approach," International Water Association, Water 21, article 7, IWA Task Force, June 2004. Evidence of the connection between household metering and financial sustainability is available in E. Lentini, "Desafíos de los Operadores de Áreas Urbanas de más de 300.000 Habitantes," IDB, 2015 (link).

Plan zone (AR-T1166). These programs address the problems in the areas in the country that lag furthest behind in access to water and sanitation services as well as the need for institutional strengthening to ensure that the services are well managed. Given that there are geographic areas outside the northwest and northeast regions of the country with similar social and infrastructure deficits, a decision was taken with the Argentine government to allow up to a maximum of 30% of program resources to be allocated to areas outside the provinces covered by the Belgrano Plan (paragraph 3.5).

- 1.9 Progress report for Ioan 2776/AR-OC. The Bank's Board of Executive Directors approved this operation in 2012 for US\$555 million. The loan contract (US\$500 million) was signed in March 2013 and declared eligible in October of the same year. The program objective is to improve water and sanitation sector service and efficiency in the provinces of the Norte Grande of Argentina¹⁹ by financing projects to: (i) increase coverage and improve potable water and sanitary and stormwater sewer services in unserved or underserved areas; and (ii) strengthen sector entities in the provinces, and improve service provider operational and financial efficiency and management. The executing agency, the same as the one being proposed for this operation, has broad experience in the execution of programs with external financing (paragraph 2.13), which has enabled it to satisfactorily comply with contractual, management, and fiduciary commitments. As of July 2017, US\$198 million of the loan proceeds (39.8%) have been disbursed, and 61% have been committed. Two of the works have been completed, 20 four are currently in execution,21 and two are being tendered.22 In addition, contracting for approximately US\$220 million in services is under way, after which all loan proceeds will be committed. It is estimated that these projects will provide water services to 17,700 households and sanitation services to 160,700 households and will enable wastewater to be treated at a rate of 2.2 cubic meters per second. While there have been some delays, the assessment is that execution is proceeding adequately, and expected results will likely be achieved (optional electronic link 9).
- 1.10 Lessons learned. For program preparation, the lessons learned from the evaluations of similar operations in Argentina (paragraphs 1.8 and 1.9) and in the region (based on Water and Sanitation Sector Framework Document GN-2781-3) were taken into account. They are as follows: (i) having advanced engineering designs reduces costs and delays during works execution, so program resources will be allocated to update and improve these designs; (ii) by ensuring proper coordination between the executing agency, the provinces, and other institutions involved in the works (municipal or environmental permits), steps can be taken to make sure that works start on time and proceed according to schedule; (iii) bringing in technical specialists with experience in project execution and supervision in a timely manner will strengthen the capacity of the executing agency, so an institutional capacity assessment has been conducted and funds will be allocated to finance this aspect (paragraph 1.19); and (iv) making sure that all beneficiary service

¹⁹ The provinces of the Norte Grande are in the northwest and northeast regions.

²⁰ Castelli water supply system and bulk and individual meters in Tucumán.

Wastewater treatment plant in Santiago del Estero (85%); water systems in Miraflores, Villa Bermejito, and El Espinillo (65%); drinking water system in Formosa (59%); and sewer mains in Santiago del Estero (execution has not started).

Wastewater treatment plants in Corrientes (US\$67 million) and in Concepción, province of Tucumán (US\$28 million).

operators have their own results-based management plans (RBMPs) in place prior to startup of the works will ensure the timely execution of the institutional development component.

- The national government's strategy. The Argentine government approved the 1.11 National Water and Sanitation Plan²³ in 2016. This plan lays the foundation for sector development, seeking to achieve 100% coverage for water services and 75% coverage for sewer services in the country's urban areas by 2019. It also includes a line of action to promote the financial sustainability of water and sanitation operators, as a strategy for freeing up resources that are currently used to cover operating deficits and directing them toward investments in service expansions. In addition, in 2016, the Argentine government launched the Belgrano Plan,24 a social, production, and infrastructure program intended to decrease the social and economic development gap between the 10 provinces of the northwest and northeast regions and the rest of the country. The Belgrano Plan has four objectives: (i) to develop social aspects, housing, and habitats; (ii) to enhance infrastructure, logistics, and transportation; (iii) to strengthen regional economies; and (iv) to combat drug trafficking. The first objective of the plan includes measures to expand and improve water and sanitation services, as well as to improve operational and institutional management. This operation, which will finance the expansion and improvement of water and sanitation services in the provinces of the northwest and northeast regions, aligns with both plans.
- 1.12 **The Bank's strategy with the country.** The operation is aligned with the Bank's country strategy with Argentina 2016-2019 (document GN-2870-1), specifically with the priority of "poverty and inequality reduction," which includes the strategic objective of improving habitat by expanding access to water and sanitation in poor regions. In addition, the operation is included in the 2017 Operational Program Report (document GN-2884).
- 1.13 Strategic alignment. The operation is consistent with the Update to the Institutional Strategy 2010-2020 (document AB-3008) and aligns with the social inclusion and equality challenge inasmuch as it will increase access to water and sanitation services in regions with poverty rates above the national average. In addition, the program will contribute to the Corporate Results Framework 2016-2019 (document GN-2727-4) through the following output indicators: households with new or upgraded access to sanitation; households with wastewater treatment; and households with new or upgraded access to water. The program is also consistent with the Sustainable Infrastructure for Competitiveness and Inclusive Growth Strategy (document GN-2710-5), specifically with the priority area to "support the construction and maintenance of socially and environmentally sustainable infrastructure, thus enhancing quality of life." In addition, it aligns with the dimensions of success and lines of action of the Water and Sanitation Sector Framework Document (document GN-2781-3), seeking to achieve universal access while improving service quality and to ensure social and environmental sustainability.
- 1.14 The operation is also aligned with the crosscutting theme of climate change and environmental sustainability, inasmuch as it will improve environmental conditions through the construction of infrastructure to provide sewer services and wastewater

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²³ National Water and Sanitation Plan (MIOPyV).

The Belgrano Plan Unit is responsible for its execution. This unit reports to the Office of the Chief of Staff and its jurisdiction is pursuant to Decree 435/2016.

treatment. Approximately 60% of program resources will be invested in climate change mitigation activities, in accordance with the <u>multilateral development banks'</u> joint methodology for tracking climate finance. These resources contribute to the IDB Group's target of increasing financing for climate change projects to 30% of all operations approved by the end of 2020.

1.15 Compliance with the Bank's Public Utilities Policy. The program and the national objectives for the sector fulfill the financial sustainability and economic evaluation conditions of the Public Utilities Policy (document GN-2716-5) and are consistent with the principles of that policy. One of the sample operators for this operation, which operates water and sanitation services in Santiago del Estero, has been covering its operating and maintenance costs with rate revenues (paragraph 2.12), and the sample operator that provides water and sanitation services in Salta currently covers its operating and maintenance costs through a combination of rate revenues and transfers that it receives in a transparent, periodic manner from the provincial government. A rate adjustment was recently approved for the latter operator, and in the medium term it is expected to be able to cover its operating and maintenance costs with rate revenues (paragraph 2.12). In addition, the works to be financed through this operation are socioeconomically viable (paragraph 2.11). For projects beyond the sample, applicable eligibility criteria are included (paragraph 3.5) to ensure compliance with the conditions of this policy. There is also a suitable institutional structure (policy-setting, regulation, and service delivery) (paragraph 1.5) (see optional electronic link 6).

B. Objectives, components, and cost

- 1.16 **Objective.** The objective of the program is to increase access to water and sanitation services, while improving the operational and financial performance of service operators, mainly in the provinces covered by the Belgrano Plan. The specific objectives are: (i) to expand water and sewer service coverage; (ii) to optimize environmental, public health, and hygiene conditions through wastewater treatment; and (iii) to improve the management capacity of water and sanitation service operators. To achieve its objectives, the program will be divided into two components:
- 1.17 Component 1: Infrastructure works (US\$247 million). The objective of this component is to expand coverage of water and sewer services by financing new, expanded, upgraded, or rehabilitated water and sanitation systems. This includes works to extract ground water and/or collect surface water; conveyance lines; water purification plants; supply systems; distribution systems; pumping stations with electromechanical systems; and complementary works. It also includes the installation of trunk and main sewers; sewer systems and residential connections; manholes; lifting stations with electromechanical systems; and complementary works, as well as the construction of sewage treatment systems and/or plants. In addition, this component will finance the inspection of works during construction. As a result of the various types of intervention, the program is expected to directly benefit approximately 150,000 households with new or upgraded access to water and/or sanitation.
- 1.18 Component 2: Institutional development and studies (US\$20 million). This component will improve the organizational structure, investment planning, and operational, business, and financial capacities of the program's water and sanitation operators, in order to increase revenues and decrease operating and maintenance

costs, thereby supporting the sustainability of investments. Financing will be provided to implement the activities prioritized in the respective results-based management plans (RBMPs).²⁵ These will include feasibility studies; cost and rate studies; organizational improvement plans; activities to improve business, financial, and information systems; plans to install bulk and individual meters and reduce unaccounted-for water; system operating and maintenance trainings; and system management trainings. These interventions are expected to make the operators more financially self-sufficient.

- 1.19 **Program management.** The program also includes financing to provide administrative and operational support to the executing agency for administration, monitoring, coordination, and supervision of program execution, as well as to engage consulting services to strengthen the executing agency's technical capacity, perform external audits, and conduct program evaluations.
- 1.20 Cost. The program will have a total cost of US\$270 million, of which US\$200 million will be financed by the Bank from its Ordinary Capital and US\$70 million will be financed with local counterpart resources. Table I-1 includes the consolidated budget, disaggregated by component and source of financing.

Components **IDB** Local **Total** % I. Infrastructure works 182.9 64.1 247.0 91.5% II. Institutional development and studies 14.8 5.2 20.0 7.4% Program management 2.3 0.7 3.0 1.1% Total 200.0 270.0 100.0% 70.0 74.0 % 26.0 100.0

Table I-1. Program costs (US\$ millions)

C. Key results indicators

1.21 The results matrix (Annex II) includes program outputs and outcomes. Table I-2 shows the key indicators.

Table I-2. Key indicators

Outcome indicator	Unit of measure	Baseline	Target
Households with new access to water systems		0	1,500
Households with new access to sewer systems	Households	0	29,000
Households with new wastewater treatment		0	119,000

1.22 **Beneficiaries.** The beneficiaries will be the households whose well-being and quality of life will improve owing to new or upgraded access to water and sanitation services and to environmental improvements resulting from proper wastewater treatment. Since this is a multiple-works operation, a series of eligibility and

RBMPs are documents for strategic planning and institutional strengthening of water and sanitation operators, so that they can improve their management capacities and achieve appropriate levels of efficiency, quality, and sustainability in operating and maintaining investments. These documents also include the baseline and five-year targets for the operators' principal management indicators (see optional electronic link 4).

prioritization criteria have been established (paragraph 3.5), which apply to the various types of projects to be financed under the program.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

Modality and financial structure. This will be an investment loan under the multiple-works modality, since it involves independent water and sanitation projects that meet eligibility criteria and includes a representative sample for evaluation and execution. The execution and disbursement period will be five years, consistent with the multiyear execution plan (required electronic link 1). The program will address the priority needs set by the federal and provincial governments and will be governed by the program Operating Regulations (paragraph 3.3). It will focus mainly on the 10 provinces covered by the Belgrano Plan, where at least 70% of the resources will be invested, with the option of financing investments in other parts of the country (paragraph 1.8). Table II-1 presents the disbursement schedule (optional electronic link 7).

Table II-1. Disbursement schedule (US\$ millions)

Source/Year	1	2	3	4	5	Total
IDB	38.97	84.2	69.15	6.7	0.98	200.0
Cumulative %	19.5%	61.6%	96.2%	99.5%	100.0%	
Local contribution	8.2	27.84	27.03	6.18	0.75	70.0
Total	47.17	112.04	96.18	12.88	1.73	270.0
Cumulative %	17.5%	59.0%	94.6%	99.4%	100.0%	

- 2.2 **Local contribution.** The local counterpart resources for the program are expected to be financed with the proceeds of a loan from Agence Française de Développement (AFD).²⁶ Since those proceeds will be used jointly with proceeds from the Bank's loan for all program components, an agreement was reached to execute the operation in accordance with Bank policies and procedures, including the Policies for the Procurement of Works and Goods Financed by the Bank (document GN-2349-9) and the Policies for the Selection and Contracting of Consultants Financed by the Bank (document GN-2350-9), both from March 2011. In addition, the AFD will accept the Bank's technical no objections related to the works to be financed from both sources, as well as the program's environmental and auditing requirements, in order to prevent execution delays. If for some reason the loan contract with the AFD is not formalized, the borrower will be responsible for completing the local contribution with its own resources.
- 2.3 **Representative sample.** To determine the viability of the program and expedite execution upon its approval, a representative sample of the type of works to be executed was analyzed. The projects are: (i) expansion and optimization of the

The AFD loan operation has been sent to the agency's loan committee and management council for consideration and is expected to be sent to its board of governors for consideration in October. If necessary, the AFD and the Bank will sign an agreement establishing mechanisms for collaboration, supervision, information-sharing, and assistance to coordinate the implementation of their respective loans, in accordance with the applicable Bank policies and procedures.

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wastewater treatment plant in the city of Salta,²⁷ which will increase the treatment capacity from 3,600 cubic meters/hour to 10,000 cubic meters/hour; and (ii) expansion of sewer systems in the city of Santiago del Estero,²⁸ which will expand service coverage to approximately 3,000 households. Together, these interventions total US\$86.3 million, accounting for 32% of the program total (optional electronic link 1). The review and analysis of sanitation projects was a priority for the sample selection, since these types of works account for 97% of Component 1 resources (see Annex II). In addition, the sample projects meet the eligibility criteria established for the program (paragraph 3.5). Specifically, they are located in the region covered by the Belgrano Plan, they have commitment from local governments for their implementation and subsequent operation and maintenance, and they are technically, institutionally, financially, economically, and socio-environmentally feasible (paragraphs 2.10 to 2.13).

B. Environmental and social risks

- In accordance with the guidelines of Operational Policy OP-703, the operation has been classified as a category "B" operation, a due diligence review having confirmed that the negative environmental and social impacts will be local and of short duration, and mitigation measures exist to address them. The investments are expected to have a positive social and environmental effect on the quality of life and well-being of beneficiaries and on the environment. Due diligence did not identify a need for physical displacement or impacts related to the Involuntary Resettlement Policy (Operational Policy OP-710) that would require the preparation of resettlements plans. However, plans will be required if they are relevant for projects not included in the sample.
- 2.5 The operation's main impacts are associated with construction activities (temporary and limited); traffic interruptions; minimum to moderate airborne dust and emissions and impact on air quality; impact on water/soil, especially if hazardous waste and materials are not properly handled; temporary noise impact; health and safety impact in the workplace and the community. Construction activities may temporarily impede access to businesses, residences, and the social infrastructure, which can be mitigated through the Environmental and Social Management Plan (ESMP) developed for each project. For the sample project in Salta, in order to expand the wastewater treatment plant, it is necessary to purchase the home of an individual homeowner. This home will be purchased directly, in accordance with national law and based on market value.²⁹ An analysis with the Disaster Risk Management Policy (Operational Policy OP-704) showed a moderate risk level, associated with heavy rains and potential flooding. Initial studies on the modification of the shoreline of the Arenales River (50-year return period) showed that potential flooding would have no

The Sur purification plant is located southeast of the city, approximately six kilometers from the city center. This is a conventional plant equipped with a screening system, two grit chambers, four primary sedimentation basins, four filter beds, and four secondary clarifiers. Disinfection is performed with chlorine gas. Sludge is treated with a high-load anaerobic digestion system composed of four primary and four secondary digesters, and a drying bed system measuring 12,000 square meters.

This includes the expansion of the secondary sewer system for seven neighborhoods in the city of Santiago del Estero (Ramón Carrillo, Independencia, Jorge Newbery, Reconquista, 8 de abril, Duplex, and Sargento Cabral). The total length of the piping will be approximately 37.4 kilometers, mainly with a diameter of 160 millimeters.

²⁹ This house will not be purchased with Bank resources.

- impact on the existing and proposed infrastructure. These studies will be updated (for 100 years) prior to tendering the works.
- 2.6 The program Operating Regulations include an Environmental and Social Management Framework (ESMF) to ensure that every project complies with Bank policies. While no impacts related to Operational Policies OP-710 and OP-765 were identified in the sample projects, the program has a Resettlement Framework and an Indigenous Peoples Framework that were published and will also be included in the program Operating Regulations. The borrower prepared an Environmental and Social Impact Assessment (ESIA) and an associated Environmental and Social Management Plan (ESMP) for each of the two projects selected for the sample. The Bank and the executing agency have made available to the public the operation's ESMF, Resettlement Framework, and Indigenous Peoples Framework, as well as the ESIA and ESMP for the sample projects. The borrower will implement all the plans and mitigation measures included in the ESMP, the Resettlement Framework, the ESMF, and the Indigenous Peoples Framework, in order to prevent implementation delays related to social and environmental issues. In accordance with the ESMF and with both ESMPs, the executing agency will take steps to strengthen its capacity, in order to ensure that all environmental and social aspects of the program are properly managed.
- 2.7 The first consultation for the sample project in Salta was held on 29 June 2017 and included the presentation of the ESIA, the ESMP, and the ESMF. Most of the attendees were public officials. A second consultation took place on 10 August with stakeholders to present the same documents. All the questions asked during these consultations (which concerned water quality and plant management) were duly answered, and participants expressed support for the project. Activities took place in accordance with Bank policies. In Santiago del Estero, prior to issuing tenders, the ESIA needs to be updated. This means having another consultation with the affected parties. During program execution, public consultations will be required for the remaining projects.
- 2.8 **Fiduciary risks.** The fiduciary risks have been classified as low. The executing agency is currently implementing loan 2776/OC-AR with Bank resources and has broad experience in the fiduciary management of programs with external financing (paragraph 2.13) (see Annex III).
- 2.9 Other risks. In addition, other medium development and monitoring risks were identified as follows: (i) insufficient detail in the detailed designs may cause delays during works execution and/or cost increases, so a preinvestment unit will be created in the executing agency and a project design manual will be prepared; (ii) the financial and technical capacities of operators may not be sufficient to ensure the sustainability of investments, so Component 2 includes technical assistance resources for operators, as well as works contracts that feature assisted operation during at least the first year and implementation of RBMP activities; and (iii) program management and monitoring may be limited because of a lack of human resources at the executing agency and limited systems available for the program, so the program management component includes resources to strengthen these aspects at the executing agency.

C. Special considerations

2.10 **Technical viability.** In order to determine the technical viability of the program, an evaluation was conducted of the works proposed for the two projects in the

representative sample: the expansion of the Salta purification plant and the expansion of the Santiago del Estero sewer system. Based on this analysis (optional electronic link 1), the projects adequately meet the needs and priorities of the two cities, in terms of the size and characteristics of the proposed works. The following observations were also made: (i) the studies and designs prepared follow generally accepted engineering principles and practices; (ii) the solutions proposed resulted from an analysis of the most suitable technological alternatives; and (iii) the schedules and deadlines for works execution were prepared taking into account the complexity of the works and the lessons learned from similar projects. In addition, the respective companies are expected to properly operate and maintain both the physical facilities and the equipment, based on program requirements (paragraph 3.10). For the remaining projects that are not included in the sample and that the program will finance, the program Operating Regulations will establish the project eligibility and prioritization criteria, as well as guidelines for project formulation and review and approval procedures (paragraphs 3.3 and 3.5).

- 2.11 Socioeconomic viability. A cost-benefit analysis was conducted for the sample projects: the expansion and upgrade of the wastewater treatment plant in the city of Salta, and the expansion of sewer systems in the city of Santiago del Estero. These projects are socioeconomically viable, with an economic internal rate of return of 21.1% for the Salta project and 13.8% for the Santiago del Estero project. Using a discount rate of 12%, the net present values were US\$38.8 million and US\$707,000, respectively (optional electronic link 2). These evaluations were supplemented with sensitivity analyses that showed robust results. For projects that were not evaluated, a cost-benefit analysis will be conducted. The program will only finance projects with economic internal rates of return above 12%.
- 2.12 Financial viability. The financial analysis of the two water and sanitation operators for the sample in Salta (Compañía Salteña de Agua y Saneamiento and Aguas del Norte Sociedad Anónima)30 and Santiago del Estero (Aguas de Santiago Sociedad Anónima)³¹ was performed based on their operating and financial information. Aguas de Santiago covers its operating costs with rate revenues; its financial projections indicate that this positive trend will continue during upcoming fiscal years. Aguas del Norte has had an average coverage ratio of 73% for its operating costs and operating revenues³² over the past four years and has received subsidies from the provincial government to cover part of its operating costs. However, the rate adjustment approved in early 2017 will allow this operator to achieve operational self-sustainability in the medium term. The actions prioritized in the RBMPs33 prepared by the participating operators will be implemented with resources from Component 2 (paragraph 1.18). The objective of these plans is to promote the operational and financial sustainability of these service providers by monitoring their performance through the management indicators defined in the respective RBMPs (see optional electronic link 4). A condition for eligibility is for operators to have an approved RBMP prior to the startup of works, as well as to implement the actions included in this plan (paragraphs 3.3 and 3.5). For this operation, just as with loan

³⁰ Government-run enterprise in the province of Salta.

³¹ Private company with a concession contract in effect until 2027.

Ratio: operating revenues/operating costs (%).

The RBMP for Aguas del Norte is almost completed. Resources from ATN/OC-15932-AR are being used to support preparation of the RBMP for Aguas de Santiago, in order to move ahead with institutional strengthening of the sample operators.

2776/OC-AR, the borrower, acting through the executing agency, will come to an agreement with the respective provincial and/or municipal government and the beneficiary service provider, in the respective participation, transfer, and maintenance agreement (PTMA), on the implementation of an RBMP with program resources, to ensure that the revenues obtained by beneficiary water and sanitation service providers are sufficient to cover operating costs, included those related to administration, operations, and maintenance.

2.13 **Institutional viability.** The update of the Institutional Capacity Assessment System (ICAS) analysis of the executing agency during the preparation of this operation indicates a satisfactory level of development and a low risk level. This is consistent with the agency's experience and knowledge of procurement and financial policies at the Bank (paragraph 1.9) and other multilateral organizations such as the World Bank³⁴ and the CAF.³⁵ After the executing agency's capacity was analyzed for this program, an agreement was reached to reinforce some of areas. The program management component includes resources needed for this purpose (see optional electronic link 3).

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 **Execution mechanism.** The borrower will be the Argentine Republic. The executing agency will be the borrower, represented by the Ministry of the Interior, Public Works, and Housing (MIOPyV), acting through the Coordination Unit for Externally Financed Programs and Projects (UCPyPFE). The UCPyPFE will designate the team that has been executing loan 2776/OC-AR as the program execution unit (PEU). This team will consist of a coordinator, supported by a technical team, and will be accountable to the Bank for each project cycle. The PEU will receive support from the UCPyPFE operational areas (see optional electronic link 3). To ensure proper program execution, a condition precedent to the first disbursement of the loan will be the creation of the PEU within the executing agency.³⁶ The provinces and/or municipios will act as project beneficiaries and will deliver the infrastructure built under the program to water and sanitation service providers for its operation and maintenance.
- 3.2 Among its responsibilities, the executing agency will: (i) prepare and present to the Bank the required consolidated monitoring and evaluation reports; (ii) carry out the selection processes for works, goods, and consulting services; (iii) supervise the works and monitor and supervise program execution and evaluation; (iv) perform the program's financial management, including the preparation of supporting documentation for disbursement requests and expense vouchers, as well as delivery of the required financial reports to the Bank; and (v) ensure that the program fulfills contractual clauses and complies with environmental and social regulations.

³⁵ Norte Grande Sanitation Infrastructure Program I, II, and III.

This condition is required to verify the actual execution capacity of the PEU as well as compliance with the regulations that govern the operations of the UCPyPFE, including Resolution 109 – E/2016 of the MIOPyV. The Water Programs Execution Unit – Belgrano Plan, which is part of the UCPyPFE and is currently executing loan 2776/OC-AR, is expected to be designated as the PEU for this new operation.

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³⁴ Norte Grande Water Infrastructure Project I and II.

- 3.3 Program Operating Regulations. Program execution will be governed by the provisions of the program Operating Regulations, which will substantially maintain the project cycle established in loan contract 2776/AR-OC. This document will include: (i) a detailed execution mechanism, with a description of core staff at the PEU; (ii) institutional roles and responsibilities of the entities involved; (iii) intervention strategy for the various phases of the project cycle; (iv) project eligibility and prioritization criteria; (v) guidelines for project formulation and the minimum content of the RBMPs; (vi) rules and procedures for the selection and contracting of works, goods, and services; (vii) rules and procedures for administrative and financial management; (viii) monitoring and evaluation procedures; and (ix) the ESMF. It will also include the environmental and social requirements of the Environmental and Social Management Report (ESMR) (see optional electronic link 5). To ensure successful program execution and effective coordination between the executing agency, the provinces, and the service providers, a special contractual condition precedent to the first disbursement of the loan will be the entry into force of the program Operating Regulations under the terms and conditions previously agreed upon with the Bank. If the AFD loan³⁷ is approved, that agency will also agree to the program Operating Regulations.
- 3.4 **Participation, transfer, and maintenance agreements.** The executing agency will sign a participation, transfer, and maintenance agreement with every beneficiary province and/or municipio. This agreement will set forth the conditions to join the program, the commitment to operate and maintain the newly built infrastructure, the participation of providers throughout the project cycle, and the timely delivery of information to the executing agency on RBMP indicators, financial statements (paragraph 2.12), and operations and maintenance reports (paragraph 3.10).
- 3.5 Eligibility and prioritization criteria. The eligibility criteria for program-financed projects will be included in the program Operating Regulations: (i) located in a Belgrano Plan province, or in another province for up to 30% of the program total; (ii) located in urban or suburban communities with a total population of more than 15,000 inhabitants; (iii) a project that is socioeconomically, legally, technically, socially, environmentally, and financially viable; (iv) a participation, transfer, and maintenance agreement signed by provincial authorities and/or service providers, as applicable; (v) existence of a legally incorporated service provider; (vi) commitment from the provincial authorities that the service provider will be responsible for the operation and maintenance of the works to be financed with program resources: (vii) commitment from the provincial authorities and/or the service provider to allocate sufficient budget funds to properly operate and maintain the works to be financed and to cover operating and maintenance costs with service revenues in the medium term; (viii) commitment to have an approved RBMP prior to the start of the works and to implement this plan during program execution; and (ix) classification as category "B" or "C" operations, in accordance with the Bank's Operational Policy OP-703. Projects will be prioritized based on coverage deficits and poverty levels.

If the AFD loan is approved, the agreement between the parties will reflect operating and coordination aspects related to program reviews, based on the principle that Bank policies and procedures will apply. An annex may be added to the Bank's standard bidding documents with a statement covering aspects related to integrity, eligibility, and environmental and social commitments in terms that are consistent with Bank policies and AFD requirements.

- Procurement. Goods, works, and consulting services will be procured in accordance with the policies set forth in documents GN-2349-9 and GN-2350-9. All procurements must be included in the procurement plan approved by the Bank through the Procurement Plan Execution System, and the methods and ranges set forth therein, as described in Annex III, Fiduciary Agreements and Requirements. The executing agency and the Bank have agreed on a procurement plan itemizing procurements for the first 18 months of execution (required electronic link 4).
- 3.7 **Advances of funds.** Disbursements will be made using the advance of funds modality, based on actual liquidity needs, for a maximum period of six months, in accordance with the investment schedule and the required flow of funds, pursuant to the financial management guidelines for IDB-financed projects (document GN-2811), as described in Annex III.
- 3.8 Physical start of works. To ensure that program execution complies with the planned five-year deadline (paragraph 2.1), the deadline for the physical start of all works included in the program will be three years from the effective date of the loan contract.
- 3.9 **Audits.** Throughout the loan disbursement period, the executing agency will submit to the Bank the program's annual audited financial statements within 120 days after the close of the fiscal year. Audits will be conducted by independent auditors acceptable to the Bank. The financial management guide for IDB-financed projects (document OP-273-6) and the guide for financial statements and external audits will be used to determine the scope and other related aspects. Auditing services will be financed with program resources. The executing agency will be responsible for engaging the audit firm.
- 3.10 **Operation and maintenance.** The borrower, acting through the executing agency, will submit to the Bank the annual maintenance plan for program-financed works and goods, as well as information on the operation and maintenance processes conducted. These will be submitted during the first quarter of every calendar year, starting in the year that the first program-financed work is completed and for up to three years after the end of the loan disbursement period. The commitment to prepare these reports will be included in the respective participation, transfer, and maintenance agreement (paragraph 3.4). If the inspections conducted by the Bank, or the reports it receives, show that maintenance is being performed below the acceptable levels, the borrower, acting through the executing agency, will take the necessary steps to fully correct the deficiencies.

B. Summary of arrangements for monitoring results

- 3.11 **Monitoring.** For the activities under its responsibility, the executing agency will prepare reports indicating progress made and outcomes achieved. The monitoring mechanism will include the procurement plan, the multiyear execution plan, the annual work plan, the resettlement framework, the progress monitoring report, and the results-based management plan (RBMP). The executing agency will submit semiannual reports on progress and results achieved, including an action plan for the following six-month period, within 60 days after the end of every six-month period.
- 3.12 **Evaluation.** The following program evaluations will be commissioned: (i) a midterm evaluation, which will be submitted 36 months after the date the program takes effect or when at least 60% of the loan proceeds have been disbursed, whichever occurs

first; and (ii) a final evaluation, within 90 days following the date of the program's last disbursement. The proposed evaluation methodology will be a "before and after" analysis, which will measure the results indicators before and after program implementation and compare the measurements to verify that the targets were achieved. There will also be an ex post economic evaluation, taking into account the model developed ex ante but with potential adjustments, as described in the monitoring and evaluation plan (required electronic link 2). The report from this evaluation will be included in the project completion report.

Development Effectiveness Matrix								
Sum	mary							
I. Corporate and Country Priorities								
1. IDB Development Objectives		Yes						
Development Challenges & Cross-cutting Themes	-Social Inclusion and Equality -Climate Change and Environmental Sustainability							
Country Development Results Indicators	-Households with new or upgraded access to drinking water (#)* -Households with new or upgraded access to sanitation (#)* -Households with wastewater treatment (#)*							
2. Country Development Objectives		Yes						
Country Strategy Results Matrix	GN-2870-1	Improve the habitat and access to basic services, particularly in lower-income regions.						
Country Program Results Matrix	GN-2884	The intervention is included in the 2017 Operational Program.						
Relevance of this project to country development challenges (If not aligned to country strategy or country program)								
II. Development Outcomes - Evaluability		Evaluable						
3. Evidence-based Assessment & Solution		10.0						
3.1 Program Diagnosis		3.0						
3.2 Proposed Interventions or Solutions	ļ	4.0						
3.3 Results Matrix Quality		3.0						
4. Ex ante Economic Analysis		10.0						
4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General Economic Analysis		4.0						
4.2 Identified and Quantified Benefits		1.5						
4.3 Identified and Quantified Costs		1.5						
4.4 Reasonable Assumptions		1.5						
4.5 Sensitivity Analysis		1.5						
5. Monitoring and Evaluation		7.5						
5.1 Monitoring Mechanisms		2.5						
5.2 Evaluation Plan		5.0						
III. Risks & Mitigation Monitoring Matrix	_							
Overall risks rate = magnitude of risks*likelihood		Medium						
Identified risks have been rated for magnitude and likelihood		Yes						
Mitigation measures have been identified for major risks		Yes						
Mitigation measures have indicators for tracking their implementation		Yes						
Environmental & social risk classification		В						
IV. IDB's Role - Additionality								
The project relies on the use of country systems								
	1	Financial Management: Budget, Accounting and Reporting.						
Fiduciary (VPC/FMP Criteria)	Yes	Procurement: Information System.						
Non-Fiduciary	Yes	Environmental Assessment National System.						
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:								
Gender Equality								
Labor								
Environment	t .							
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								
Note: (#) ladiantes and illustrate to the assessment ORFI- Occurs Development Development Development	•	•						

Note: (*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

The program presents a general diagnosis of the problem and its determinants, based on aggregated statistics for the area of intervention. Because the program is structured as a multi-works program, not all direct beneficiaries are clearly identified; however, the program has explicitly defined prioritization and eligibility criteria. The proposed solutions are adequately supported by evidence of effectiveness in similar contexts.

The results matrix reflects a clear vertical logic in which the products contribute to the results and these to the expected impacts. However, given the level of geographical aggregation defined for some outcome indicators, there will be a significant challenge in measuring and isolating the achievements attributable to the program from other factors that may affect the indicators over time.

The ex-ante socio-economic evaluation is based on the cost-benefit analysis of two projects identified to be financed with the operation (the optimization and expansion of the Salta treatment plant, and the expansion of the Santiago del Estero sewerage network), which together represent 32% of the total financing. In both cases, the results show positive rates of return. For non-evaluated projects, only those with rates of return above 12% may be financed by the operation.

The monitoring and evaluation plan includes a monitoring scheme based on standard instruments, including the results matrix, the Program Execution Plan (PEP), and the Annual Operational Plans (POA), among others. For the effectiveness evaluation, the evaluation plan includes an ex-post socioeconomic evaluation that will update the key parameters that determine economic viability, as well as before-and-after evaluations, which cannot establish attribution. Since the plan does not include an impact evaluation to identify the causal relationship between the program and the expected results, the analysis of attribution will be based on the program's theory of change.

				R	esults Ma	atrix				
Program objective			program is							improving the operational and financial
	periorinal		: Improvem		•					
Indicators	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3		Year 5	Program completion	Comments/Means of verification
Incidence of acute diarrhea in the Belgrano Plan provinces. ¹	Number of cases per year/ 100,000 inhabitants	3,415	2017						2,732	Boletín integrado de vigilancia, National Epidemiology and Health Conditions Analysis Division, Ministry of Health.
Outcomes										
Indicators ²	Unit of measure	Baseline	Baseline vear	Year 1	Year 2	Year 3	Year 4	Year 5	Program completion	Comments/Means of verification
Outcome 1: Expanded water serv	ice coveraç	je								
Households with new access to water systems in the cities targeted by the program. (Households with new or upgraded access to drinking water - Country Development Results Indicator 18).	Households	0	2017	1	-	-	-	1,500	1,500 ³	Semiannual progress reports and final evaluation for the program. Beneficiary households for every project will be taken into account. This will be measured by project/work and reported as a total.
Drinking water coverage in the Belgrano Plan region.4	%	92.40	2010	1	-	-	-	92.47	92.47	Final evaluation for the program, based on data from the Population and Housing Census and the Permanent Household Survey by INDEC. ⁵
Outcome 2: Expanded sanitation	service cov	/erage								
Households with new access to sewer systems in the cities targeted by the program. (Households with new or upgraded access to sanitation - Country Development Results Indicator 19).6	Households	0	2016	-	-	8,750	14,500	29,000	29,000	Semiannual progress reports and final evaluation for the program. Beneficiary households for every project will be taken into account. This will be measured by project/work and reported as a total.

¹ The incidence is for the general population.

² The baseline and targets were set on the basis of the sample and a pipeline of projects that may be eligible for the program. Therefore, the targets should be considered as tentative and may change as new projects are added during program execution.

³ The 1,500 households correspond to the projects in the pipeline that may be eligible.

⁴ The baseline takes into account the total number of households with available service in the Belgrano Plan region, based on 2010 census data.

⁵ While up to 30% of loan proceeds may be used to finance projects located in other regions of Argentina, currently 100% of the water proposals and projects in the pipeline are located in the Belgrano Plan region.

⁶ This includes 10,000 households that will benefit from the project to expand the secondary sewer network in Santiago del Estero (including the neighborhoods from the sample project and additional neighborhoods for which studies are currently being prepared) and households that may benefit from eligible projects that are in the pipeline.

Households with new wastewater treatment in the cities targeted by the program. (Households with wastewater treatment - Country Development Results Auxiliary Indicator 4).7	Households	0	2016	-	-		100,000	119,000	119,000	Semiannual progress reports and final evaluation for the program. Beneficiary households for every project will be taken into account. This will be measured by project/work and reported as a total.	
Sanitation coverage in the Belgrano Plan region.8	%	46.70	2010	-	-	-		48.14	48.14	Final evaluation for the program, based on data from the Population and Housing Census and the Permanent Household Survey by INDEC.	
Outcome 3: Improved operationa	Outcome 3: Improved operational and financial performance of service providers										
Indicator ⁹	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Program completion	Comments/Means of verification	
Financial self-sufficiency											

⁷ The targets for this indicator take into account the 100,000 households in Salta with wastewater treatment from the Sur purification plant and the approximately 100,000 households that will have wastewater treatment once the expansion works are completed. The 19,000 remaining households correspond to pipeline projects that may be eligible.

⁸ While up to 30% of loan proceeds may be used to finance projects located in other regions of Argentina, currently 100% of the water proposals and projects in the pipeline are located in the Belgrano Plan region.

⁹ The baseline and targets were set based on the sample projects (Salta and Santiago del Estero). They will be recalculated when new projects are added. If projects with providers other than Aguas del Norte or Aguas de Santiago are included, specific targets will be set and defined for the new provider and added to the outcomes as a new indicator.

	Outputs										
Component 1: Infrastructure works											
Output	Unit of measure	Associated outcome	Cost (US\$)	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Program completion	Comments/ Means of verification
Drinking water systems built	Systems	1	7,500,000	0	-	-	-	-	1	1	Final acceptance certificate approved by works inspectors, supervisors, and PEU general coordinator. This will be measured by work/project and reported as a total.
MILESTONES with associated costs		1			1	1	1			I	
Drinking water distribution systems built	Kilometers		3,000,000	0	-	6	9	9	6	30	Idem. The targets include kilometers of secondary networks and main and secondary water supply systems
Drinking water purification plants built	Number of plants	1	4,500,000	0	-	-	-	-	1	-	Idem.
Output	Unit of measure	Associated outcome	Cost (US\$)	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Program completion	Comments/ Means of verification
Sanitation systems built	Systems	2	239,500,000	0	-	-	-	5	2	7	Final acceptance certificate approved by works inspectors, supervisors, and PEU general coordinator. This will be measured by work/project and reported as a total.
MILESTONES with associated costs						_					
Sewer systems built	Kilometers	2	76,400,000	0	42	118	167	83	7	417	Idem. The targets include kilometers of secondary networks and trunk and main sewers.
Treatment plants built	Plants	2	163,100,000	0	-	-	-	1	5	6	Idem.

Component 2: Institutional development and studies											
Output ¹⁰	Unit of measure	Associated outcome	Cost (US\$)	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Program completion	Comments/ Means of verification
Results-based management plans (RBMPs) for service operators implemented	Number of plans	3	5,000,000	0	-	-	-	2	2	4	Semiannual report on the program, based on data from all participating providers. Note: The RBMP for each operator will be considered as implemented when at least two of its priority activities have been executed. The targets take into account the RBMPs for the providers in the sample projects. Targets will be updated as activities for the plans associated with new projects and/or providers are financed.
Individual meters installed in the Belgrano Plan region	Number of individual meters	3	10,000,000	0	-	-	12,813	11,250	937	25,000	Semiannual report on the program, based on data from all participating providers.
Bulk meters installed in the Belgrano Plan region.	Number of bulk meters	3	5,000,000	0	-	-	46	68	46	160	Semiannual report on the program, based on data from all participating providers.

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¹⁰ This will be measured by work/project and reported as a total.

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country: Argentina Project number: AR-L1258

Name: Water and Sanitation Services Development Program –

Belgrano Plan

Executing agency: The borrower, acting through the Ministry of the Interior, Public

Works, and Housing (MIOPyV)

Prepared by: Brenda Álvarez Junco and Juan Carlos Lazo (FMP/CAR)

I. EXECUTIVE SUMMARY

1.1 The Bank analyzed the institutional capacity of the program using an Institutional Capacity Assessment System (ICAS) report and an institutional capacity assessment for procurements, prepared in June 2017.

- 1.2 The executing agency will be the borrower, acting through the Ministry of the Interior, Public Works, and Housing (MIOPyV), which will act, in turn, through the Coordination Unit for Externally Financed Programs and Projects (UCPyPFE). The UCPyPFE will appoint a coordinator who will be responsible to the Bank for proper execution of the program. The coordinator will have the support of a technical team that will be responsible for the project cycle.
- 1.3 Under the program, the local contribution is expected to be financed with proceeds from a loan from Agence Française de Développement (AFD), the contract for which is in negotiation (up to US\$70 million). If for some reason the loan contract with the AFD is not formalized, the borrower will be responsible for completing the local contribution with own resources.

II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

2.1 The executing agency's institutional capacity was assessed, including its programming, administrative organization, personnel administration, management of goods and services, financial administration, and internal and external control. The assessment indicated a satisfactory level of institutional capacity and development and a low level of risk for program execution and subsequent administration of the works.

III. FIDUCIARY RISK EVALUATION AND MITIGATION MEASURES

3.1 The executing agency is currently executing loan 2776/OC-AR with Bank resources and has extensive experience in the fiduciary management of programs with external financing (World Bank and CAF). The latest ICAS report and institutional capacity assessment for procurements, prepared for this

operation, revealed a satisfactory level of development and a low risk level with regard to financial and procurement matters.

IV. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF THE CONTRACT

- 4.1 To expedite negotiation of the contract by the project team, primarily the Legal Department, below are the agreements and requirements to be considered in the special conditions or in the sole annex and that may be updated or modified during program execution, as applicable, with prior documentation and authorization by the Bank:
- 4.2 For the purposes of Article 4.10 of the General Conditions, the parties agree that the exchange rate to be used will be the rate stipulated in Article 4.10(b)(i). For the purpose of determining the equivalency of expenditures incurred in local currency chargeable against the local contribution or the reimbursement of expenditures chargeable against the loan, the exchange rate will be the rate in effect on the first working day of the month in which the payment is made. However, if the expenditures incurred in local currency chargeable against the local contribution are financed from a source other than the borrower, the exchange rate will be the rate specified in the program Operating Regulations.

A. Audit management

4.3 To ensure a flexible contracting process for audit services for the operation, options will be kept open vis-à-vis the various institutions that are eligible to audit Bank-financed operations (i.e. for both the Office of the Auditor General (AGN) and independent firms to be contractually eligible to perform program audits). When the time comes to initiate the contracting process, the executing agency will ask the Bank for the shortlist of institutions that may be invited to participate.

V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

A. Procurement execution

- 5.1 The fiduciary agreements and requirements for procurements establish the applicable provisions for the execution of all procurements planned under the program.
- The policies for the procurement of works and goods financed by the Bank (document GN-2349-9) and the policies for the selection and contracting of consultants financed by the Bank (document GN-2350-9), both from March 2011, will apply.
- 5.3 The Bank-approved national subsystem that will be used is the information system.

- a. Procurement of works, goods, and nonconsulting services. Works, goods, and nonconsulting services¹ arising under the project and subject to international competitive bidding (ICB) will be procured using the standard bidding documents issued by the Bank. Bidding processes subject to national competitive bidding (NCB) will be executed using national bidding documents agreed upon with the Bank. The program sector specialist is responsible for reviewing the technical specifications of procurements during preparation of the selection processes. Direct contracting is not anticipated.
- b. **Selection and contracting of consultants.** Consulting service contracts arising under the program will be executed using the standard request for proposals issued by the Bank. The program sector specialist is responsible for reviewing the terms of reference for the contracting of consulting services. Direct selection of consulting firms is not anticipated.
- c. Selection of individual consultants. Individual consultants will be selected on the basis of their qualifications to do the work, based on a comparison of the qualifications of at least three candidates. The program sector specialist is responsible for reviewing the terms of reference for the contracting of consulting services.
- d. For contract renewal purposes, approval by the relevant authorities of a satisfactory performance evaluation will be sufficient. The evaluation will be performed once a year to facilitate approval by the respective authorities.
- e. Individual consultants contracted for operation 2776/OC-AR are expected to continue providing their services for this program. Therefore, the executing agency will submit to the Bank the list of consultants who will continue to work on program activities, in which case the single-source selection procedure may be applied, as set out in Section V, paragraph 5.4(a) of the above-mentioned policies.
- f. Recurrent expenses. Recurrent or operating and maintenance expenses required during the life of the program will include: per diems, traveler's insurance, office lease, supplies, office expenses, and other costs involved in running the program, which will be financed by the program under the annual budget approved by the Bank. Recurrent expenses also include the cost of consultants hired to assist the executing agency during the program execution period. However, operating expenses do not include salaries for government employees. Recurrent expenses include items such as taxes on debits and credits in checking accounts, stamp taxes on purchase orders, publication of bid notices, and contracted supervision.
- g. Others. Cofinancing through local contribution. Part of the local contribution for the program may be financed with proceeds from an AFD loan, for which the contract is in negotiation (up to US\$70 million). Since those proceeds will be used jointly with Bank proceeds for all program components, an agreement was reached to execute the operation according

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Policies for the procurement of goods and works financed by the IDB (document <u>GN-2349-9</u>), paragraph 1.1: Nonconsulting services are treated as goods.

to IDB policies and procedures, including the procurement policies (documents GN-2349-9 and GN-2350-9). In addition, the AFD will accept the Bank's technical no objections related to the works to be financed from both sources, as well as the program's environmental and auditing requirements, in order to prevent execution delays. If for some reason the loan contract with the AFD is not formalized, the borrower will be responsible for completing the local contribution with its own funds.

Threshold amounts (US\$ thousands)

	Works			Goods	Consulting services		
ICB	NCB	Shopping	ICB	NCB	Shopping	International advertising	Shortlist 100% national
<u>></u> 25,000,000	<25,000,000 <u>></u> 350,000	<350,000	≥ 1,500,000	<1,500,000 <u>></u> 100,000	<100,000	>200,000	<1,000,000

Main procurement items

Activity	Type of bidding	Estimated date	Estimated amount US\$
Works			
Expansion and optimization of the wastewater treatment plant in the city of Salta	ICB	03-2018	78,100,000
Wastewater treatment plant and sewer system in the town of Añatuya, Santiago del Estero	ICB	01-2018	33,173,077
Expansion of the secondary sewer network in the city of Santiago del Estero	ICB	03-2018	29,807,692
Sewer system in San Vicente, Misiones	ICB	03-2018	30,288,462
Goods			
Measurement and consumption	ICB	03-2019	15,000,000
Consulting services			
Inspection: Wastewater treatment plant in the city of Salta	QCBS	03-2018	2,730,769
Inspection: Expansion of the secondary sewer network in the city of Santiago del Estero	QCBS	03-2018	1,192,308
Inspection: Wastewater treatment plant and sewer system in the town of Añatuya, Santiago del Estero	QCBS	02-2018	1,326,923
Inspection: Sewer system in San Vicente, Misiones	QCBS	05-2018	1,211,538

B. Procurement supervision

Thresholds for ex post review

Works	Goods	Consulting firms	Individual consultants
<5,000,000	<500,000	<200,000	<50,000

5.4 Procurement will be supervised on an ex ante basis as indicated in the table above. Ex post review visits will take place every 12 months. Ex post review reports will include at least one physical inspection visit, selected from procurements subject to ex post review. At least 10% of the contracts that are reviewed will be physically inspected during the program.

- 5.5 The threshold amounts for ex post review are based on the executing agency's fiduciary capacity and may be modified by the Bank to the extent of any change in such capacity.
- 5.6 **Special provisions.** The policies for the procurement of works and goods financed by the Bank (document GN-2349-9) and the policies for the selection and contracting of consultants financed by the Bank (document GN-2350-9), both from March 2011, will apply (multilateral organizations' lists of ineligible firms and individuals).
- 5.7 **Records and files.** The executing agency will maintain a central filing system with the respective procedures and safeguards and will ensure that the files for each procurement process are properly collated, organized, and filed.

VI. AGREEMENTS AND REQUIREMENTS FOR FINANCIAL MANAGEMENT

A. Programming and budget

- The programming and budget area of the MIOPyV provides services to the entire UCPyPFE to formulate, program, record, and execute the budget allocations for all loans, including those executed by the PEU. These duties are fulfilled pursuant to the provisions of the National Budget Act and following the deadlines set by the National Accounting Office, the National Budget Office, or other national entities that require them, which are mandatory.
- In addition, that area handles the procedures needed for the PEU to obtain loans on an annual basis from the national budget originating from local (Source 11) and external (Source 22) sources of financing, as determined by the pari passu arrangement for program components.
- 6.3 The PEU/UCPyPFE will create and maintain throughout the life of the loan a specific budget line in its annual budget, in order to monitor loan proceeds according to the source and project expenditures.
- No problems are anticipated in terms of budgetary management, timeliness of local counterpart funds, or system delays affecting execution.

B. Cash and disbursement management

- 6.5 The cash management area of the MIOPyV is responsible for opening accounts for the loan in dollars and pesos at Banco de la Nación Argentina. It will also make applicable arrangements with the National Treasury, Banco de la Nación Argentina, and relevant agencies of the Ministry of Finance.
- 6.6 In addition, this area is responsible for the management and administration of loan proceeds through the Designated Account and the Operating Account, the issuance of payments through both checks and bank transfers, and communications with the banking institution and bank transfer (interbank) service providers.

- 6.7 The Designated Account is the account in dollars opened in Banco de la Nación Argentina, where advances of funds from the IDB will be credited. The Operating Account will receive funds from two different sources: an external source, transferred from the Designated Account by means of a currency conversion process ("pesification");² and a local source, through the National Treasury (Source 11), in accordance with the commitment made to finance the loan as per the pari passu agreement set forth in the loan contract. Operating Account funds will be used to make payments to contractors, providers, and consultants.
- The withdrawal of loan proceeds and all loan fund transfers will require the joint signatures of the UECyPFE director and the PEU executive coordinator, after authorization from the Bank through the system and with applicable safety standards and passwords. The Bank must be informed in writing about the names of the officials who are authorized to sign as well as about any changes, following the procedures of the relevant entities.
- 6.9 The cash management area will provide to the accounting area the bank statements for these accounts, to be used for bank reconciliations and standard accounting tasks.
- 6.10 Disbursements will be made on the basis of a detailed financial plan, a template for which has been agreed upon with the Ministry of Finance and the Office of the Chief of Staff. In addition, disbursements will follow IDB guidelines on disbursement methods, withdrawal of loan proceeds and related requirements, designated accounts, conditions applicable to advances of funds, nonallowable expenses, and repayment.

C. Accounting, information systems, and reporting

6.11 The executing agency will use the system for execution units of projects with external financing (UEPEX) as its financial management system. Cash-basis accounting will be used and the International Financial Reporting Standards will be followed when applicable in accordance with established national criteria. The required financial reports will be: (i) financial execution plan for up to 180 days after a request for an advance of funds; (ii) annual audited financial statements; and (iii) other reports as requested by the fiduciary specialists.

6.12 The duties of the accounting area for all projects will be as follows: (i) record accounting entries in the UEPEX system and file supporting documentation for the recorded payments, invoices, and receipts as well as all other related payment information; (ii) submit settlement affidavits and respond to potential requirements; (iii) obtain a taxpayer identification number at the start of the loan operation, which is necessary to open bank accounts in dollars and pesos; (iv) perform monthly bank reconciliations for both accounts, the Designated

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The guidelines to convert U.S. dollars to local currency are: (a) cash and bank notes in foreign currency: this line includes the existing balance in the Designated Account at year-end closing of accounts, expressed in pesos using the purchasing exchange rate of Banco de la Nación Argentina on the closing date of the fiscal year; and (b) funds owed to the IDB: IDB proceeds entered in foreign currency are recorded at the exchange rate for the date in which they were credited in the Special Account.

- Account (U.S. dollars) and the Operating Account (pesos); and (v) prepare the loan's financial statements and submit them to external auditors for the preparation of applicable reports.
- 6.13 Accounting information will flow through a chart of accounts, in order to classify expenses by category, component, and source of financing, based on the structure of the loan financing matrix agreed upon in negotiations.

D. Internal control and internal audit

6.14 Law 24156 establishes and regulates financial administration and internal and external control systems for the national public sector. The Office of the Comptroller General (SIGEN) is the national public administration's lead agency for internal control systems, and reports to the Office of the President of Argentina. SIGEN acts as a regulatory, supervisory, and coordinating body for the Internal Audit Units that are created in each entity. The UCPyPFE and therefore the PEU are subject to internal audits by the Internal Audit Unit of the MIOPyV. However, to date, neither of these units has been audited by that audit unit.

E. External control: External financial audits and project reports

- 6.15 In 2011, the Bank completed a diagnostic assessment of government audit practices by the AGN. This assessment, performed in accordance with Bank guidelines to determine the degree of development of the public finance management systems, concluded by validating the AGN as an auditor for Bank projects. To have flexibility and be able to adjust the loan portfolio to the capacity for timely auditing of the AGN, it is recommended that both the AGN and independent audit firms be contractually eligible to conduct program audits.
- 6.16 Audits will follow the new terms of reference prepared by the Bank, updated in 2017.
- 6.17 Annual audited financial reports will be required, based on the executing agency's fiscal year. These will be submitted within 120 days, as determined by the Bank depending on the organization selected to audit the operation.

F. Financial supervision³

6.18 The initial financial supervision plan is based on risk and fiduciary capacity assessments conducted on the basis of on-site and desk reviews scheduled for the program and includes the scope of operational, financial, and accounting activities, enforcement and legal considerations, frequency, and identification of responsible parties.

See Financial Management Guidelines for IDB-financed Projects (document OP-273-6), Annex I, Application of Financial Management Principles and Requirements, requirement 4, Financial Supervision.

G. Execution mechanism

- 6.19 The accounting area will process payments within approximately 15 days after the contractor or consultant submits complete documentation. If the documentation is incomplete, it will remain in the technical area until the contractor or consultant meets the requirements.
- 6.20 The accounting area will receive the reports from the technical, legal, and evaluation areas. After verification, it will forward them to the budget area, which will confirm the availability of funds from the source of financing, depending on the resources used for the payment. If funds are available, the corresponding settlement will be made and the amount recorded in the UEPEX system. Then, the payment authorization will be prepared and assigned for approval. After the executive coordinator signs the authorization, it will be forwarded to the cash management area for payment. Once the payment has been sent, the file will be returned to accounting for the payment of tax withholdings. Approximately 300 payment files are processed per month.
- 6.21 To control the processing period, payment files will contain a "Document Monitoring" feature, an internal ledger on which each person responsible will record the date they processed the file and their signature.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE- /17

Argentina. Loan/OC-AR to the Argentine Republic. Water and Sanitation Development Program – Belgrano Plan

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 Argentine Republic, as Borrower, for the purpose of granting it a financing aimed at cooperating in the execution of the Water and Sanitation Development Program – Belgrano Plan. Such financing will be in the amount of up to US\$200,000,000, from the resources of the Bank's Ordinary Capital, 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 ____ 2017)

LEG/SGO/CSC/EZSHARE-1044359933-2187 Pipeline No. AR-L1258

The Board of Executive Directors