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June 13, 2016

**Closing Date: Thursday, June 30, 2016
at 6 p.m.**

FROM: Vice President and Corporate Secretary

Niger - Urban Water and Sanitation Project

Additional Financing and Restructuring

Project Paper

Attached is the Project Paper regarding proposed additional credit and grant and a proposed restructuring to Niger for an Urban Water and Sanitation Project (IDA/R2016-0163/1), which is being processed on an absence-of-objection basis.

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Report No: PAD1838

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT PAPER

ON

A PROPOSED ADDITIONAL GRANT

IN THE AMOUNT OF SDR 42.40 MILLION
(US\$60 MILLION EQUIVALENT),

A PROPOSED ADDITIONAL CREDIT

IN THE AMOUNT OF SDR 7.10 MILLION
(US\$10 MILLION EQUIVALENT),

AND

A PROPOSED RESTRUCTURING

TO THE

REPUBLIC OF NIGER

FOR THE

URBAN WATER AND SANITATION PROJECT

JUNE 9, 2016

Water Global Practice
Africa Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective April 30, 2016)

Currency Unit = CFA Franc (CFAF)
CFAF 578 = US\$1
US\$1.41733 = SDR 1

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
AFD	French Development Agency (<i>Agence Française de Développement</i>)
CBA	Cost-benefit Analysis
CPS	Country Partnership Strategy
DGA	General Directorate of Sanitation (<i>Direction Générale de l'Assainissement</i>)
EIB	European Development Bank
EIRR	Economic Internal Rate of Return
EOPT	End-of-Project Target
CFAF	African Franc
DN	Nominal Diameter (<i>diameter nominal</i>)
DA	Designated Account
FM	Financial Management
GRS	Grievance Redress Service
IFR	Interim Financial Report
MHA	Ministry of Water and Sanitation (<i>Ministère de l'Hydraulique et de l'Assainissement</i>)
NPV	Net Present Value
PCU	Project Coordination Unit
PDO	Project Development Objective
PIM	Project Implementation Manual
PP	Project Paper
PSP	Private Sector Participation
PSC	Project Steering Committee (<i>Comité de Pilotage</i>)
RAP	Resettlement Action Plan
SEEN	Niger Water Operating Company (<i>Société d'Exploitation des Eaux du Niger</i>)
SPEN	Water Assets Holding Company (<i>Société de Patrimoine de l'Eau du Niger</i>)

Regional Vice President:	Makhtar Diop
Country Director:	Paul Noumba Um
Senior Global Practice Director:	Jennifer J. Sara
Practice Manager/Manager:	Alexander E. Bakalian
Task Team Leader:	Madio Fall

REPUBLIC OF NIGER
URBAN WATER AND SANITATION PROJECT ADDITIONAL FINANCING

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ADDITIONAL FINANCING DATA SHEET

Republic of Niger

Urban Water and Sanitation Project Additional Financing (P159240)

AFRICA

Basic Information – Parent (Urban Water and Sanitation Project-P117365)							
Parent Project ID:	P117365	Original EA Category: B - Partial Assessment					
Current Closing Date:	31-December-2016						
Basic Information – Additional Financing Urban Water and Sanitation Project - AF (P159240)							
Project ID:	P159240	Additional Financing Type (from AUS):	Scale Up				
Regional Vice President:	Makhtar Diop	Proposed EA Category:	B - Partial Assessment				
Country Director:	Paul Nounba Um	Expected Effectiveness Date:	30-October-2016				
Senior Global Practice Director:	Jennifer J. Sara	Expected Closing Date:	30-June-2020				
Practice Manager/Manager:	Alexander E. Bakalian	Report No:	PAD1838				
Team Leader(s):	Madio Fall						
Borrower							
Organization Name	Contact	Title	Telephone	Email			
Republic of Niger, Ministry of Planning	Ms. Kane Aichatou Boulama	Ministre du Plan	227-2072-3617				
Project Financing Data - Parent (Urban Water and Sanitation Project-P117365) (in US\$, millions)							
Key Dates							
Project	Ln/Cr/TF	Status	Approval Date	Signing Date	Effectiveness Date	Original Closing Date	Revised Closing Date
P117365	IDA-48930	Effective	26-Apr-2011	12-May-2011	01-Sep-2011	31-Dec-2015	31-Dec-2016

Disbursements (millions)										
Project	Ln/Cr/TF		Status	Currency	Original	Revised	Canceled	Disbursed	Undisbursed	% Disbursed
P117365	IDA-48930		Effective	SDR	57.70	57.70	0.00	47.40	10.30	82.15
Project Financing Data - Additional Financing Urban Water and Sanitation Project Additional Financing (P159240)(in US\$, millions)										
[] Loan [] Grant [X] IDA Grant										
[X] Credit [] Guarantee [] Other										
Total Project Cost:			70.00		Total Bank Financing:			70.00		
Financing Gap:			0.00							
Financing Source – Additional Financing (AF)								Amount		
BORROWER/RECIPIENT								0.00		
International Development Association (IDA)								10.00		
IDA Grant								60.00		
Total								70.00		
Policy Waivers										
Does the project depart from the CAS in content or in other significant respects?								No		
Explanation										
Does the project require any policy waiver(s)?								No		
Explanation										
Team Composition										
Bank Staff										
Name		Role		Title		Specialization		Unit		
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Josue Akre		Financial Management Specialist		Financial Management Specialist		Financial Management		GGO13		
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		Specialist		
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Medou Lo	Environmental Specialist	Consultant	Environment	GENDR
Mohamed Nanzoul	Team Member	Senior Infrastructure Specialist	Infrastructure	GWA07
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Veronique Verdeil	Team Member	Water & Sanitation Specialist	Water & Sanitation	GWA07

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments
Niger	Zinder	Zinder	X		
Niger	Tillaberi	Tillaberi	X	X	
Niger	Maradi	Tessaoua		X	
Niger	Tahoua	Tahoua		X	
Niger	Tillaberi	Say	X	X	
Niger	Niamey	Niamey	X	X	
Niger	Dosso	Matankari		X	

Niger	Diffa	Maine Soroa	X	X	
Niger	Maradi	Guidan Roumji		X	
Niger	Zinder	Goure	X	X	
Niger	Diffa	Goudoumaria		X	
Niger	Maradi	Gazaoua		X	
Niger	Dosso	Dosso	X	X	
Niger	Agadez	Arlit		X	
Niger	Agadez	Agadez	X	X	
Institutional Data					
Parent (Urban Water and Sanitation Project - P117365)					
Practice Area (Lead)					
Water					
Contributing Practice Areas					
Cross Cutting Topics					
[] Climate Change					
[] Fragile, Conflict & Violence					
[] Gender					
[] Jobs					
[...] Public Private Partnership					
Sectors / Climate Change					
Sector (Maximum 5 and total % must equal 100)					
Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %	
Water, sanitation and flood protection	Water supply	76			
Water, sanitation and flood protection	Sanitation	19			
Public Administration, Law, and Justice	Public administration-Water, sanitation and flood protection	5			
Total		100			
Themes					
Theme (Maximum 5 and total % must equal 100)					
Major theme	Theme	%			
Urban development	Urban services and housing for the poor	100			

Total		100		
Additional Financing Urban Water and Sanitation Project – AF (P159240)				
Practice Area (Lead)				
Water				
Contributing Practice Areas				
Cross Cutting Topics				
[] Climate Change				
[] Fragile, Conflict & Violence				
[] Gender				
[] Jobs				
[...] Public Private Partnership				
Sectors / Climate Change				
Sector (Maximum 5 and total % must equal 100)				
Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Water, sanitation and flood protection	Sanitation	14		
Water, sanitation and flood protection	Water supply	81		
Water, sanitation and flood protection	General water, sanitation and flood protection sector	5		
Total		100		
<input checked="" type="checkbox"/> I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.				
Themes				
Theme (Maximum 5 and total % must equal 100)				
Major theme	Theme	%		
Urban development	Urban services and housing for the poor	100		
Total		100		
Consultants (Will be disclosed in the Monthly Operational Summary)				
Consultants Required? Consultants will be required				

I. Introduction

1. This Project Paper seeks the approval of the Executive Directors to provide an additional grant in the amount of SDR 42.40 million (US\$60 million equivalent) and an additional credit in the amount of SDR 7.10 million (US\$10 million equivalent) to the Republic of Niger for the ongoing Urban Water and Sanitation Project (P117365, Credit No. 4893-NE), referred to as the parent project).

2. The proposed Additional Financing (AF) will help finance the costs associated with scaling up the impacts of the parent project by increasing access to sustainable water and improved sanitation in six initially targeted cities and one additional city. Proposed additional activities are in line with the parent project development objective (PDO). The Project Paper also includes a restructuring that will involve: (a) extending the project closing date from December 31, 2016, to June 30, 2020; (b) triggering two new safeguards policies, namely OP4.11 – Physical Cultural Resources and OP7.50 – Projects on International Waterways; (c) revising the Results Framework; and (d) adjusting the disbursement arrangements.

3. The Government of Niger is committed to expand access to drinking water and sanitation in urban areas through the parent project, which is on track to achieve its objective in the originally targeted cities (Niamey, Tillaberi, Dosso, Tahoua, Agadez, Arlit, and selected secondary centers). To scale up the impacts of the project, the Government presented a request for an additional financing dated January 7, 2016 to improve water and sanitation services in selected cities (Zinder, Agadez, Tillaberi, Niamey, Goure, Maine Soroa and Say) and to further extend access to services in unserved areas. The PDO will remain unchanged.

4. The AF will enhance the impact of the parent project in: (a) extending access to improved water sources to approximately 340,250 people, which will increase the project outcome target by 67 percent from 509,000 to a total of 849,250 additional people; (b) extending access to sanitation services to an estimated 26,940 students, which will increase the project outcome target by 45 percent from 60,000 to 86,940 additional students; (c) improving the equity of access to and quality of delivery of water services to the urban population of the targeted cities through social connections and standposts; and (d) consolidating and sustaining the ongoing urban water subsector reform activities.

5. The additional activities will be entirely financed from the proposed IDA additional financing. No co-financing from the Government or from multilateral or bilateral agencies is foreseen.

II. Background and Rationale for Additional Financing

Country and Sector Context

6. **Niger has a vast land area of 1.27 million km² of which two-thirds is desert.** More than 84 percent of the population of 17 million (2012 census) are concentrated along the Niger River and the southern border with Nigeria. The country's center and northern regions are arid and sparsely populated within a few small towns situated along the road to Algeria to the north. About 80 percent of the population relies on farming and livestock production for their

livelihood, but have to cope with frequent droughts. Mining (uranium) and, more recently, oil production are increasingly becoming key contributors to the national economy.

7. **Since the 2011 restoration of the constitutional order, Niger is slowly rebuilding its democratic governance institutions.** The authorities continue to emphasize their commitment to an inclusive and secular state. They have established several public agencies to mediate conflicts in an effort to overcome the country's history of political instability. Governance has improved in recent years and Niger was ranked 29 out of 52 countries in terms of overall governance quality in the 2014 Ibrahim Index of African Governance ranking. The Government is pursuing new measures to combat organized crime and terrorism and promote the safety and property rights of its citizens. Both unrest in Niger's tribal areas and the threat posed by the conflict in neighboring Mali have diminished. Nevertheless, the country continues to face significant risks related to domestic and regional instability, as well as organized crime and transnational terrorism. The Al-Qaeda network remains active throughout the Sahel. The rise of Boko Haram in Nigeria and the expansion of its operations to neighboring countries, including Niger, is a cause of concern, with several isolated attacks in the Niger section of the Lake Chad basin in 2015. The numbers of Nigerian refugees and internally displaced people in the southeastern Diffa region now exceed 100,000 people.

8. **Poverty has been declining, but remains pervasive and severe.** Economic growth and development policies during the 2005–2011 period were only moderately pro-poor. The most recent (2011) poverty assessment estimated the national poverty rate at 48 percent, down 5 percent from the 2006 poverty rate. Poverty is heavily concentrated in rural areas that are highly vulnerable to weather-related shocks. Non-monetary poverty in these areas is more severe than income and consumption measures would indicate. Niger's human development index of 0.337 in 2013 is well below the Sub-Saharan Africa average of 0.502 and has stagnated since 2006. Literacy rates for adults and youth or the secondary school enrolment rate are far below the sub-regional averages. Health indicators have improved over the past decade, but health-adjusted life expectancy is still low at 51.6 years for women and 49.4 for men.

9. **In 2011, to strengthen its effort to achieve the Millennium Development Goals, Niger adopted the 2011–2015 National Drinking Water Supply and Sanitation Program.** The country achieved its national objective with an access rate of 56.9 percent for drinking water in both rural and urban areas at the end of 2014, according to the Ministry of Water and Sanitation (*Ministère de l'Hydraulique et de l'Assainissement*, MHA). In contrast, the hygiene and sanitation subsector still needs considerable support. Despite clearer legislative and regulatory frameworks since 2011, access to sanitation facilities was estimated at only 7.2 percent in rural areas and 64.8 percent in urban areas in 2012 (Demographic and Health Survey). The proposed 2016–2030 Sectoral Water, Hygiene, and Sanitation Program (*Programme Sectoriel Eau Hygiène et Assainissement*) is being designed to achieve Niger's the Sustainable Development Goal for water and sanitation by 2030.

10. **Since 1996, the Government has implemented an institutional reform program to build an autonomous and financially viable urban water subsector** capable of ensuring the delivery of safe water to urban centers at the lowest possible cost. The sector reform is based on the establishment of a public-private partnership including: (a) the creation of a public water assets holding company (*Société de Patrimoine des Eaux du Niger*, SPEN) in charge of sector

development under a ten-year concession contract; and (b) the selection of the private Niger Water Operating Company (*Société d'Exploitation des Eaux du Niger*, SEEN) in charge of operations and maintenance of facilities and commercial activities (billing and collection) under a 10-year lease (affermage) contract. Today, Niger is one of Sub-Saharan Africa's top performers in the urban water subsector, providing a high-level service coverage and operational efficiency in a financially self-sustainable sector (including debt service). The non-regular payment by the Government of its water bills experienced a few years ago is no longer a constraint to the financial equilibrium of the sector as the Government has made considerable efforts to clear the outstanding arrears in January 2016 and has established a new mechanism to ensure the regular payment of its water bills.

Table 1. Benchmarking of Operating Performance Indicators (2014)

	Cote d'Ivoire	Senegal	Burkina Faso	Niger
Indicator				
Number of service connections	787,300	634,500	339,900	192,300
Access to piped water in urban areas (%)	70	98	86	85
Household connections ratio (%)	69	89	65	58
Unaccounted-for Water (%)	25	20	18	15
Bill collection ratio - private clients (%)	80	98	98	90
No. of staff per 1,000 connections	2.9	2.1	2.8	3.4
Average water tariff (CFAF per m ³)	393	482	504	304
Compliance with bacteriological standards (% of samples)	95	99	100	99

Sources: Société des Eaux de Côte d'Ivoire - Société des Eaux du Sénégal (public assets holding company) / Sénégalaise des Eaux (operator) - Office National de l'Eau et de l'Assainissement du Burkina Faso - SPEN (public assets holding company) / SEEN (operator), as of January 2015.

11. World Bank support has been instrumental in expanding access and improving water services in urban areas. 1.5 million people have gained access to potable water through 120,000 household connections and 1,240 public standposts in urban areas under two Bank-funded operations: the Water Sector Project that closed in 2010, and the parent Urban Water and Sanitation Project that was approved in 2011. In contrast to the water situation in 2001, when water was rationed and only available for 12 hours a day including in the capital city of Niamey, water supply is now a 24/7 continuous service. The access rate to piped water in urban areas increased from 31.10 percent in 2001 to 85.00 percent in 2015, while the total access has increased in the same period from 64.60 percent to 91.60 percent (source SPEN). The operational efficiency of the sector has improved significantly as witnessed in table 1 that benchmarks Niger with the best-managed water utilities in the sub-region.

12. The World Bank has worked with other partners in the sector to support the development of water and sanitation services. Building on a priority investment program designed by the public asset holding company, SPEN, with the assistance of the private operator, SEEN, and by the MHA, several development partners are engaged in the sector with close to US\$353 million of investments. Close collaboration has enabled determination of technical and geographical areas of focus to maximize the scope and impact of investments, while parallel financing limits the risk of delays for the respective operations. The proposed AF will therefore not only expand the parent project, but also complement other investments in the sector, including (a) urban water operations financed by EXIMBANK of China in Zinder Region

(ongoing) and in the cities of Niamey, Diffa, Dosso, and Maradi (under preparation); and (b) projects under preparation in Niamey (US\$85 million) from French Development Agency (*Agence Française de Développement*, AFD), the Netherlands Facility for Infrastructure Development, the European Investment Bank (EIB), and FINEXPO of Belgium.

Table 2. Investments in Urban Water and Sanitation (US\$, millions)

Source of Financing	Completed and Ongoing Projects	Projects Under Preparation	Total Secured and Identified Financing	%
IDA	90	70	160	43
EXIMBANK - China	35	94	129	34
AFD		24	24	7
EIB		24	24	6
The Netherlands Facility for Infrastructure Development		25	25	7
FINEXPO – Belgium		12	12	3
TOTAL	125	248	373	100

Sources: SPEN - AFD - EIB – MHA (May 2016).

Parent Project Features and Performances

13. **Parent project.** The ongoing Urban Water and Sanitation Project (P117365) (SDR 57.7 million US\$90 million equivalent) was approved on April 26, 2011, and became effective on September 1, 2011. The PDO is to increase access to sustainable water supply services and to improved sanitation services in some urban areas in the Recipient's territory. The objective will be achieved through: (a) expanding water production, storage, and distribution capacities and facilitating access to services through programs for constructing social water connections, public standposts, and on-site sanitation facilities; and (b) consolidating the achievement of the urban water subsector reforms and strengthening capacities to deliver and manage services.

14. Activities to support the PDO are grouped into three components: (a) urban water supply; (b) urban sanitation; and (c) institutional strengthening and capacity building, as described below.

Component 1: Urban water supply (US\$68.7 million equivalent)

15. This component includes the following activities:

- **Niamey.** (a) Construction of a 2,000 m³ water storage tank; (b) expansion of distribution networks by 204 km; and (c) construction of 28,600 social connections and 130 standposts.
- **Three cities (Agadez, Arlit, and Tahoua).** (a) Construction of 23 groundwater boreholes, 25 km transmission pipes, and three water storage tanks; (b) expansion of distribution networks by 205 km; and (c) construction of approximately 5,000 social connections and 141 standposts.
- **Secondary centers.** (a) Construction of one small water treatment unit and rehabilitation of two elevated water storage tanks; (b) construction of 20 groundwater boreholes and 10 km transmission pipes; (c) expansion of distribution networks by 180 km; and (d) construction of 3,500 social connections and 182 standposts.

- **Water quality improvement.** Supply and installation of treatment facilities in five towns where the quality of groundwater does not comply with standards (excessive fluorine in Tessaoua and Guidanroumdji, iron in Matankari, and nitrates in Gazaoua and Goudoumaria).

Component 2: Urban sanitation (US\$18.0 million equivalent)

16. Activities include: (a) the installation of 23,500 household latrines, 5,000 washing facilities with soakaway pits, one sludge treatment facility (Niamey), and 20 public toilets; (b) the installation of 2,000 school latrines; and (c) technical assistance to: (i) mobilize populations, manage contracts, and supervise works; (ii) train local masons and contractors; and (iii) support media campaigns, hygiene education, and training activities.

Component 3: Institutional strengthening and capacity building (US\$4.1 million equivalent)

17. This component is implemented by the Project Coordination Unit (PCU) in collaboration with concerned institutions and includes: (a) institutional support to the urban water subsector; (b) environmental and social management; (c) capacity building and support to the project implementation agencies in the MHA; and (d) coordination and project management.

18. **Project restructurings.** After 15 months of implementation, in early 2013, the project began having an impact on access to improved water services with 96,000 additional people (20 percent of the end-of-project target [EOPT]) benefiting from the social household water connections and the standposts program launched in September 2012. Bidding documents for the large urban water civil works were finalized that year and construction had begun on several sites. However, early on, the implementation of the on-site sanitation component encountered serious delays because of the difficulty with the recruitment of the delegated management firm that would facilitate the execution of the component. At the request of the Borrower, the project was restructured twice: (a) first in May 2013, to cancel the on-site sanitation subcomponent and reallocate the funds (US\$7.75 million) to new water supply activities in selected urban towns; and (b) second in March 2015, to extend the project closing date by one year up to December 31, 2016, to allow sufficient time to fully implement these activities.

19. **Performance of the original project.** The project is on track toward achieving its development objective. As of May 2016, 536,750 additional people (105 percent of the EOPT) have gained access to drinking water, and an additional 58,530 students (98 percent of the EOPT) have gained access to improved sanitation services. All the projected work contracts that were initially planned have been awarded. The sector reform supported by the project is progressing satisfactorily. The financial equilibrium of the sector is maintained, although it remains fragile as it is depending on periodic adjustments to tariffs and the continuous payment of its bills by the Government. Following a strong donors' coordinated action, the Government made considerable efforts to clear outstanding arrears to SEEN in January 2016 and established a new mechanism to ensure the regular payment of its water bills. The Government has also agreed to conduct a tariff study and to adjust the tariffs by the end of March 2017. At AF appraisal, progress toward the development objective achievement and implementation performance are satisfactory. All covenants are complied with. The initial credit is disbursed at 82.15 percent. There is no financial audit report pending. The project has complied with safeguards

implementation to date; however, the Safeguards rating has been assessed as Moderately Satisfactory in the latest Internal Status Report due to delays in implementing the Resettlement Action Plan, which has delayed the startup of the work of the fecal sludge treatment plant in Niamey.

Rationale and Design of the Additional Financing

20. **Rationale for the AF.** The AF is being sought to scale up the impacts of the original project at the request of the Government. In line with the original PDO, The AF will support the extension of urban water and sanitation services in the perimeter covered by SPEN. Despite the impressive achievements of the ongoing project, limited access to drinking water and sanitation remains an issue in many urban areas. Consequently, there is a pressing need to improve water and sanitation services, particularly for the poor people in peri-urban areas.

21. **The AF is the preferred financing mechanism** because it will utilize the current effective implementation arrangements and existing PCU, which have produced satisfactory results under past and ongoing projects. Moreover, the AF mechanism will save time that would otherwise be required to prepare a new project. It will also help maintain the positive momentum of the results achieved to date and ensure the continuation of the ongoing sector reforms as well as sustain the improvements in SPEN's performance through the capacity-building component.

22. **AF design, coordination with sector partners and lessons learned.** The AF has been designed in close coordination with SPEN, SEEN, the MHA, and other development partners to ensure that investments will match priority needs and complement both the parent project and other ongoing or planned operations financed by other donors. Moreover, the proposed AF has incorporated lessons from the previous IDA-financed operations in Niger and the experience accumulated in West Africa in developing access to water and sanitation through social connection and sanitation programs and accompanying sector reforms. Three important lessons that have influenced the AF design are:

- **To support a pro-poor water strategy, subsidizing access is economically and socially more efficient than subsidizing tariffs.** The social connections programs, by subsidizing the upfront cost of getting a domestic connection, are well-targeted to the low-income segments of the populations and produce substantial economic benefits that accrue to the new customers, while maximizing the quality of the water service and the health impact of piped water, particularly for the poor.
- **Accountability is essential to build and maintain trust with customers.** Whereas customers and the public in general do not expect much from non-performing utilities, their demands in terms of quality and costs of services increase quickly in the presence of efficient operators, private or public.
- **Fecal sludge management is key to improve sanitation and hygiene.** In many African urban areas, wastewater systems are not affordable and onsite sanitation remains the norm. Developing safe disposal and treatment facilities and supporting the fecal sludge management chain generate both health and economic benefits.

23. **Summary description of AF activities.** The additional activities financed by the AF are in line with, and scale up the activities of the parent project. They are summarized below and described in detail in Annexes 2 and 3.

Component 1. Urban water supply (US\$55.76 million equivalent)

24. Additional activities under Component 1 include:

- Rehabilitating and expanding production, storage, and transmission facilities in selected centers to increase water availability and quality through, *inter alia*: (a) rehabilitating boreholes, water storage tanks and transmission pipes; (b) increasing water production capacity by equipping new boreholes with connection pipes, constructing transmission pipes, raw water intakes, pumping stations, and constructing and expanding water treatment plants; (c) increasing water storage capacity by constructing elevated water storage tanks; (d) constructing interconnections to new energy lines supplying the water facilities; and (e) supplying and installing remote management systems;
- Increasing access to safe water in selected centers through, *inter alia*: (a) the supply and installation of primary, secondary, and tertiary water distribution networks; and (b) the provision and installation of household water service connections and standposts; and
- Providing with goods and consultant services for such purposes, including technical studies and supervision of works.

Component 2. Urban Sanitation (US\$10.02 million equivalent)

25. Additional activities under Component 2 include:

- Expanding access to sanitation services in selected centers through, *inter alia*: (a) constructing school latrines including (i) separated bloc latrines (students / teachers, boys / girls), and (ii) handwashing stations; and (b) conducting sanitation awareness and demand creation campaigns;
- Expanding the fecal sludge treatment capacity in Niamey by (a) constructing an additional treatment plant; and (b) developing a fecal sludge management service chain;
- Providing with goods and consultant services for such purposes, including technical studies and supervision of works.

Component 3. Institutional strengthening and capacity building (US\$4.22 million equivalent)

26. Component 3 includes support to the Recipient through the provision of technical assistance, training, operating costs, goods and services for the: (i) institutional support to the urban water subsector; (ii) management of the environmental and social aspects of the project, but specifically excluding the provision of land (including compensation for land acquisition), cash compensation and other assistance paid in cash for involuntary resettlement; (iii) building of capacity and provision of support to the agencies in the Ministry in charge of Water, the

Environment and Fight Against Desertification¹ participating in the implementation of the Project; (iv) development of citizens' engagement activities; (v) implementation of the safeguard documents; (vi) capacity building to the Project Implementing Entity, the Directorate General of Sanitation (*Direction Générale de l'Assainissement* - DGA), MHA and the PCU; and (vii) Project management and coordination.

27. **AF readiness.** The parent project yielded cost savings that have been used to conduct studies to identify new activities to be financed under the AF to scale up and increase the impact of the parent project. Preparatory activities of the AF investment program (technical studies and preparation of bidding documents) are being carried out under the parent project and bidding documents for several large works have been completed (see details in Annex 2).

28. **The proposed AF is consistent with the Country Partnership Strategy (CPS).** The CPS for the fiscal years 2013–2016 (Report No. 76232 NE) was approved by the Board in March 2013 and aims to support Niger's development as an emerging economy that is productive, diversified, resilient, and inclusive with enhanced opportunities for productive employment and improved standards of living. A Systemic Country Diagnostic is currently being undertaken to inform the formulation of the next Country Partnership Framework for FY17-19, to be delivered in FY17. The operations identified in the draft Country Partnership Framework, including continued support to water and sanitation activities, remain fully aligned with the second pillar of the CPS, which aims at reducing vulnerability and at strengthening governance and capacity for service delivery. The proposed AF activities will help provide all segments of the population, especially the poor, with affordable access to safe water by providing social water connections at affordable costs to poor households.

¹ As agreed in the Financing Agreement, activities listed under (ii) and (iii) are incorporated as reference to similar activities carried out under the Original Financing. The Ministry in charge of Water, the Environment and Fight Against Desertification (*Ministère de l'eau, de l'environnement et de la lutte contre la désertification* - MEELCD) was the Ministry in charge of Water at the time of appraisal of the parent project, which has been replaced by the Ministry in charge of Water and Sanitation, MHA.

III. Proposed Changes

Summary of Proposed Changes	
<p>The changes associated with the AF comprise modifications to the parent (a) scope of activities (component costs, disbursement estimates, and implementation schedule); (b) Results Framework; and (c) project closing date. In addition, two new safeguards policies will be triggered: OP 4.11 on Physical Cultural Resources and OP 7.50 on Projects on International Waterways.</p> <p>The proposed AF will finance activities to scale up the development impact of the parent project by (a) rehabilitating or constructing water production, storage, and pumping facilities and primary, secondary, and tertiary water distribution networks to enable extension of water services in unserved areas and in selected cities; (b) providing access to water services through social water connections and standposts; (c) providing access to sanitation through the construction of school latrines; and (d) consolidating the achievements of the urban water subsector reforms and strengthening the fecal sludge management chain by continuing and scaling up the capacity-building actions undertaken under the parent project with a view to improving the performance of the sector stakeholders, notably SPEN and the DGA.</p> <p>The Results Framework will be adjusted to take into account the impact of the proposed AF activities.</p>	
Change in Implementing Agency	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Project's Development Objectives	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Results Framework	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Change in Safeguard Policies Triggered	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Change of EA category	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Other Changes to Safeguards	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Legal Covenants	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Loan Closing Date(s)	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Cancellations Proposed	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Disbursement Arrangements	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Reallocation between Disbursement Categories	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Disbursement Estimates	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Change to Components and Cost	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Change in Institutional Arrangements	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Financial Management	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]
Change in Procurement	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Change in Implementation Schedule	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]
Other Change(s)	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>]

Development Objective/Results		
Project's Development Objectives		
Original PDO		
The objective of the project is to increase access to sustainable water services and to improved sanitation services in some urban areas in the Recipient's territory		
Change in Results Framework		
Explanation:		
The end-of-project target (EOPT) of several current outcome and output indicators will be adjusted to reflect the impact of AF activities. In addition, two new intermediate indicators will be introduced to monitor citizen engagement.		
Compliance		
Change in Safeguard Policies Triggered		
Explanation:		
OP/BP4.11: Physical Cultural Resources		
Given that most of activities to be undertaken will involve excavations with possible discoveries of physical cultural resources, this policy is triggered in order to ensure that all the precautions have been taken to protect and safeguard physical cultural resources.		
No specific standalone instrument on physical cultural resources is required; rather, a chance find procedure and clauses will be inserted in each civil work contract to properly comply with policy requirement during project implementation.		
OP/BP7.50: Projects on International Water ways		
Among investments to be realized under this AF, the construction of water production facilities will use water of the Niger river, an international water way serving many riparian countries (Benin, Burkina, Cameroon, Chad, Cote d'Ivoire, Guinea, Mali, Niger and Nigeria).		
The necessary volume to take per day is 10,000 m ³ for Tillaberi. To comply with this policy, a notification referenced as 061/MH/SG/DGH/PEAMU dated February 10, 2016 from the Government of Niger was sent to riparian countries through the NBA (Niger Basin Authority). The Government received the no-objection from the NBA on May 9, 2016 in a letter referenced as 000765/2016/ABN/EM-7.		
Current and Proposed Safeguard Policies Triggered:	Current (from Current Parent ISDS)	Proposed (from Additional Financing ISDS)
Environmental Assessment (OP) (BP 4.01)	Yes	Yes
Natural Habitats (OP) (BP 4.04)	No	No
Forests (OP) (BP 4.36)	No	No
Pest Management (OP 4.09)	No	No
Physical Cultural Resources (OP) (BP 4.11)	No	Yes
Indigenous Peoples (OP) (BP 4.10)	No	No

Involuntary Resettlement (OP) (BP 4.12)		Yes	Yes			
Safety of Dams (OP) (BP 4.37)		No	No			
Projects on International Waterways (OP) (BP 7.50)		No	Yes			
Projects in Disputed Areas (OP) (BP 7.60)		No	No			
Covenants - Additional Financing (Urban Water and Sanitation Project - AF P159240)						
Source of Funds	Finance Agreement Reference	Description of Covenants	Date Due	Recurrent	Frequency	Action
IDA	Schedule 2, Section I, F, 2	The Recipient shall furnish to the Association, as soon as available, but in any case not later than November 30 of each year, the annual work plans and budgets and Safeguard Documents referred to in Section I, F.1 of Schedule 2 for their review and approval.		X	Yearly	New
IDA	Schedule 2, Section V, 1	The Recipient shall, not later than July 31 of each year, commencing July 31, 2011, review the Project Implementing Entity’s updated financial projections and take all necessary measures, including readjustment of annual tariff as necessary to permit the restoration or maintenance of the Financial Equilibrium.		X	Continuous	New
IDA	Schedule 2, Section II, B.4	In order to ensure the timely carrying out of the audits referred to in Section II, B.3 of Schedule 2, the Recipient shall engage auditors for the purpose not later than five (5)	March 30, 2017			New

		months after the Effective Date in accordance with the provision of Section III of Schedule 2				
IDA	Schedule 2, Section II, B.5	Without limitation to the provisions of paragraph 1 above, no later than three (3) months after the Effective Date, the Recipient shall ensure that the PCU’s accounting software has been adapted for the Project in a manner satisfactory to the Association.	January 31, 2017			New
Conditions						
Source of Fund		Name		Type		
International Development Association (IDA)		Subsidiary Agreement, Schedule 1, Article V, 5.01		Effectiveness		
Description of Condition						
The Subsidiary Agreement has been revised and executed on behalf of the Recipient and the Project Implementing Entity in accordance with Section I.B of Schedule 2 to the Financing Agreement.						
Source of Fund		Name		Type		
International Development Association (IDA)		Subsidiary Agreement, Schedule 1, Article V, 5.02		Effectiveness		
Description of Condition						
The revised Subsidiary Agreement has been duly authorized by the Recipient and the Project Implementing Entity, and all formalities have been completed to ensure that it is legally binding upon the Recipient and the Project Implementing Entity in accordance with its terms.						
Risk						
Risk Category				Rating (H, S, M, L)		
1. Political and Governance				High		
2. Macroeconomic				Substantial		
3. Sector Strategies and Policies				Moderate		
4. Technical Design of Project or Program				Low		
5. Institutional Capacity for Implementation and Sustainability				Low		

6. Fiduciary							Moderate			
7. Environment and Social							Moderate			
8. Stakeholders							Low			
9. Other (Climate change impact)							Low			
OVERALL							Substantial			
Finance										
Loan Closing Date - Additional Financing (Urban Water and Sanitation Project – AF - P159240)										
Source of Funds						Proposed Additional Financing Loan Closing Date				
International Development Association (IDA)						30-June-2020				
IDA Grant						30-June-2020				
Closing Date(s) - Parent (Urban Water and Sanitation Project - P117365)										
Explanation:										
The closing date of the parent project will be modified to avoid interruptions in funding activities that will continue under the AF and ensure sufficient time to implement them, in particular works on the sludge treatment plant. The closing date will be aligned with the proposed closing date of the AF.										
Ln/Cr/TF	Status	Original Closing Date		Current Closing Date		Proposed Closing Date		Previous Closing Date(s)		
IDA-48930	Effective	31-Dec-2015		31-Dec-2016		30-June-2020		31-Dec-2016		
Change in Disbursement Arrangements										
Explanation:										
A separate designated account (DA) will be established for the AF activities. The ceiling of the DA has been set to CFAF 2.0 billion.										
The AF funds will be under a unique disbursement category of eligible expenditures.										
Change in Disbursement Estimates (including all sources of Financing)										
Explanation:										
Disbursement estimates are adjusted to reflect the inclusion of the AF.										
Expected Disbursements (in US\$, millions)(including all Sources of Financing)										
Fiscal Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Annual	7.79	4.87	15.51	23.92	17.91	18.00	30.00	30.00	12.00	
Cumulative	7.79	12.66	28.17	52.09	70.00	88.00	118.00	148.00	160.00	
Allocations - Additional Financing (Urban Water and Sanitation Project - AF - P159240)										

Source of Fund	Currency	Category of Expenditure ²	Allocation	Disbursement % (Type Total)	
			Proposed	Proposed	
IDA	XDR	GDS, W, NCS, CS, TR and Op. Costs for Parts of the Project, except for Part 3 (ii) and (iii)	7,100,000	100.00	
		Total:	7,100,000		
IDAT	XDR	GDS, W, NCS, CS, TR and Op. Costs for Parts of the Project, except for Part 3 (ii) and (iii)	42,400,000	100.00	
		Total:	42,400,000		
Components					
Change to Components and Cost					
Explanation:					
The denomination of the project components will remain the same. The cost of Components 1, 2 and 3 will be changed to reflect the additional activities that are introduced under the AF. The detailed description and costs of the additional activities are given in Annexes 2 and 3.					
Current Component Name		Proposed Component Name	Current Cost (US\$, millions)	Proposed Cost (US\$, millions)	Action
1. Urban water supply		Urban water supply	76.45	132.21	Revised
2. Urban sanitation		Urban sanitation	9.45	19.47	Revised
3. Institutional strengthening and capacity building		Institutional strengthening and capacity building	4.10	8.32	Revised
		Total:	90.00	160.00	
Other Change(s)					
Change in Procurement					
Explanation:					
The current guidelines (Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers, dated January 2011 and revised July 2014, and Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and					

² The abbreviated labels used below mean: GDS: Goods, W: Works, NCS: Non-Consulting Services, CS: Consultants' Services, TR: Training, Op. Costs: Operating Costs

Grants by World Bank Borrowers, dated January 2011 and revised July 2014) will apply and replace the guidelines referred to in the Financing Agreement of Credit 4893-NE (guidelines dated May 2004 and revised October 2006).

Additional provisions for national competitive bidding have been introduced in the Financing Agreement. In addition, procurement from United Nations Agencies has been added as a possible procurement method for goods and works.

An updated procurement plan, including updated thresholds for applicable procurement methods and prior reviews, was agreed during negotiations on May 27, 2016.

Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, dated October 15, 2006 and revised in January 2011 will continue to apply.

Change in Implementation Schedule

Explanation:

Implementation schedule will be amended to reflect the additional activities for 2016–2020.

IV. Appraisal Summary

Economic and Financial Analysis

Explanation:

Rationale for public sector intervention. The past poor performances of the former water utility as public provider of urban water services, as well as the entity responsible for managing investments for their development, amply justify the option taken by the Government in 2001 to engage in a reform creating an asset holding company (SPEN) and a private operator (SEEN). The two actors' operating performances and their transparency compare favorably with all public and private operators in Sub-Saharan Africa. SPEN and SEEN's relationship with the Government has been immune from interference with investment decisions and human resources management. The framework agreements (*contrats-plans* in French) between the Government and SPEN have been satisfactorily executed and the rate-setting decisions have been endorsed without problems, on the basis of the recommendations stemming from the financial model. In addition, SPEN and SEEN have demonstrated their capacity to innovate to achieve their mandate (as part of the lease contract and the performance contract) to equitably serve the poorest strata of the urban population in expanding access to unserved areas and subsidizing the upfront connection costs to multiply domestic connections. The AF will support this pro-poor strategy.

World Bank's value added. The Bank's dialog with the Government and SPEN has been instrumental in deepening the reform of the water and sanitation sector under the previous and parent IDA-financed projects. The Bank is now in a unique position to help SPEN to meet the challenges of the development of urban water services in Niger. The Bank's value added has been substantial in bringing specific expertise in the development of social connections programs. Value added will also be high at the implementation stage, with a Bank team highly knowledgeable about the sector challenges and the supervision of large water investments.

Economic analysis. The economic analysis of the AF follows the methodology established at appraisal of the parent project. It consists of a cost-benefit analysis (CBA) of the additional water supply activities under the AF, which represent 80 percent of the AF. The overall net present value (NPV) is estimated at US\$9.0 million and the overall economic internal rate of return (EIRR) of 7 percent. The Niamey subcomponent yields a higher EIRR, estimated at 29 percent, than the three other cities (Agadez, Zinder, and Tillabéri) and the secondary centers subcomponents. These results are a conservative estimate both (a)

underestimating the value of the benefits, in part due to the yet unknown geographical distribution of the new social connections and standposts in the different cities and centers, and (b) reflecting the high investment costs necessary to develop capital-intensive water treatment plants and new distribution systems, especially in the three main cities outside of Niamey, which is plaguing the specific EIRR for those cities. The sensitivity analysis shows that the results are robust to different variables that may be affected by some level of uncertainty. The overall long-term marginal cost is estimated at CFAF 305 per m³, which is only slightly higher than the average tariff in 2016 (CFAF 303 per m³).

Financial analysis. The financial and operating performances of SPEN and SEEN are reviewed in Annex 5. The main findings are as follows:

- (a) SEEN maintained a high level of operating performance, with regard to non-revenue water (best performance in West Africa) and to staff productivity, which improved by 30 percent;
- (b) SEEN's bill collection ratio on private customers continuously deteriorated over the review period and is now significantly below the contractual target (98 percent);
- (c) SPEN maintained its financial equilibrium over the review period, building on the increase of its contractual remuneration after the 2011 tariff revision;
- (d) SPEN controlled its cash operating expenditures per m³ sold; and
- (e) The increase of arrears on fees resulted from the public arrears on water bills, and, in turn, led SPEN to postpone the payment to the Government of part of the service of on-lent debt.

Water tariffs and regulation. The Multi-sectoral Regulatory Authority was closed on December 31, 2012. The regulation of the urban water supply sector was transferred to the Ministry in charge of Water, to which SPEN submits proposals of revision of the water tariffs on the basis of the findings of the sector's financial model.

Financial perspectives. The sector's financial model was updated and scenarios of revision of the water tariffs and of the on-lending conditions of sector debt to SPEN were prepared in November 2015, to ensure SPEN's financial equilibrium from 2018 onwards. They will be further reviewed as part of the annual discussion on SPEN's financial equilibrium, which is covenanted in the Financing Agreement, in view of their social acceptability and of their consistency with the sector's financial autonomy.

Technical Analysis

Explanation:

As in the parent project, the AF will use technologies for water supply systems that are well established and have been used effectively in earlier water supply projects. Similarly, the technologies that will be used under the sanitation component have been extensively tested under earlier sanitation projects.

The water investment program supported by the AF originates from a priority investment program designed by SPEN with the assistance of SEEN to restore water services in critical areas of the targeted cities and to maximize the impact of the facilities built under the parent project or supported by other donors. The proposed rehabilitation and expansion of water production facilities, feeder pipes, storage and pumping facilities, and the rehabilitation and expansion of water distribution networks and service connections is designed to improve the quantity of water available to existing customers and the quality of service.

The proposed continuation of the social connections and standposts programs will be carried out in parallel with the expansion of secondary and tertiary networks. SPEN and SEEN have demonstrated their capacity to implement these programs and manage expansion works in close coordination with the identification of connection beneficiaries. No major technical issues are expected from the AF because technologies considered for water supply systems are proven and well established.

For sanitation, the Government has changed its approach in promoting sanitation in recent years. Compared to the period when the parent project was prepared, DGA is now implementing a behavior change approach to create demand for sanitation and let households build their own sanitation facilities rather than subsidizing them. World Bank support through the Water and Sanitation Program has facilitated the development of tools and approaches in this regard, which will be further applied for the AF activities. In addition, the AF sanitation component will build on the experience of the parent project as regards the construction of a second sludge treatment plant, which will expand the treatment capacity and supplement the capacity already created through the first plant constructed under the parent project.

Readiness:

The design studies of the investments proposed in the selected cities are being prepared under the financing of the parent project. The technical design studies have been launched by SPEN. Several bidding documents both for the water works and for the sanitation component are already available (see Annex 2). Activities scheduled in the first 18 months will be ready ahead of effectiveness.

Social Analysis

Explanation:

Social inclusion. The project will continue to rely on pro-poor policies for developing access, including social water connections and public standposts programs. In addition, the proposed AF will seek to reduce the unequal access rates within settlements where water services have been interrupted for a long time due to under-investments, particularly in the secondary cities.

Citizen engagement. Specific communication programs have been developed at the local level to enhance communication on the project's results on the ground and SPEN and SEEN are currently collecting opinions of the urban population on the quality and availability of water services, as part of an ongoing customer satisfaction survey. The outcomes of these surveys, which are undertaken at regular intervals, will help target social connection programs and water network extensions. To mainstream citizen engagement, the AF will also comprise additional activities that will ensure a voice for stakeholders through beneficiary feedback and increase accountability of the service providers to customers. Additional awareness raising activities for sanitation and the development of a more professional fecal sludge management chain involving local pit emptiers are also an opportunity to engage with city dwellers on the improvement of hygiene and health. Citizen engagement will be monitored by: (a) the percentage of beneficiaries who know at least two of their responsibilities regarding their access to water (from the customer satisfaction surveys); and (b) the percentage of satisfactory complaints resolution by SEEN (from SEEN records).

Gender. Increased allocations under the AF, particularly under Component C on institutional support and capacity building, will enable the Project Implementing Entity to mainstream gender activities in project implementation. The AF will review current gender issues emerging from sex disaggregated beneficiary assessments, forthcoming customer satisfaction surveys and sanitation awareness campaigns, and provide training to SPEN and SEEN staff and to the DGA staff on gender mainstreaming in water and sanitation operations and policies. The quality assessment tools will be applied in a gender sensitive manner, which will allow the service provider and the services in charge of promoting sanitation to understand the unique gender gaps, issues, and priority responses for the urban water supply and sanitation sectors.

Environmental Analysis (including Safeguards)

Explanation:

Environmental impact. There are no significant or irreversible adverse impacts that are expected from the implementation of activities that will be financed under the proposed AF. The main potential adverse

environmental and social impacts associated with these investments are expected to be small-scale and site-specific.

Safeguard policies and instruments. The project remains Environmental Assessment (EA) category B (partial assessment). In addition to the safeguards policies triggered under the parent project (OP/BP 4.01 and OP/BP 4.12), two other policies will be triggered for the implementation of the AF: (a) OP/BP 4.11 on Physical Cultural Resources to reflect that chance find artifacts can show up during civil works; and (b) OP/BP 7.50 on Projects on International Waterways because for the proposed water production facilities in Tillaberi, 10,000 m³ per day will be withdrawn from the Niger River.

To comply with OP 7.50, the Government of Niger notified the riparian countries of the Niger River, through the Niger Basin Authority, of the details of the proposed AF on February 10, 2016. The Government received the no-objection from the NBA on May 9, 2016 in a letter referenced as 000765/2016/ABN/EM-7.

As the exact location of future investments are not yet known at appraisal and activities are diversified, the Borrower has updated the existing Environmental and Social Management Framework and Resettlement Policy Framework to reflect the AF activities. Both safeguards documents were disclosed both in-country and at the Bank's InfoShop on May 18, 2016 and will be implemented accordingly.

During the implementation of the ongoing parent project, screening of subprojects has taken place to ensure proper identification and mitigation of any adverse impacts. In addition, a specific Environmental and Social Impact Assessment and a Resettlement Action Plan have been prepared and consulted upon as part of the preparatory studies of the sludge treatment facility in Niamey. The part-time contract of the environmental and social specialist in the PCU has been extended to a full-time contract to ensure proper implementation of safeguard aspects.

Risk

Explanation:

The overall risk of the project is Substantial, in view of both the country context and the existing capacity and experience acquired during the first phase of the project and the nature of proposed additional activities.

The political and governance risk is rated High in Niger, due to the overall security and governance situation. The country is affected by domestic and regional instability linked particularly to transnational terrorism (Al-Qaeda in Sahel and Boko Haram). This has generated large numbers of internally displaced people, affected the economy and disrupted some commercial routes in insecure areas in the Lake Chad region, leading to threats to the national economy against which the macroeconomic risk is assessed as Substantial. This situation may spread to some of the project intervention areas and could then impede progress and therefore affect the achievement of the PDO. Therefore, procurement from United Nations Agencies has been added as a possible procurement method for goods and works.

However, all other project-level risks are low or moderate:

- (a) **Macroeconomic: Substantial.** The deterioration of the macroeconomic indicators linked, among others, to security issues may specifically affect project implementation through unanticipated increased costs of goods and construction of water works infrastructure and difficulties for the Government to comply with its financial commitment to maintain the financial equilibrium supporting the water reform.
- (b) **Sector strategies and policies: Moderate.** The Government's commitment to the water sector reform remains strong. The private sector participation through the lease contract contributes to improving the governance of the sector and operational performances in service delivery. The

project complements other donors' interventions on sanitation. The Government is keen to build on the World Bank intervention to contribute to its ambition to reach universal coverage for urban water and strengthen the capacity of the sanitation sector.

- (c) **Technical design: Low.** The works that are contemplated under the AF are a continuation of the first phase activities and do not generate particular technical issues and the technologies are fully mastered by SPEN and SEEN. The satisfactory outcome of the bidding of waterworks under the parent project demonstrated that there is an adequate level of competition for major contracts in Niger.
- (d) **Institutional capacity for implementation and sustainability: Low.** Implementation capacities have substantially increased during the first phase and will continue to be improved by the continuation of the private sector participation arrangements and support to the sanitation sector institutions. This is key for the sustainability of water and sanitation services, because of the improvement of maintenance and staff productivity as well as effective and proactive monitoring of the quality of water services.
- (e) **Fiduciary: Moderate.** Implementation performance in procurement and financial management (FM) has been and continues to be satisfactory. There are no overdue audits under the parent project or any Bank-financed project implemented by the implementing agency. The procurement residual risk for the AF is assessed as Moderate subject to several measures to mitigate risks, including the strengthening of existing procurement capacities.
- (f) **Environmental and social: Moderate.** The implementation of the safeguards documents and safeguards management have been satisfactory during the first years of the parent project. The Safeguards rating has recently been assessed as Moderately Satisfactory due to delays in implementing the Resettlement Action Plan, which has delayed the startup of the works of the fecal sludge treatment plant in Niamey.
- (g) **Stakeholders: Low.** Customers continue to perceive significant improvements in the delivery and quality of water supply services; the Government is committed to the sector reform and to the project success, as well as the two public water companies and other agencies and ministries involved; donors present in the water sector are well coordinated.
- (h) **Other: Low.** The screening undertaken at the AF Project Concept Stage confirmed that potential climate and disaster risks on the project components and subsectors were low. Despite the location of the project in a Sahelian country, characterized by high temperatures and limited availability of water, both the physical and non-physical components of the overall project (parent and AF) will significantly contribute to reduce potential negative climate impacts.

V. World Bank Grievance Redress

29. Communities and individuals who believe that they are adversely affected by a Bank-supported project may submit complaints to existing project-level grievance redress mechanisms or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank's independent Inspection Panel, which determines whether harm occurred, or could occur, as a result of the Bank's non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's corporate

GRS, please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the Bank Inspection Panel, please visit www.inspectionpanel.org.

Annex 1: Updated Results Framework and Monitoring Indicators

Niger: Urban Water and Sanitation Project - Additional Financing (P159240)

Project Development Objectives

Original Project Development Objective - Parent:

To increase access to sustainable water supply services and to improved sanitation services in some urban areas in the Recipient's territory.

Proposed Project Development Objective - Additional Financing (AF): No change

Results

Core sector indicators are considered: Yes

Results reporting level: Project Level

OUTCOME INDICATORS	Status	Core	Unit of Measure	Baseline 2010	Progress to Date (April 2016)	Cumulative Target Values			Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition and so on)
						2016	2018	2020				
People provided with access to "Improved Water Sources" under the project	R		Number	0	536,750	509,000	649,250	849,250	Annual	Progress reports from SPEN	SPEN	Number of new social connections x 10 plus number of new standposts x 250
<i>People provided with access to "Improved Sanitation" under the project</i>	D		<i>number</i>	<i>0</i>	<i>dropped in 2013</i>	<i>235,000</i>	<i>-</i>	<i>-</i>				<i>Number of rehabilitated connections x 10</i>
Students provided with access to appropriate sanitation facilities in their schools under the project	R		Number	0	58,530	60,000	68,101	86,940	Annual	Progress reports from DGA	DGA	Number of new schools latrines x 30 students (latrines for teachers not included)

Direct project beneficiaries,	R		Number	0	536,750	594,000	739,250	949,250	Annual	Progress reports	PCU	Sum of beneficiaries with new access to improved water sources and with improved water service; beneficiaries from school latrines not included to avoid double counting
of which female	C		%		52	52	52	52				
Restoration of financial equilibrium of the urban water supply sector	C		Yes/No	No	Yes	Yes	Yes	Yes	Annual	Annual review of regulator's financial model	SPEN and regulator	Net cash balance (previous year plus net cash flow from operations minus debt service and variation of working capital requirements) positive or equal to zero

Intermediate results indicators

INTERMEDIATE RESULTS INDICATORS	Status	Core	Unit of Measure	Baseline 2010	Progress to Date (April 2016)	Cumulative Target Values			Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition and so on)
						2016	2018	2020				
Improved community water points constructed or rehabilitated under the project	R		Number	0	537	553	753	953	Annual	Progress reports	SEEN	Number of new standposts constructed under the project
New piped household water connections that are resulting from the project intervention	R		Number	0	40,100	37,100	46,100	61,100	Annual	Progress reports	SEEN	Number of new social water connections installed by SEEN
People with access to enhanced water supply services under the project	R		Number	0	0	85,000	90,000	100,000	Annual	Progress reports from SEEN/SPEN	SEEN/SPEEN	Population in targeted centers with improved services (water quality compliant with standards, increased pressure, increased continuity)
Improved latrines constructed under the project	D		Number	0	dropped in 2013	2,500						Number of household latrines constructed under the project

INTERMEDIATE RESULTS INDICATORS	Status	Core	Unit of Measure	Baseline 2010	Progress to Date (April 2016)	Cumulative Target Values			Frequency	Data Source/ Methodology	Responsibility for Data Collection	Description (indicator definition and so on)
						2016	2018	2020				
New school latrines constructed under the project	R		Number	0	1,751	2,000	2,350	3,164	Annual	Progress reports	DGA	Number of latrine blocks x 4; for students and teachers
Public sanitation facilities constructed under the project	C		Number	0	16	20	20	20	Annual	Progress reports	DGA	Number of public toilets constructed under the project
Onsite greywater facilities constructed under the project	D		Number	0	dropped in 2013							
Satisfactory complaints resolution by the service provider	N		Percent		0	80	92	98	Annual	Annual report	SPEN/SEEN	<u>Citizen engagement</u> : Ratio number of satisfactory complaints / complaints received by SEEN (as defined in the performance contract)
Beneficiaries who know at least two of their responsibilities regarding their access to water	N		Percent		0	0	35	75	Every two years	Customer satisfaction surveys	SPEN/SEEN	<u>Citizen engagement</u> : surveyed beneficiaries who know at least two of their responsibilities regarding their access to water

Summary of Results Framework Changes

Revisions to the Results Framework			Comments/ Rationale for Change
PAD	Current as Restructured in 2013	Proposed	
PDO: To increase access to sustainable water services and to improved sanitation services in some urban areas in the Recipient's territory	Unchanged	Unchanged	The AF will finance scaled up activities supporting the same PDO. Sustainability criteria are defined in the framework and performance agreements linking the Government, SPEN and SEEN and cover both the levels of services provided, the standards of quality (pressure, continuity, water quality) and the financial equilibrium of the sector (defined above).
PDO INDICATORS			
People provided with access to "Improved Water Sources" under the project	Indicator unchanged Change in the EOPT value: increased from 484,000 to 509,000 people.	Indicator revised: People provided with access to "improved water sources" under the project - Urban (number) Change in the EOPT value: increased from 509,000 to 849,250 people.	Outcome impact of the AF – new standposts (x 250 people) and new connections (x 10 people)
<i>People provided with access to "Improved Sanitation" under the project</i>	<i>Dropped</i>	<i>NA</i>	<i>NA</i>
Students provided with access to appropriate sanitation facilities in their schools under the project	Indicator unchanged	Indicator unchanged Change in the EOPT value: increased from 60,000 to 86,940 students.	Outcome impact of the AF – counting only the latrines constructed for students, not those for teachers
Direct project beneficiaries, of which female (%)	Indicator unchanged Change in the EOPT value decreased due to dropping of domestic latrines, from 779,000 to 569,000	Indicator unchanged Change in methodology of calculation to avoid double counting of beneficiaries of school sanitation (same areas, hence beneficiaries, also benefiting from new access) and include people benefiting from improved water quality; Therefore, change in baseline 2016:	Outcome impact of the AF – sum of beneficiaries of new access to services and improved services for existing customers

Revisions to the Results Framework			Comments/ Rationale for Change
		from 569,000 (new access to water + sanitation) to 594,000 (new + enhanced access to water); Change in the EOPT value increased from 594,000 to 949,250	
Restoration of financial equilibrium of the urban water supply sector	Unchanged	Unchanged	As defined in the Concession and Lease contracts and in the PAD
INTERMEDIATE RESULTS INDICATORS			
PAD	Current as restructured in 2013	Proposed	
Component 1: Urban water supply			
Improved community water points constructed or rehabilitated under the project	Indicator unchanged Change in the EOPT value increased from 453 to 553 additional standposts	Indicator unchanged Change in the EOPT value: increased from 553 to 953 additional standposts.	Impact of the AF activities
New piped household water connections that are resulting from the project intervention	Unchanged	Indicator unchanged Change in the EOPT value: increased from 37,100 to 61,100 additional piped household water connections	Impact of the AF activities
People benefiting from improved water quality under the project	Unchanged (no results expected in years before completion of all works in last year of project)	Indicator revised: "People with access to enhanced water supply services under the project" Change in the EOPT value: increased from 85,000 to 100,000 people	Impact of the AF activities
Component 2: Urban sanitation			
<i>Improved latrines constructed under the project</i>	<i>Dropped</i>	<i>NA</i>	<i>NA</i>
New school latrines constructed under the project	Unchanged	Indicator unchanged Change in the EOPT value: increased from 2,000 to 3,164 additional latrines in schools, including some for the students (77% of the new latrines) and separate ones for teachers	Impact of the AF activities
Public sanitation facilities constructed under the project	Unchanged	Unchanged	

Revisions to the Results Framework			Comments/ Rationale for Change
<i>Onsite greywater facilities constructed under the project</i>	<i>Dropped</i>	<i>NA</i>	<i>NA</i>
Citizen Engagement:			
Satisfactory complaint resolution by the service operator	-	NEW Baseline: 80% (2016) Target: 98% (EOP)	Ratio number of satisfactory complaints / complaints received by SEEN. Source: performance contract and SEEN annual reports
Beneficiaries who know at least two of their responsibilities regarding their access to water	-	NEW Baseline: 0 (2016) Target: 75 (2010)	Surveyed beneficiaries who know at least two of their responsibilities regarding their access to water Source: customer satisfaction surveys carried out by SEEN

Annex 2: Detailed Description of Additional Activities

Niger: Urban Water and Sanitation Project - Additional Financing (P159240)

1. This annex provides a detailed description of the activities to be implemented under the AF to scale up the positive results of the parent project and the status of the preparatory studies.

Detailed Project Activities

2. The final selection of activities was completed during appraisal to fit the financial envelope allocated to the AF.

Component 1: Urban water supply (US\$55.76 million equivalent)

3. This component will comprise the following additional activities:

Subcomponent 1.1: Agadez (US\$12.83 million equivalent)

4. The AF will finance the following activities to scale up the initial project:

- (a) Expansion of water production facilities including: (i) equipment and connection of six existing boreholes, including installing pumps and 15 km of pipes interconnecting boreholes to the main transmission pipe; (ii) construction of a pumping station including two new tanks of 400 m³ each, 25 km of transmission pipes and the installation of four transmission pumps; and (iii) equipment connecting of the pumping station and boreholes to the energy line, including the remote management system of the water production system;
- (b) Supply and installation of an additional 30 km of water distribution networks; and
- (c) Goods and consultant services.

Subcomponent 1.2: Zinder (US\$20.38 million equivalent)

5. To address important needs in Zinder and supplement water production facilities financed by EXIMBANK, SPEN plans to extend further the production capacity and densify the water distribution network. This consists of:

- (a) Expansion of water production facilities including: (i) construction of five new equipped boreholes and a pumping station; and (ii) rehabilitation and equipment of five existing boreholes, including installing pumps and interconnecting boreholes with the main transmission pipe;
- (b) Construction of (i) a transmission pipe of 44 km between the production site and the city; and (ii) an elevated storage tank of 1,000m³;
- (c) Supply and installation of an additional 64 km of water distribution networks; and
- (d) Goods and consultant services.

Subcomponent 1.3: Tillabéri (US\$9.47 million equivalent)

6. The AF will finance the following activities to scale up the initial project:
- (a) Expansion of water production facilities including (i) the construction of a new water treatment plant of 10,000 m³ per day expandable to 30,000 m³ per day including pre-decantation pond of 3,000 m³ capacity; and (ii) the construction of a raw water pumping station of 500 m³/h to supply the treatment plant;
 - (b) Construction of (i) a transmission pipe of 2 km; (ii) an elevated storage tank of 1,000 m³ capacity; and (iii) an energy line and remote management system of equipment;
 - (c) Supply and installation of an additional 20 km of water distribution networks; and
 - (d) Goods and consultant services.

Subcomponent 1.4: Niamey (US\$4.00 million equivalent)

7. Activities planned in Niamey include:
- (a) Increasing the production capacity by 15,000 m³ per day;
 - (b) Expanding and densifying the water distribution network in unserved areas; and
 - (c) Goods and consultant services.

Subcomponent 1.5: Secondary centers (US\$1.08 million equivalent)

- (a) Activities in Gouré, Mainé Soroa, and Say include (i) rehabilitation of boreholes and elevated water tanks; and (ii) extension of water distribution networks;
- (b) Goods and consultant services.

Subcomponent 1.6: Construction of household connections and standposts in selected cities (US\$8.00 million equivalent)

8. This activity aims to improve access to drinkable water by:
- (a) Expanding small diameter pipes network on 190 km to allow connections to schools, health centers, standposts, and households; and
 - (b) Providing construction of 24,000 social connections and 400 standposts.

Component 2: Urban sanitation (US\$10.02 million equivalent)

9. This component will comprise the following additional activities:

Subcomponent 2.1: Access to sanitation services (US\$4.24 million equivalent)

10. Activities to expand access to sanitation services in Niamey, Dosso, and Tillabéri include, inter alia, (a) constructing 1,164 school latrines in selected centers including (i) separated bloc latrines for students (898) and teachers (266) and for boys and girls and (ii) handwashing stations; and (b) conducting sanitation awareness and demand creation campaigns.

Subcomponent 2.2: Fecal sludge management in Niamey (US\$5.78 million equivalent)

11. Activities to expand the fecal sludge management in Niamey include: (a) constructing an additional fecal sludge treatment plant to expand treatment capacity to 400,000 people; and (b) developing a fecal sludge management service chain.

12. The two subcomponents above include a provision for goods and consultant services that may be needed to realize the activities, including technical studies and supervision of works.

Component 3: Institutional strengthening and capacity building (US\$4.22 million equivalent)

10. This component will support the Recipient through the provision of technical assistance, training, operating costs, goods and services for the required purposes in the areas of:

Subcomponent 3.1: Institutional support to the urban water subsector (US\$0.09 million equivalent)

11. Activities include, among others, specific technical assistance and studies and technical audit of the execution of the contracts of SPEN and SEEN.

Subcomponent 3.2: Institutional support to MHA (US\$0.12 million equivalent)

11. Activities include capacity building and support to the project implementation agencies (SPEN, DGA) and relevant services of the Ministry in charge of water and sanitation, including developing capacities in sector management and reforms and training in project management, procurement and FM.

Subcomponent 3.3: Citizen engagement activities (US\$0.90 million equivalent)

12. This subcomponent finances assistance to the development of citizen engagement activities.

Subcomponent 3.4: Environmental and social management (US\$0.60 million equivalent)

13. This subcomponent finances assistance to the implementation and management of safeguards documents and processes.

Subcomponent 3.5: Coordination and project management (US\$2.51 million equivalent)

14. Activities include capacity building and support to the PCU, including its operating costs, and expenditures related to monitoring, financial audits, training, communication, and organization.

Status of Preparatory Studies

15. The parent project yielded cost savings that have been used to conduct studies to identify new activities to be financed under the AF to scale up and increase the impact of the parent project. Preparatory activities of the AF investment program (technical studies, preparation of bidding documents) are being carried out under the parent project and several bidding documents for large works have been completed as listed in Table 2.1.

Table 2.1. Status of Preparatory Studies

Activities	Status
Water works Agadez	Bidding documents available
Water works Zinder	Studies ongoing
Water works Tillabéri	Studies ongoing
Water works Niamey	Bidding documents available
Water works secondary centers	Bidding documents available
Household social connections, standposts, and tertiary networks	Will be executed by SEEN through single source selection
School latrines selected centers	Bidding documents available
Fecal sludge treatment plant Niamey	Bidding documents available
Sanitation awareness and fecal sludge chain	Studies ongoing building on Water and Sanitation Program (WSP) material

Annex 3: Detailed Costs of Additional Activities

Niger: Urban Water and Sanitation Project - Additional Financing (P159240)

N°	Component	US\$, millions
I	URBAN WATER SUPPLY	55.76
1	Agadez	12.83
1.1	Water production facilities	8.79
1.2	Water distribution network	4.03
2	Zinder	20.38
2.1	Water production facilities	7.35
	Transmission pipe and construction of storage capacity of 1,000 m ³	9.20
2.2	Water distribution network	3.83
3	Tillabéri	9.47
4.1	Construction of a new water treatment plant of 10,000 m ³ /day	6.39
4.2	Transmission system and construction of storage capacity of 1,000 m ³	2.10
4.3	Water distribution network	0.98
4	Niamey	4.00
5	Secondary centers	1.08
6	Nationwide household connections and standposts program	8.00
II	URBAN SANITATION	10.02
1	Expanding access to sanitation services (school latrines, awareness campaigns, strengthening the sanitation chain)	4.24
2	Expanding fecal sludge treatment plant capacity in Niamey	5.78
III	INSTITUTIONAL STRENGTHENING AND CAPACITY BUILDING	4.22
1	Institutional support to the urban water subsector	0.09
2	Institutional support to MHA	0.12
3	Citizens' engagement activities	0.90
4	Environmental and social management	0.60
5	Coordination and management of the project	2.51
	TOTAL	70.00

Note: All subcomponents under Components 1 and 2 include Consultant services.

Annex 4: Implementation Arrangements

Niger: Urban Water and Sanitation Project - Additional Financing (P159240)

A. Project Administration Mechanisms

Project Implementation Institutional Arrangements

1. **The implementation arrangements under the AF will remain unchanged.** The following gives an update on the existing implementation arrangements, and provides updated information on fiduciary aspects and monitoring and evaluation.
2. **Oversight.** The Project Steering Committee (*Comité de pilotage*, PSC) will remain the same and will oversee and monitor the proposed AF and activities. It will facilitate relations with the ministerial departments and public agencies. The PSC is chaired by the permanent secretary of the MHA and includes representatives from various ministries,³ SPEN, DGA, and the Office of Monitoring Environment and Impact Evaluation (*Bureau de l'Evaluation Environnementale et des Etudes d'Impact*) of the Ministry of Environment and Sustainable Development.
3. **Project management and coordination.** The existing PCU will continue to manage and coordinate the AF. The PCU, with occasional assistance of consultants and specialists, will (a) coordinate project activities of the various implementing agencies including procurement; (b) carry out FM; (c) prepare annual work plans and budgets for submission to the PSC and to IDA; and (d) ensure monitoring and evaluation, and reporting.
4. **Implementation responsibilities** for each of the three project components are as follows:
 - (a) SPEN will implement the urban water component.
 - (b) The DGA of the MHA will implement the urban sanitation component.
 - (c) The PCU will implement the institutional strengthening and capacity-building component in close coordination with other project stakeholders, particularly the Office of Monitoring and Impact Evaluation of the Ministry of Environment and Sustainable Development for safeguards issues.
5. **Procedures.** The Project Implementation Manual (PIM) details the project implementation arrangements together with the procurement procedures, the administrative, financial and accounting procedures, and the safeguard procedures. The PIM has been updated and will be used accordingly.

³ Ministries in charge, respectively, of Economy and Finance, Health, Housing and Urban Development, Interior, Public Education, and Mines and Energy.

Measures to Address Capacity Constraints

6. The implementation framework was extensively tested during the execution of the parent project, under which SPEN and the PCU developed satisfactory implementation capacities. However, specific training and capacity-building support will continue to be provided to the PCU, DGA, and SPEN teams during project implementation under the institutional component of the parent project.

7. **Financial management.** There are no overdue audits under the parent project or any Bank-financed project implemented by the implementing agency. The current FM system will be maintained throughout the implementation of the project. The project has submitted on time the quarterly unaudited Interim Financial Reports (IFRs), as well as the certified annual audit reports. It is expected that these reports will continue to be submitted on time for the additional funds and extended project duration. The project's accounting software and the format of the IFR of the parent project will be updated to include the new activities introduced under the AF.

B. Disbursement arrangements

8. The additional financing will finance 100 percent of the eligible expenditures. A new separate DA will be established in a commercial bank acceptable to IDA. The DA will receive funds based on the project's cash needs. Advances to the DA will be made against withdrawal applications supported by Statements of Expenditures and other documents as specified in the Disbursement Letter. All supporting documents will be retained by the project team and readily accessible for review by periodic IDA implementation support missions and external auditors. The current disbursement methods (Advance Reimbursement, Direct Payment, and Special Commitment) will continue to be used under this AF. The option to disburse against submission of quarterly unaudited IFRs could be considered at any time subject to both the quality and timeliness of the IFRs submitted to the Bank, as well as the overall FM arrangements as assessed in due course.

C. Procurement arrangements

9. The procurement arrangements of the parent project will continue to apply to the AF. The PCU will manage the procurement of all activities under the AF.

10. The current guidelines (Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers, dated January 2011 and revised July 2014, and Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers, dated January 2011 and revised July 2014) will apply and replace the guidelines referred to in the Financing Agreement of Credit 4893-NE (guidelines dated May 2004 and revised October 2006). Additional provisions for national competitive biddings were included in the Financing Agreement, as well as the potential use of procurement from United Nations' Agencies in case of security concerns. Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants, dated October 15, 2006 and revised in January 2011 will continue to apply.

11. An updated procurement plan, including updated thresholds for applicable procurement methods and prior reviews, was prepared by the Borrower for implementation of AF activities that provides the basis for the procurement methods. This plan was reviewed by the World Bank during project appraisal and agreed during negotiations on May 27, 2016. After the AF approval by the World Bank, it will be available at the Project Technical and Fiduciary Coordination Unit. It will also be available in the project's database and in the World Bank's external website. The plan will be updated in agreement with the Technical and Fiduciary Coordination Unit annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. All subsequent updates will be disclosed once they are approved by the World Bank.

Capacity Assessment and Remedial Actions

12. An updated assessment has been carried out during April 2016. The procurement performance for the parent project has evolved from Moderately Satisfactory to Satisfactory although the procurement risk has been rated as Substantial during implementation so far. The procurement specialist supporting all the procurement activities of the project has left on January 2015 and was not replaced because the major procurement activities were already completed.

13. The AF's overall project risk for procurement is rated Substantial before mitigations. The key risks for procurement are (a) the insufficiency of proficient procurement staff to implement procurement actions on time and in line with the Bank's procurement procedures; (b) the staff involved in the project who may not have experience with complex technical procurement will be responsible for process control and approval; (c) inadequate communication and interaction between the PCU and the executing agencies and the Procurement Unit in the ministry, which may lead to delays in procurement processes and poor estimation of the costs; and (d) poor filing which can lead to loss of documents.

14. The residual risk is assessed as Moderate after adopting the following measures:

- A qualified and experienced procurement specialist to be located at the PCU will be appointed to fully support all procurement activities for the project, notably to ensure quality control and compliance with World Bank procedures.
- A workshop will be organized at the beginning of the project to train/update all key stakeholders involved in procurement on the World Bank's procurement procedures and policies.
- The PIM including implementation and administrative, financial, and accounting procedures has been updated to take into account the AF activities and notably to clarify the role of each team member involved in the procurement process of the project and the maximum delay for each procurement stage, specifically with regard to the review, approval system, and signature of contracts.
- The PCU will closely monitor the procurement plans and will exercise quality control on all aspects of the procurement process, including evaluation, selection, and award on a monthly basis.

- The filing system at the level of PCU will be improved to ensure compliance with World Bank procurement filing manual.

15. Table 4.1 summarizes the agreed action plan.

Table 4.1. Action Plan Mitigations Measures

Risk	Action	Responsibility	Date
1. The insufficient number of proficient procurement staff to implement procurement actions on time and in line with Bank procurement procedures	Recruit a qualified procurement specialist to support all the procurement activities of the project	MHA- PCU	Two months after effectiveness
2. Staff involved in the project who may not have experience with complex technical procurement will be responsible for process evaluation, control, and approval	Organize a workshop to update/train all involved actors in Bank procurement procedures	MHA - PCU	Two months after effectiveness
3. Inadequate communication and interaction between the executing agency, the procurement unit, the PCU which may lead to delays in procurement processes and poor estimation of the costs	Based on the updated PIM, closely monitor procurement plans and exercise quality control on all aspects of the procurement process, including evaluation, selection and award on a monthly basis.	PCU	During the life of the Project
4. Poor filing which can lead to loss of documents	Improve the filing system at the level of PCU to ensure compliance with the Bank's procurement filing manual	PCU / Procurement specialist	During the life of the project

D. Monitoring and Evaluation

16. The monitoring and evaluation arrangements of the parent project will continue to apply. The PCU's management information system improved markedly under the parent project.

Annex 5: Updated Economic and Financial Analysis

Niger: Urban Water and Sanitation Project - Additional Financing (P159240)

Rationale for public sector intervention

1. The past poor performances of the former water utility as public provider of urban water services, as well as the entity responsible for managing investments for their development, amply justify the option taken by the Government in 2001 to engage in a reform creating an asset holding company (SPEN) and a private operator (SEEN). The two actors' operating performances and their transparency compare favorably with all public and private operators in Sub-Saharan Africa. SPEN and SEEN's relationship with the Government has been immune from interference with investment decisions and human resources management. The framework agreements (*contrats-plans* in French) between the Government and SPEN have been satisfactorily executed and the rate-setting decisions have been endorsed without problems, on the basis of the recommendations stemming from the financial model. In addition, SPEN and SEEN have demonstrated their capacity to innovate to achieve their mandate (as part of the lease contract and the performance contract) to equitably serve the poorest strata of the urban population in expanding access to unserved areas and subsidizing the upfront connection costs to multiply domestic connections. The AF will support this pro-poor strategy.

World Bank's value added

2. The Bank's dialog with the Government and SPEN has been instrumental in deepening the reform of the water and sanitation sector under the previous and parent IDA-financed projects. The Bank is now in a unique position to help SPEN to meet the challenges of the development of urban water services in Niger. The Bank's value added has been substantial in bringing specific expertise in the development of social connections programs. Value added will also be high at the implementation stage, with a Bank team highly knowledgeable about the sector challenges and the supervision of large water investments.

Economic Analysis

3. The ex-ante economic analysis (PAD, page 10) that was conducted at appraisal of the parent project based on a standard CBA consisted of: (a) a CBA analysis of the urban water component (75 percent of the project costs); and (b) an assessment of the cost-effectiveness of the sanitation component. The economic analysis of the AF follows the methodology established at appraisal of the parent project. It consists of a CBA of the additional water supply activities under the AF, which represent 80 percent of the AF. The following is a summary of the methodology used and results of the CBA.

Assumptions supporting the CBA of the additional water investments

4. **Economic costs** include the investment costs to be financed by IDA under the AF and the incremental operation and maintenance costs associated with the increased access and water consumption.

5. **Economic benefits** include the value of the incremental consumers' surplus and the water utility's profit (SPEN/SEEN). The project will provide access to safe water to an additional 340,000 people through a nationwide program of 24,000 social connections and 400 standposts.

- (a) The profit is calculated as the total revenue from water sales (water sales, connection fees, and rental fees) minus operating costs (energy for water pumping, chemicals for water treatment, and other commercial costs).
- (b) Consumer surplus (only domestic customers are taken into account) is measured based on changes in volume of water consumed per person and water expenses when a household gets connected to a social connection or has access to a standpost.

6. Table 5.1 summarizes the main assumptions:

Table 5.1. Main Assumptions on Key Variables for the AF CBA

Variables	Value
Social connections under the AF	24,000
Standposts under the AF	400
Energy (CFAF per m ³)	Varies from 31 to 80 according to the cities
Chemicals (CFAF per m ³)	Varies from 6 to 15 according to the cities
Other commercial costs (CFAF per m ³)	2,000

Source: SPEN (April 2016)

Results

7. The overall NPV is estimated at US\$9.0 million and the overall EIRR at 7 percent at a 6 percent discount rate.⁴ The Niamey subcomponent yields a higher EIRR, estimated at 29 percent, than the three other cities (Agadez, Zinder, and Tillaberi) and the secondary centers subcomponents. These results are a conservative estimate both underestimating the value of the benefits, in part due to the yet unknown geographical distribution of the new social connections and standposts in the different cities and centers, and the high investment costs necessary to develop capital-intensive water treatment plants and new distribution systems, especially in the three main cities outside of Niamey, which is plaguing the specific EIRR for those cities.

8. The sensitivity analysis shows that the results are robust to different variables that may be affected by some level of uncertainty. The overall long-term marginal cost is estimated at CFAF 305 per m³, which is only slightly higher than the average tariff in 2016 (CFAF 303 per m³). Table 5.2 presents the results by EIRR and NPV for both the base scenario and sensitivity analysis scenarios.

⁴ The ex-ante CBA was using a 10 percent discount rate. Results below are estimated at a 6 percent discount rate as per the World Bank guidelines for this kind of development investments.

Table 5.2. Summary of Economic Analysis for the Urban Water Additional Investments

Scenario	Unit	Niamey	Three Cities	Secondary Centers	Overall
Base Scenario					
NPV at 6%	US\$, millions	25	-20	3	9
EIRR	%	29	-6	26	7
Scenario 1: Investment costs increase by 20%					
NPV at 6%	US\$, millions	23	-25	3	1
EIRR	%	23	-7	20	5
Scenario 2: Variable costs increase by 20%					
NPV at 6%	US\$, millions	22	-20	3	6
EIRR	%	22	-7	19	5
Scenario 3: Water demand decreases by 20%					
NPV at 6%	US\$, millions	7	-20	1	-12
EIRR	%	21.8	-7.3	19.3	4.9
Scenario 4: Combined 10% increase in all costs and 10% demand decrease					
NPV at 6%	US\$, millions	19	-23	3	-1
EIRR	%	21	-7	20	5

Note: Exchange rate based on International Monetary Fund rate May 5, 2016: US\$1 = CFAF 575.

Financial analysis

Urban water supply sector's financial situation

9. **Operational and financial performance of SEEN.** Table 5.3 summarizes the evolution of SEEN's income statements since 2012 and provides selected operational and financial indicators.

10. SEEN maintained a high level of operating performances, with regard to non-revenue water (best performance in West Africa) and to staff productivity, which improved by 30 percent. However, the progress on productivity is not reflected in the labor costs, which increased by 17 percent in 2015, and the bill collection ratio on private customers continuously deteriorated over the review period. This ratio is now significantly below the contractual target (98 percent) and the contractual penalties are applied. In addition, payment arrears on public customers' water bills continuously increased.

11. SEEN's operating income substantially decreased after 2013, following the deterioration of the working ratio. The net income further deteriorated in 2015, due to extraordinary financial costs that year.

Table 5.3- SEEN - Selected Financial Data (CFAF, millions) and Indicators

Year	2012	2013	2014	2015	Variation 2012-2015
Water sales	11,686	13,962	13,427	14,477	24%
Operating revenues	19,201	23,760	22,033	25,453	33%
Cash operating expenditures	15,380	20,078	19,174	22,789	48%
<i>o/w: Labor costs</i>	3,288	3,897	3,854	4,519	37%
<i>Energy</i>	2,048	2,313	2,461	2,653	30%
Depreciation and allowances	1,550	1,389	1,646	1,387	-11%
Operating costs	16,930	21,466	20,820	24,176	43%
Operating income	2,271	2,294	1,213	1,276	-44%
Income tax	694	846	286	709	2%
Net income	1,275	1,182	1,115	242	-81%
Operational indicators:					
Volumes sold (m ³ , millions)	52.2	59.0	59.7	64.0	23%
No. of active service connections	123,380	165,121	177,644	192,363	56%
No. of staff	596	609	628	659	11%
No. of staff per 1,000 connections	4.8	3.7	3.5	3.4	-29%
Non-revenue water	15.4%	15.7%	16.3%	15.3%	-0.1%
Collection ratio (private customers)	95.9%	92.2%	92.0%	88.3%	-7.6%
Financial indicators:					
Working ratio	80.1%	84.5%	87.0%	89.5%	9.4%
Operating ratio	88.2%	90.3%	94.5%	95.0%	6.8%
Customers receivables (months):	6.7	8.2	8.8	11.8	75%
Suppliers payables (months)	3.4	2.4	0.9	1.3	-61%

Source: SEEN audited financial statements and technical reports 2012-2015

12. **Current financial situation of SPEN.** Table 5.4 summarizes the evolution of SPEN's income statements and of its statements of sources and application of funds, and provides selected financial indicators.

Table 5.4 - SPEN - Selected Financial Data (CFAF, millions) and Indicators

Year	2012	2013	2014	2015	Variation 2012-2015
Fees	3,977	4,450	4,395	4,497	13%
Operating revenues	4,098	4,568	5,451	4,861	19%
Cash operating expenditures	1,176	2,421	1,744	1,422	21%
<i>o/w: Labor costs</i>	315	368	369	371	18%
Depreciation and allowances	1,817	1,802	1,791	†	
Operating costs	2,992	4,224	3,535	†	
Operating income	1,105	344	1,916	†	
Interest	1,174	1,149	1,207	1,074	-9%
Income tax	80	91	76	†	
Net income	-102	-886	-653	†	
Funds from operations (after interest)	1,095	868	3,084	†	
Repayment of loans	614	613	613	†	
Variation of working capital requirements	-5,291	490	-307	†	
Investments	10,036	11,488	20,621	24,219	141%

Table 5.4 - SPEN - Selected Financial Data (CFAF, millions) and Indicators

Year	2012	2013	2014	2015	Variation 2012-2015
Borrowings	4,083	4,587	4,158	†	
Grants & subsidies	0	7,340	13,934	†	
Cash variation	-179	204	247	†	
Net cash	2,075	2,280	2,527	†	
Indicators:					
Cash operating expenditures per m ³ sold (CFAF)	22.5	41.0	29.2	22.2	-1%
Working ratio	28.7%	53.0%	32.0%	29.2%	0.6%
Operating ratio	73.0%	92.5%	64.8%	†	
Net fees receivables (CFAF, millions)	4,058	5,547	5,902	†	
Fees receivables (months)	12.2	15.0	16.1	†	

Source: SPEN audited financial statements (2012-2014) and statement of budget execution for 2015

Note: † Data not yet available

13. The above results show that:

- (a) SPEN maintained its financial equilibrium over the review period.
- (b) The increase of arrears on fees resulted from the public arrears on water bills, and, in turn, led SPEN to postpone the payment to the Government of part of the service of on-lent debt.
- (c) SPEN controlled its cash operating expenditures per m³ sold, excepted in 2013, when SPEN had to reimburse SEEN for an adjustment of the operator's remuneration or "*prix exploitant*", P_e.

12. **Tariffs and revenue-sharing.** The financial analysis section of the PAD of the parent project pointed to the deterioration of SPEN's financial situation that resulted from the absence of tariff revision since 2006, leading to a sharp decrease of the contractual remuneration of SPEN (the so-called "*prix patrimoine*", P_p). A 13.4 percent increase of water tariffs was applied in 2011, which brought P_p to a more realistic level. Table 5.5 provides the evolution of the revenue-sharing between SPEN (P_p) and SEEN (P_e) since 2010.

Table 5.5- Revenue-Sharing between SEEN and SPEN (CFAF/m³ sold)

Year	2010	2012	2013	2014	2015
Average revenue per m ³	263.4	304.0	309.4	301.1	303.8
SPEN revenue per m ³ (P _p)	38.9	68.7	75.4	72.8	70.3
SEEN's revenue per m ³ (P _e)	224.5	235.3	234.0	228.3	233.5

Source: SPEN and SEEN

14. **Regulation.** The Multi-sectoral Regulatory Authority was closed on December 31, 2012. The regulation of the urban water supply sector was transferred to the Ministry in charge of Water, to which SPEN submits proposals of revision of the water tariffs on the basis of the findings of the sector's financial model.

Financial Perspectives

15. **Financial forecasts and modeling.** The sector's financial model was updated and scenarios of revision of the water tariffs and of the on-lending conditions of the sector debt to SPEN were prepared in November 2015. Table 5.6 provides the main features of the two sets of scenarios that would keep SPEN in financial equilibrium from 2018 onwards.

Table 5.6: Scenarios of Tariff Revisions

Scenarios	On-lending Conditions	Tariff Increases
Scenario I.	No change	2018: 26%
Scenario II	IDA's original credit and China Eximbank loan fully passed to SPEN as grants	2018: 8%

Source: SPEN (November 2015)

16. The above scenarios will be further reviewed as part of the annual discussion on SPEN's financial equilibrium, which is covenanted in the Financing Agreement. The IDA AF (and possibly other sources of financing) will be part of the next annual review of the financial equilibrium. It is likely that the tariff increase contemplated in scenario I would not be socially acceptable and would have to be spread over several fiscal years. Conversely, the on-lending conditions of scenario II are hardly consistent with the principle of financial autonomy of the sector.