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IDA/R2016-0278/1

November 18, 2016

**Closing Date: Friday, December 9,  
2016 at 6 p.m.**

FROM: Vice President and Corporate Secretary

**Cote d'Ivoire - Urban Water Supply Project**

**Project Appraisal Document**

Attached is the Project Appraisal Document regarding a proposed credit to Cote d'Ivoire for the Urban Water Supply Project (IDA/R2016-0278), which is being processed on an absence-of-objection basis.

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REPORT NO: PAD1920

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF EUR44.8 MILLION  
(US\$50 MILLION EQUIVALENT)

TO THE

REPUBLIC OF CÔTE D'IVOIRE

FOR AN

URBAN WATER SUPPLY PROJECT

NOVEMBER 16, 2016

Water Global Practice  
Africa Region

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

## CURRENCY EQUIVALENTS

(Exchange Rate Effective September 30, 2016)

Currency Unit = CFA Franc (CFAF)

CFAF 587 = US\$1

US\$1 = EUR 0.8956

## FISCAL YEAR

January 1 – December 31

## ABBREVIATIONS AND ACRONYMS

CE	Citizen Engagement
CPF	Country Partnership Framework
CSP	Steering Committee ( <i>Comité de suivi et de pilotage</i> )
CQS	Selection based on the Consultants' Qualification
DA	Designated Account
DCI	Ductile Cast Iron
EIRR	Economic Internal Rate of Return
ESMP	Environmental and Social Management Plan
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
EUIP	Emergency Urban Infrastructure Project
FDE	Water Development Fund ( <i>Fonds de développement de l'eau</i> )
FIRR	Financial Internal Rate of Return
FM	Financial Management
FNE	National Water Fund ( <i>Fonds national de l'eau</i> )
GDP	Gross Domestic Product
ICB	International Competitive Bidding
LCS	Least-Cost Selection
M&E	Monitoring and Evaluation
MIE	Ministry of Economic Infrastructure ( <i>Ministère des infrastructures économiques</i> )
NCB	National Competitive Bidding
NPV	Net Present Value
ONAD	National Sanitation and Drainage Agency ( <i>Office national de l'assainissement et du drainage</i> )
ONEA	National Water and Sanitation Agency ( <i>Office National de l'Eau et de l'Assainissement</i> )
ONEP	National Water Agency ( <i>Office national de l'eau potable</i> )
PCU	Project Coordination Unit
PDO	Project Development Objective
PVC	Polyvinyl Chloride
PIM	Project Implementation Manual
PP	Procurement Plan
PPP	Public-Private Partnership

PRICI	Emergency Infrastructure Renewal Project ( <i>Projet de Renaissance des Infrastructures de Côte d'Ivoire</i> )
QCBS	Quality- and Cost-Based Selection
RAP	Resettlement Action Plan
RFP	Request for Proposal
RPF	Resettlement Policy Framework
SBD	Standard bidding document
SdE	Senegalese Water Utility ( <i>Sénégalaise des Eaux</i> )
SEEN	Niger Water Operating Company ( <i>Société d'Exploitation des Eaux du Niger</i> )
SIA	Social Impact Assessment
SODECI	Côte d'Ivoire Water Company ( <i>Société de distribution d'eau de Côte d'Ivoire</i> )
SONES	National Water Company of Senegal ( <i>Société Nationale des Eaux du Sénégal</i> )
SPEN	Water Assets Holding Company ( <i>Société de Patrimoine de l'Eau du Niger</i> )
SYSCOHADA	Accounting System of the Organization for the Harmonization of Business Law in Africa
UWS	Urban Water Supply
WTP	Water Treatment Plant

Regional Vice President:	Makhtar Diop
Country Director:	Pierre Laporte
Senior Global Practice Director:	Guang Zhe Chen
Practice Manager:	Alexander Bakalian
Task Team Leader:	Matar Fall

**CÔTE D’IVOIRE**  
**Urban Water Supply Project**

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# PAD DATA SHEET

*Côte d'Ivoire*

*Urban Water Supply Project (P156739)*

## PROJECT APPRAISAL DOCUMENT

AFRICA

GWA07

Report No.: PAD1920

Basic Information					
Project ID	EA Category	Team Leader(s)			
P156739	B - Partial Assessment	Matar Fall			
Lending Instrument	Fragile and/or Capacity Constraints [ ]				
Investment Project Financing	Financial Intermediaries [ ]				
	Series of Projects [ ]				
Project Implementation Start Date	Project Implementation End Date				
9-Dec-2016	30-Jun-2022				
Expected Effectiveness Date	Expected Closing Date				
9-Apr-2017	30-Jun-2022				
Joint IFC					
No					
Practice Manager/Manager	Senior Global Practice Director	Country Director	Regional Vice President		
Alexander E. Bakalian	Guang Zhe Chen	Pierre Frank Laporte	Makhtar Diop		
Borrower: Republic of Côte d'Ivoire					
Responsible Agency: Cellule de Coordination du PREMU (CC-PREMU)					
Contact:	Pierre Dimba	Title:	Project Coordinator		
Telephone No.:	22505306858	Email:	pdimba@puiur.com		
Project Financing Data(in US\$, millions)					
[ ]	Loan	[ ]	IDA Grant	[ ]	Guarantee
[ X ]	Credit	[ ]	Grant	[ ]	Other

Total Project Cost:	50.00	Total Bank Financing:	50.00							
Financing Gap:	0.00									
<b>Financing Source</b>		<b>Amount</b>								
BORROWER/RECIPIENT		0.00								
International Development Association (IDA)		50.00								
Total		50.00								
<b>Expected Disbursements (in US\$, millions)</b>										
Fiscal Year	2017	2018	2019	2020	2021	2022				
Annual	6.00	8.00	15.00	15.00	3.00	3.00				
Cumulative	6.00	14.00	29.00	44.00	47.00	50.00				
<b>Institutional Data</b>										
<b>Practice Area (Lead)</b>										
Water										
<b>Contributing Practice Areas</b>										
Social, Urban, Rural and Resilience Global Practice										
<b>Proposed Development Objective(s)</b>										
The proposed project development objective is to improve quality of, and increase access to, water services in selected urban areas and to strengthen capacity of ONEP for financial planning and financial management of the urban water supply sector.										
<b>Components</b>										
<b>Component Name</b>					<b>Cost (US\$, millions)</b>					
Component A - Urban Water Supply					45.64					
Component B - Institutional Support					4.36					
<b>Systematic Operations Risk- Rating Tool (SORT)</b>										
<b>Risk Category</b>								<b>Rating</b>		
1. Political and Governance								Substantial		
2. Macroeconomic								Moderate		
3. Sector Strategies and Policies								Moderate		
4. Technical Design of Project or Program								Low		
5. Institutional Capacity for Implementation and Sustainability								Substantial		
6. Fiduciary								Moderate		
7. Environment and Social								Moderate		

8. Stakeholders	Substantial		
9. Other (Tariff adjustment)	Substantial		
<b>OVERALL</b>	Substantial		
<b>Compliance</b>			
<b>Policy</b>			
Does the project depart from the CAS in content or in other significant respects?	Yes	[ ]	No [ X ]
Does the project require any waivers of Bank policies?	Yes	[ ]	No [ X ]
Have these been approved by Bank management?	Yes	[ ]	No [ ]
Is approval for any policy waiver sought from the Board?	Yes	[ ]	No [ X ]
Does the project meet the Regional criteria for readiness for implementation?	Yes	[ X ]	No [ ]
<b>Safeguard Policies Triggered by the Project</b>	<b>Yes</b>	<b>No</b>	
Environmental Assessment OP/BP 4.01	X		
Natural Habitats OP/BP 4.04		X	
Forests OP/BP 4.36		X	
Pest Management OP 4.09		X	
Physical Cultural Resources OP/BP 4.11	X		
Indigenous Peoples OP/BP 4.10		X	
Involuntary Resettlement OP/BP 4.12	X		
Safety of Dams OP/BP 4.37		X	
Projects on International Waterways OP/BP 7.50		X	
Projects in Disputed Areas OP/BP 7.60		X	
<b>Legal Covenants</b>			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Schedule 2 Section I.A.3 - PCU Staffing	No	9-July-2017	
<b>Description of Covenant</b>			
The recipient shall ensure that, throughout project implementation, the PCU is maintained with staff in sufficient number, with experience and qualifications satisfactory to the Association, in carrying out the day-to-day coordination of the project. To this end, the recipient shall, no later than three (3) months after the effective date, have hired a project manager, a procurement specialist, a procurement assistant, an accountant, a disbursement assistant, and a social specialist, under terms of reference and with qualification and experience satisfactory to the Association.			
<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Schedule 2 Section I.B.1 - Project Management Contract	No	9-May-2017	
<b>Description of Covenant</b>			

To facilitate the carrying out of the project, the recipient shall, not later than one month after the effective date, conclude with the PCU a project management contract, vesting responsibility in the PCU for the overall management, monitoring, and supervision of the project and setting out details of the roles and responsibilities of the PCU under the project.

<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Schedule 2 Section I.B.2 – Implementation Support Contract	No	9-May-2017	

**Description of Covenant**

To facilitate the carrying out of the project, the recipient shall conclude with ONEP and the PCU, not later than one month after the effective date, an implementation support contract acceptable to the Association, vesting responsibility in ONEP for the technical management of Part A of the project, and specifying its roles and responsibilities.

<b>Name</b>	<b>Recurrent</b>	<b>Due Date</b>	<b>Frequency</b>
Schedule 2 Section II.B.4 - Recruitment of External Financial Auditor	No	9-Oct-2017	

**Description of Covenant**

The recipient shall, not later than six months after the effective date, appoint an external auditor, whose qualifications and experience and terms of reference shall be acceptable to the Association.

**Conditions**

<b>Source of Fund</b>	<b>Name</b>	<b>Type</b>
IDA	Project Implementation Manual	Effectiveness

**Description of Condition**

The additional condition of effectiveness consists of a Project Implementation Manual, including financial management and procurement procedures, in a manner and substance satisfactory to the Association, to reflect the specific content and design of the project and ensure consistency with its objectives, has been adopted by the recipient.

**Team Composition**

**Bank Staff**

<b>Name</b>	<b>Role</b>	<b>Title</b>	<b>Specialization</b>	<b>Unit</b>
Matar Fall	Team Leader (ADM Responsible)	Lead Water and Sanitation Specialist	Water and Sanitation	GWA07
Maurice Adoni	Procurement Specialist (ADM Responsible)	Senior Procurement Specialist	Procurement	GGO07
Maimouna Mbow Fam	Financial Management	Senior Financial Management	Financial management	GGO26

	Specialist	Specialist		
Abdoul Wahabi Seini	Safeguards Specialist	Senior Social Development Specialist	Social Development	GSU01
Abdoulaye Gadiere	Safeguards Specialist	Senior Environmental Specialist	Environment	GEN07
Andrea E. Stumpf	Counsel	Lead Counsel	Counsel	LEGCF
Faly Diallo	Team Member	Finance Officer	Finance	WFALN
Issa Thiam	Team Member	Finance Analyst	Disbursement	WFALA
Jane Jamieson	Team Member	Senior Infrastructure Specialist	Water and Sanitation/PPP	GCPDR
Madio Fall	Team Member	Senior Water & Sanitation Specialist	Water and sanitation	GWA07
Paul Kriss	Peer Reviewer	Lead Urban Specialist	Water / Urban Development	GSURB
Philippe Marin	Peer Reviewer	Senior Water & Sanitation Specialist	Water and Sanitation	GWA05
Pier Francesco Mantovani	Peer Reviewer	Lead Water and Sanitation Specialist	Water and Sanitation	GWA07
Richard Verspyck	Team Member	Consultant	Water and Sanitation	GWA07
Mariame Bamba	Team Member	Program Assistant	ACS	AFCF2

#### Extended Team

Name	Title	Office Phone	Location

#### Locations

Country	First Administrative Division	Location	Planned	Actual	Comments
Côte d'Ivoire	Agnéby-Tiassa	Agboville	X		
	Gbéké	Béoumi	X		
	Abidjan	Bingerville	X		
	Tchologo	Ferkéssédougou	X		
	Poro	Korhogo	X		
	Agnéby-Tiassa	N'Douci	X		

	Agnéby-Tiassa	N'Zianouan	X		
	Agnéby-Tiassa	Tiassalé	X		
.					
<b>Consultants (Will be disclosed in the Monthly Operational Summary)</b>					
Consultants Required?	Consultants will be required				

## I. STRATEGIC CONTEXT

### A. Country Context

1. **Côte d'Ivoire has seen strong growth coming out of years of crisis.** With a gross national income of US\$1,410 per capita in 2015, Côte d'Ivoire is ranked as the third largest economy and population in West Africa. As a result of the intermittent political crisis from 1999–2011, the Ivoirian economy grew by only 2 percent a year in nominal terms during that period. However, since Côte d'Ivoire's recovery in 2011, growth has been more robust, with the economy growing at an average of 9.7 percent from 2012 to 2013, before moderating slightly to 7.9 percent in 2014. The real gross domestic product (GDP) per capita increased cumulatively by more than 20 percent during the 2012–2014 period. All the main economic sectors, including agriculture, industry, and construction, have contributed to the renewed strong growth of GDP and employment, which were supported by an upsurge of public and private investments. According to the International Monetary Fund, in response to the authorities' continued efforts to improve the business climate and address infrastructure gaps, growth is projected at 8.5 percent in 2016.

2. In addition to establishing an appropriate macroeconomic framework and following prudent fiscal policy, the Government has dedicated significant resources in recent years to improve security and social cohesion. The Government has also adopted structural reforms to set the stage for resilient and private sector-led growth. Some of the main reforms are aimed at improving the business climate, ensuring financial stability and greater inclusion, and improving public governance and financial management (FM).

3. **Despite the progress made since 2011, Côte d'Ivoire has only been moderately successful at reducing the incidence of poverty.** The incidence of poverty has only decreased slightly from 48.9 percent in 2008 to 46.3 percent in 2015, after having dramatically increased since the mid-1980s with population increasing 2.3 percent annually during this period. Côte d'Ivoire ranked 172 out of 187 in the 2015 United Nations Development Programme Human Development Index.

4. **While urban water services showed resilience throughout the crisis, the performance and development of the sector were compromised, and the impact of the crisis is still felt today.** Although urban water supply (UWS) services were maintained throughout the political crisis, the quality and sustainability of services declined and investment in development of the sector was curtailed. The crisis generated major relocation of the population that unexpectedly increased water demand, particularly in Abidjan, the economic capital, which now accounts for more than 40 percent of the urban population. From 2004 until 2012, billing and collection became impossible in the northern part of the country and regular commercial procedures could not be fully applied elsewhere. The performances of the (private) Côte d'Ivoire Water Company (*Société de distribution d'eau de Côte d'Ivoire*, SODECI) substantially deteriorated and have not recovered post crisis; customer tariffs have not been adjusted since 2004. According to the International Benchmarking Network for Water and Sanitation Utilities, between 2000 and 2011, the percentage of population that was served dropped by 15 percentage points and has slowly begun to recover since then. Key performance indicators such as

nonrevenue water increased from 17 percent to 27 percent and continuity of supply dropped from 24 hours to 13 hours per day.

5. As a result, the sector's capacity to self-finance renewal and expansion investments and its ability to meet the increasing water demand was sharply reduced, thus creating water deficits. The end of the crisis raised expectations among the urban population—previously accustomed to high quality of service—that water shortages will be promptly addressed. These expectations were only partly satisfied through emergency investments by development partners.

## **B. Sectoral and Institutional Context**

### ***Legal and Institutional Context***

6. There is no specific legal instrument governing water supply services in Côte d'Ivoire, but the 1998 Water Code (Law No. 98-755 dated December 23, 1998), which sets the country's legal framework of the integrated management of water resources and of the management of water facilities, (a) ranks water supply to the population as the first priority use of water and (b) explicitly provides for the delegation of the management of water services to private operators. In that context, the Ministry of Economic Infrastructure (*Ministère des Infrastructures économiques*, MIE) is in charge of sector planning and development in urban and rural areas, which is partly delegated to the National Water Agency (*Office national de l'eau potable*, ONEP), while the delivery of water services in urban and semiurban areas (735 cities, towns, and villages) has been contracted to SODECI. Rural water facilities (water points and small piped systems) are usually managed by communities.

7. **Côte d'Ivoire has the longest running public-private partnership (PPP) in Africa.** The Government has successfully delegated the delivery of urban water services to the private sector under *affermage* contracts for over 50 years. This model has been replicated and adapted in various forms across the region. The sectoral institutional and contractual framework was last updated with the signing of a new 15-year *affermage* contract with SODECI in 2007 and the establishment of ONEP in 2009. Apart from its operating responsibilities, SODECI is also in charge of managing the Water Development Fund (*Fonds de développement de l'eau*, FDE), initially designed to finance renewal expenditures, systems' expansion, and social connections from a portion of the water tariffs. ONEP is in charge of planning sector development in rural and urban areas, managing assets, monitoring operators, and proposing tariffs for the Government's approval. A separate National Water Fund (*Fonds national de l'eau*, FNE) was set up in 1987 under the Autonomous Debt Amortization Agency (now the National Investment Bank of Côte d'Ivoire) to manage the long-term debt associated with water supply investments.

8. **The current sector institutional framework exhibits inadequacies, when compared to the neighboring West African countries,** that have enhanced the initial Ivorian model by creating fully autonomous asset-holding companies (*sociétés de patrimoine*) and enforcing performance-based incentives defined in the contract with the operating companies. In Côte d'Ivoire, the MIE retains full ownership of sector assets and ONEP is deprived of suitable tools (financial model, assets inventory) and adequate financial resources to properly carry out its mandate. In addition, the *affermage* contract is not strictly adhered to and explicit performance objectives are not being enforced on the private operator.

9. **Tariffs were designed to maintain a self-financing financial strategy for sector development.** Water revenues collected from customers are apportioned in three parts: (a) the SODECI tariff to cover operating costs of water supply services; (b) the FDE surcharge to finance renewal expenditures, systems' expansion, and social connections; and (c) the FNE surcharge to cover the sector's debt service. However, since 2004, tariffs have not been increased (average tariff CFAF 393 per m<sup>3</sup> or US\$0.67) and the water utility maintains that this is insufficient to finance all components of the FDE, which remain underfunded. Without a clear picture of the financial situation of the sector and assets registry, it is impossible to properly understand the sector financing needs nor assess the need for possible tariff increases.

### *Situation of Urban Water and Sanitation Services*

10. **The access rate to piped water in urban areas is estimated at 70 percent of the population, with an important disparity between Abidjan (90 percent) and other urban centers (65 percent).** Urban areas account for 50.2 percent of the country population, which was estimated at 22.7 million people according to the 2014 census. Government efforts to increase the water production capacity after the end of the crisis with the support of external partners, including IDA, have succeeded to close the water production deficit in Abidjan, which had reached 200,000 m<sup>3</sup> per day in 2014. However, a portion (48 out of 354) of the other water production centers still faces significant water shortages.

11. **Access to urban sanitation services is less developed.** According to the World Health Organization-United Nations Children's Fund Joint Monitoring Program, the access rate of the urban population to sanitation is only 33 percent and significantly higher in Abidjan (about 50 percent), which is equipped with an extensive sewerage network operated by SODECI under a separate *affermage* contract. The National Sanitation and Drainage Agency (*Office national de l'assainissement et du drainage*, ONAD) has developed a strategy that prioritizes the preparation of strategic sanitation master plans in secondary cities, the improvement of on-site sanitation, support to sludge haulers, and the construction of sludge treatment plants.

12. **The crisis has had an enduring impact on the operational performances of the UWS sector;** as can be seen from Table 1, which benchmarks Côte d'Ivoire with the best-managed utilities in the subregion.

**Table 1. Benchmarking of Operating Performance Indicators (2014)**

Indicator	Côte d'Ivoire	Senegal	Burkina Faso	Niger
Number of service connections	787,300	634,500	339,900	192,300
Access to piped water (%)	70	98	86	85
Household connections ratio (%)	69	89	65	58
Nonrevenue water (%)	25	20	18	15
Bill collection ratio - private clients (%)	80	98	98	90
Number of staff per 1,000 connections	2.9	2.1	2.8	3.4
Average water tariff (CFAF per m <sup>3</sup> )	393	482	504	304
Compliance with bacteriological standards (% of samples)	95	99	100	99

Sources: SODECI, SONES/SdE (Senegal), ONEA (Burkina Faso), SPEN/SEEN (Niger).

13. **The crisis has also affected the financing of the sector.** As mentioned above, bill collection from private customers was severely affected by the crisis. This was compounded by the irregular payment of the water bills of public customers by the Government. In addition, while SODECI's remuneration is adjusted on a yearly basis in line with its contract, end-user tariffs remained unchanged, resulting in a shortfall in funding to the FDE and the FNE, thus limiting funds availability for capital expenditures and renewal of existing assets. In early 2015, a major improvement took place, when the Government resumed timely payments of its water bills. However, even though the financial flows within the sector may be monitored, the fragmented sector organization and the absence of adequate investment and planning tools prevent the Government from having a comprehensive picture of the sector's financial situation, including assets and liabilities.

### ***Government's Priorities and Project Rationale***

14. **There is an urgent need to improve the levels of service outside of Abidjan and place the sector on a more sustainable footing.** In requesting IDA's assistance through the proposed project, the Government wishes to address:

- (a) the need to urgently reduce the persistent water shortages in urban centers in response to social tensions arising from unmet expectations to improve living conditions in the aftermath of the crisis;
- (b) the need to focus on water services outside of Abidjan, which has already benefited from significant investments by other development partners; and
- (c) the recognition that the UWS sector has to build financial visibility to move out from its current emergency phase to a more sustainable financial footing.

15. **The Government also wishes to concentrate efforts on UWS.** In view of the financial envelope that will be available to the proposed project and of the financial support allocated to urban sanitation under ongoing and scheduled IDA operations—which amounts to about US\$50 million—it was agreed that the proposed project should focus on UWS.

16. **The proposed project is aligned with the Government priorities.** It will first focus on secondary urban centers that face water shortages and production deficiencies, exhibit below-average water access rates, and for which technical studies are available to expedite implementation. The proposed project will also help provide the sector actors with adequate tools for creating financial visibility and strengthen capacities to carry out their missions.

### **C. Higher Level Objectives to which the Project Contributes**

17. The proposed project will contribute to achieving the goals of the World Bank Group's Country Partnership Framework (CPF) 2016–2019 (Report No. 96515-CI) discussed by the Board of Executive Directors on August 17, 2015. The 2015 Systematic Country Diagnostic, which informed the CPF, showed that there are disparities in access to basic services and gender disparities across wealth and urban-rural groups. This highlights among other priorities, the importance of extending water and sanitation services to improve living conditions, reduce public expenses for waterborne diseases, and increase income-generation activities and school

attendance, particularly for women. The proposed project is aligned with the CPF's second pillar, which aims to improve access to basic services. The project is also fully aligned with the development vision of Côte d'Ivoire, as set out in the current National Development Plan whose third focus area seeks to meet basic social needs, which require improving access to water and sanitation services.

18. The project will contribute directly to the World Bank's twin goals of eradicating poverty and fostering shared prosperity more equally for the benefit of the poor. Under the project, about 180,000 additional people, mostly from poor urban families, will gain access to safe drinking water. Access to clean water is a key health and nutrition determinant and expansion of water supply services is essential for continued economic growth in Côte d'Ivoire.

## **II. PROJECT DEVELOPMENT OBJECTIVES**

### **A. PDO**

19. The proposed project development objective (PDO) is to improve quality of, and increase access to, water services in selected urban areas and to strengthen capacity of ONEP for financial planning and financial management of the urban water supply sector.

### **B. Project Beneficiaries**

20. **The benefits expected from the proposed project will accrue to the urban population** from (a) the restoration of continuous water services (including better water pressure and water quality) to about 369,000 people already served by the existing water systems and (b) access to improved water sources for about 180,000 people who are not currently served and who will benefit from subsidized household connections (10,000) or from reactivated household connections (8,000). The project also will help provide instruments for better investment decision making and tariff setting, which will increase sector efficiency.

### **C. PDO-Level Results Indicators**

21. The following key performance indicators will measure success in achieving the PDO:
- (a) Number of people in urban areas provided with access to 'Improved Water Sources' under the project (core)
  - (b) Number of people with access to enhanced water supply services due to the project
  - (c) Number of direct project beneficiaries, of which female (core)
  - (d) Average hours of water supply in centers targeted by the project (hours per day)
  - (e) Sector financial model used for financial planning and decision making (yes/no)

### III. PROJECT DESCRIPTION

#### A. Project Components

22. **Selection of project activities.** Given the immediate and medium term country priorities in the water and sanitation sector, and taking into account the scheduled interventions of other donors of the sector, the project will focus on the following areas: (a) help finance a priority investment program to quickly address difficulties arising from water shortages in eight urban centers (total population: 512,000); (b) help provide access to water services through new social connections and by reactivating currently inactive household connections; and (c) help improve the financial visibility in the sector and facilitate better execution of the current PPP contractual arrangements.

23. Project sites were selected as part of the Government’s investment planning process targeting areas that face significant challenges for urban services. All targeted centers exhibit low access rate or significant failures in the water supply system because of the deterioration of existing facilities, particularly for production facilities using surface water (water intakes and water treatment plants [WTPs]) and groundwater (boreholes) as well as for water storage facilities. The deteriorated condition of facilities, compounded by other deficiencies, led to various sustainability issues in the delivery of water services, which are listed in Table 2.

**Table 2. Sustainability Issues in the Targeted Centers**

Center	Status of Facilities	Impact
<b>Tiassalé/N’Douci</b>	Deteriorated water intake and insufficient production capacity	Intermittent service throughout the towns and absence of service in high-lying areas, leading the population to use unsafe water river Installing new service connections is not possible
<b>N’Zianouan</b>	Urban center equipped with defective rural water facilities (no service from SODECI)	No water service
<b>Agboville</b>	Eutrophication of the raw water reservoir preventing effective water treatment in the dry season WTP functioning at 200% of design capacity all year long	Undrinkable water in dry season (color, odor) Intermittent service or lack of service leading to termination of service contracts by water customers Installing new service connections is not possible
<b>Korhogo</b>	Deteriorated raw water transmission pipe and insufficient production capacity	Intermittent service High proportion of inactive connections
<b>Ferkéssédougou</b>	Raw water intake not functioning during the dry season Deteriorated WTP	Intermittent service Very high proportion of inactive connections
<b>Bingerville</b>	City supplied from Abidjan production facilities Insufficient water storage facilities	Recently drilled boreholes cannot be commissioned Installing new service connections is not possible, particularly in new housing developments
<b>Béoumi</b>	Raw water reservoir empty in the dry season and receiving urban wastewater all	No water service in dry season (replaced by truck service)

Center	Status of Facilities	Impact
	year long Deteriorated WTP functioning at 60% of design capacity	Intermittent service all year long Installing new service connections is not possible

24. **Shortcomings of financial planning and sector regulation.** The absence of information on the value of fixed assets and of consolidated financial statements prevents the portrayal of a clear financial picture of the sector. Sector regulation is hampered by (a) the impact of the crisis on billing and collection, which led to the setting up of makeshift solutions to keep the sector running and compensate SODECI's losses and (b) the fact that the public party to the PPP largely depends on SODECI's willingness to share detailed information and is not in a position to implement financial planning and tariff setting. Therefore, the project activities in Component B have been developed to give the water sector actors, particularly ONEP, the tools to place the sector on a more sound financial footing.

25. The project activities identified with the MIE and ONEP are categorized into two components.

- (a) Component A - Urban Water Supply (US\$45.64 million). This component will include the following activities: (i) construct water treatment plants, boreholes, water intakes, and pumping stations in selected urban centers; (ii) construct storage tanks; (iii) construct water transmission lines and expand water distribution networks; (iv) install social water connections; and (v) perform works supervision. A detailed presentation of the project activities is provided in Annex 2.
- (b) Component B - Institutional Support (US\$4.36 million). This component will include the following activities: (i) institutional strengthening through the preparation of an inventory of urban water supply sector assets, the development of a financial model for the urban water supply sector, and the audit of the Affermage contract and ONEP agreement; (ii) capacity building for ONEP in financial planning and operations monitoring; and (iii) operations and strengthened capacity of the Project Coordination Unit (PCU) and ONEP in project management.

## B. Project Cost and Financing

26. The financing instrument is the Investment Project Financing (IPF), consisting of an IDA Credit equivalent to US\$50 million over five years. The selection of the IPF instrument is based on its flexibility and suitability to finance a range of activities, including works, equipment, and capacity building.

27. The total project financing requirements are estimated at US\$50 million, inclusive of price and physical contingencies, which will be entirely funded by the IDA Credit, as shown in Table 3.

**Table 3. Project Costs and Financing (US\$, millions)**

<b>Project Components</b>	<b>Project Cost</b>	<b>IDA Financing</b>	<b>% Financing</b>
1. Urban Water Supply	45.64	45.64	100
2. Institutional Support	4.36	4.36	100
<b>Total Costs</b>	50.00	50.00	100
Total project costs	50.00	50.00	
Front-end fees	0.00	0.00	
<b>Total Financing Required</b>	50.00	50.00	

### **C. Lessons Learned and Reflected in the Project Design**

28. **The social acceptability of PPP schemes largely depend on the services delivery performance.** Although SODECI clients were satisfied that water supplies remained available during the crisis, they now demand a quick return to the performance level that was previously attained with regard to water quality, water pressure and reliability, and continuity of services. In that respect, the restoration of quality services is a precondition for the improvement of billing and collection.

29. **Successful West African PPPs in the water sector have relied on performing private operators and also on strong asset-holding companies to execute the role of asset holder on behalf of the Government.** The smooth execution of PPP arrangements requires the latter to (a) monitor the operators’ performances closely; (b) make adequate investment decisions; and (c) have the adequate tools to enable the regulation of contracts. In turn, the effectiveness of regulation requires performance-based contracts and financial models to assist in tariff-setting decisions.

## **IV. IMPLEMENTATION**

### **A. Institutional and Implementation Arrangements**

30. **The project will replicate implementation arrangements used in the previous water-related IDA-funded projects,** the Emergency Urban Infrastructure Project ([EUIP] P110020 and P120810, which closed on March 31, 2014) and the Emergency Infrastructure Renewal Project (*Projet de Renaissance des Infrastructures de Côte d’Ivoire*, PRICI - P124715, which will close on December 31, 2018). Under these multisector projects, ONEP was the executing agency of the UWS components, whereas day-to-day implementation activities, including fiduciary responsibilities, reporting, and monitoring were vested into a stand-alone PCU. These arrangements were carried out to the World Bank’s satisfaction and their replication for the proposed project is expected to expedite project implementation.

31. The World Bank’s team carried out a specific assessment of the capacities of the PRICI’s PCU to check whether it could manage the proposed project together with the additional financing of the PRICI. The assessment concurred with the proposed implementation option, provided that (a) the existing Project Implementation Manual (PIM) is updated and (b) the procurement, FM, and safeguards units of the PCU are strengthened (see Section VI).

32. The institutional option will be formalized with the adoption and signing of the following agreements: (a) a project management contract between the MIE and the PCU and (b) an implementation support contract between ONEP, the MIE, and the PCU.

33. **Oversight and supervision.** A Steering Committee (*Comité de Suivi et de Pilotage*, CSP) chaired by the minister of economic infrastructure will be in charge of the overall oversight and of the strategic leadership of the proposed project. The CSP will ensure that project activities are consistent with the sector strategy and coordinate with other ministerial departments. The CSP will include representatives of the Ministry of Economy and Finance, the Ministry of Budget, the Ministry of Sanitation, the Union of the Cities and Communes of Côte d'Ivoire, ONEP, ONAD, SODECI, and the Ivorian Electricity Company. The PCU will act as the CSP's secretary.

## **B. Results Monitoring and Evaluation**

34. **Monitoring and evaluation (M&E) will be managed by the PCU, which already includes an experienced M&E unit.** The unit will collect data from SODECI, ONEP, and civil works supervision teams to elaborate the project monitoring indicators, as follows:

- (a) SODECI will provide data on access, service connections, and service conditions, which will be verified by ONEP before transmission to the PCU.
- (b) Intermediate indicators linked to works contracts (on water storage, production, and distribution) will be drawn from the progress reports prepared by the supervision engineering firms.
- (c) The status of indicators linked to the institutional strengthening will be assessed by ONEP.

35. Specific indicators of citizen engagement (CE) have been included in the result framework. Monitoring will be based on (a) participation of beneficiaries in the consultation process and (b) satisfaction surveys to be carried out at project start, midterm, and completion.

## **C. Sustainability**

36. The sustainability of water services will be reinforced under the proposed project by eliminating current water shortages and service deficiencies that eventually undermine the social acceptability of the urban water PPP and of the cost recovery policies. The continuation of pro-poor policies for access to services through social connections programs is an additional element of social sustainability, as well as the emphasis put on the reactivation of inactive household water connections.

37. Although the current financial information prevents the assessment of the sector's financial sustainability, the strong commitment of the Government to the strengthening of financial planning responsibilities of ONEP will help improve the financial visibility in the sector and provide adequate tools for regulation and rate setting.

38. Other features of the project design that will reinforce sustainability include (a) the effective M&E system and (b) the record of the performance of ONEP staff and PCU staff.

## V. KEY RISKS

### A. Overall Risk Rating and Explanation of Key Risks

39. The overall risk of the project is considered Substantial. Below is an explanation of the most relevant risks and mitigation measures.

40. **Political and governance risks (Substantial).** Government institutions remain inadequate following the crisis, although relatively stable, which may affect project implementation.

41. **Institutional capacity for implementation and sustainability (Substantial).** At the sector level, the lack of FM and planning is a risk to the sustainability of services to be provided through the project. The project is being designed to reinforce the institutional capacity of key stakeholders to implement their respective roles and to address identified inadequacies in institutional capacity. However, there remains a risk that the support provided will not be sufficiently mainstreamed within the institutions.

42. **Stakeholder risks (Substantial).** In a context marked by social tensions over the failure to restore pre-crisis levels of service in recent years, it is essential to closely monitor CE. A process of stakeholder consultation will ensure that the project objectives are generally well understood by the public. This will be complemented at the project implementation stage by monitoring customers' satisfaction.

43. While all sector stakeholders have been fully involved in the project design, there may be some resistance, particularly from SODECI, as ONEP asserts its role more effectively as the conceding authority for the *affermage* and enforces performance indicators in the contract.

44. **Other risks (Tariff adjustment, Substantial).** The sustainability of the sector is reliant on sufficient funds being available to cover the cost of operations and investment to meet the urban water sector objectives. Since 2004, tariffs have not been increased. The project activities will allow greater visibility of sector financing needs and enable ONEP to argue its case for a revision in tariffs if necessary. However, a tariff revision may remain a politically very sensitive action as shown by the recent experience with the tariff increases in the electricity sector.

45. **Climate change and disaster.** The project has been screened for short- and long-term climate change and disaster risks. The overall risk rating is low, as expected potential impacts of project activities (rehabilitation and expansion works of existing piped water schemes) will be minor and site specific.

## VI. APPRAISAL SUMMARY

## A. Economic and Financial Analysis

46. **Project benefits.** The benefits expected from the proposed project will accrue to the urban population from (a) the restoration of continuous water services (including better water pressure and adequate water quality) to about 369,000 people who are already served by the existing water systems and (b) access to improved water sources for about 180,000 people who are not currently served and who will benefit from 10,000 subsidized household connections and 8,000 reactivated household connections. In addition, the replacement of obsolete facilities will reduce operating costs. The project will also help provide instruments for better investment decision making and tariff setting, which will increase sector efficiency.

47. **Rationale for public sector provision/financing.** Private sector participation to the delivery of urban water services is well established in Côte d'Ivoire. However, the opportunities of commercial finance in the sector are currently limited. The Government is open to the possibility of private financing of water production investments. The long-term solution (beyond 2020) for Abidjan water supply, currently at the feasibility stage, could be contemplated under a PPP, potentially bringing in commercial finance. However, this option cannot be seriously explored until the technical solution is clearly identified and the financial model of the sector is available for ascertaining its impact on water tariffs and assessing the ability of the sector to attract commercial finance. The investments proposed for IDA financing are located in secondary urban centers that have even less capacity to support commercial finance and require concessional finance.

48. **Value added of the World Bank's support.** Participation of the World Bank Group is a key to this project. This project will broaden the World Bank support to the restoration and expansion of urban water services in Côte d'Ivoire that has been provided under emergency multisectoral operations since 2008. The World Bank involvement, beyond the financing of priority works, will help improve the functioning of PPP arrangements by mainstreaming the use of effective sector management tools that were successfully applied in West Africa to increase financial visibility and sustainability of the UWS sector. The World Bank value added will also be high at the project implementation phase that will need constant support provided by a seasoned decentralized team working in the water sector in the subregion for more than a decade. The project team can also draw on expertise and resources on PPPs from across the World Bank Group, both the World Bank and the International Finance Corporation, to strengthen the current *affermage* arrangement, strengthen the Government's capacity, and support PPP transactions that may arise from ongoing sector support.

49. **Results of the economic analysis.** The economic internal rate of return (EIRR) of the water-related activities is estimated at 7 percent and the net present value (NPV) using a discount rate of 6 percent is estimated at U\$5.5 million. These results are correlated with the size of the urban centers and the high investment costs of the planned water treatment facilities, which are dictated by the hydrologic conditions and designed for a longer-term horizon. In addition, the same water tariffs apply throughout the country and are cross-subsidized by the low costs of Abidjan water. This is confirmed by the fact that the long-term marginal cost of water in the targeted centers amounts to CFAF 490 per m<sup>3</sup>, which is 100 percent higher than the average revenue per cubic meter sold.

50. **Sensitivity analysis.** The overall results are particularly sensitive to the variation of the water demand (the switching value of this variable amounts to 10.6 percent). However, an inadequate demand response to the project activities is unlikely, given the current water deficits in the project area.

51. **Financial analysis.** The financial impact of project activities on the UWS sector is assessed by the financial internal rate of return (FIRR) derived from the cost-benefit analysis. Financial calculations take into account the financial revenues and costs in the with/without project situations, including taxes and excluding non-cash generating benefits (consumer surplus). The FIRR is estimated at 1.4 percent, which means that, in case of onlending of the IDA Credit to the FNE, the onlending conditions should not be harder than the IDA conditions.

52. **Assessment of current financial information.** The information available on the UWS sector's financial situation and its performances exhibit substantial shortcomings, which are detailed below, and hamper the financial planning and the regulation of the sector:

- (a) The financial statements of ONEP, SODECI, and the FDE do not provide detailed financial information at the UWS sector level.
- (b) The impact of the crisis on SODECI's billing and collection prevented significant information on SODECI's performances from being obtained, which in turn did not enable inclusion of meaningful performance targets in the 2007 *affermage* contract. This is still the case, even though the end of the crisis could have enabled the actors to set contractual billing and performance targets based on a progressive return to a stable situation.
- (c) The contractual obligations of SODECI, with regard to information on operational costs and performances, are not fully complied with. Consequently, the data provided by SODECI in the *plan-calcul*, which helps periodically update SODECI's contractual remuneration, cannot be easily verified against the historical records.

53. In view of the above, the establishment of sound financial sector planning and of an improved regulation framework is contingent upon

- (a) the establishment of consolidated financial statements of the urban and water supply sector within the perimeter of the *affermage* contract, which requires the setting up and maintenance of an inventory of assets and liabilities;
- (b) the setting up and maintenance of an annual determination of cross-debts and liabilities between the sector actors;
- (c) the assessment of the current execution of contractual obligations of the sector actors, which will enable the setting of operational performance targets; and
- (d) the setting up of a financial model of the sector, which will enable (i) validation of the periodical renegotiations of SODECI's remuneration, with due consideration of the operational performances and (ii) definition of the average water tariffs, in view of the financing needs.

## **B. Technical**

54. The water investment program supported by the proposed project originates from a priority investment program designed by ONEP in cooperation with SODECI to restore water services in the targeted urban centers. The proposed rehabilitation and expansion of water production facilities, feeder pipes, storage, and pumping is designed to improve the quantity of water available to existing customers and restore the quality of service. The proposed continuation of the social connection programs will be carried out in parallel with the expansion of secondary and tertiary networks and with the reactivation of service connections that had been suspended in the absence of service. ONEP and SODECI 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 because the technologies considered for water supply systems are proven and well established.

55. **Readiness.** Activities scheduled in the first 18 months will be ready for implementation by the time of effectiveness. The detailed design studies of the investments proposed are being prepared under the financing of the PRICI. The terms of reference of the institutional studies are being finalized.

## **C. Financial Management**

56. The PCU of the ongoing PRICI, under the oversight of the CSP will have the overall fiduciary responsibility for the proposed project. The FM arrangements for the proposed project are based on the existing arrangements in place under the PRICI. The overall FM performance of the PRICI is Satisfactory. Staffing has remained adequate and proper books of accounts and supporting documents have been maintained for all expenditures. The PCU is familiar with the World Bank FM requirements. In line with the principles of mainstreaming the project implementation arrangement within the Government, a financial controller from the Ministry of Budget and a public accountant from the Ministry of Finance have been assigned to the PCU and their overall performance is adequate. The audit for the year that ended December 31, 2015 for the PRICI was submitted on time and was unqualified. The interim unaudited financial reports for the ongoing project are also submitted on time.

57. The overall FM risk for the proposed project is Moderate. This means that the FM system satisfies the World Bank's minimum requirements under OP/BP 10.00. However, to maintain timeliness and reliability of information produced by the PCU and an adequate segregation of duties, an accountant and a disbursement assistant, with qualifications and experience satisfactory to the World Bank, will be hired and fully dedicated to the accounting and disbursements tasks of the proposed project, no later than three months following the effectiveness of the proposed project. Before effectiveness, the existing fiduciary procedures of the PIM will also be updated to reflect the proposed project's activities.

58. Details on the FM arrangements for this project are included in Annex 3.

## **D. Procurement**

59. A formal assessment of the capacity of the proposed project's executing agency (ONEP) and of the PCU to implement procurement actions was carried out in February 2016 to ensure

that IDA standards are adequately met. The detailed procurement responsibilities and activities of these entities are provided in Annex 3. The assessment found that the PCU, which implemented the EUIP and the PRICI has satisfactory capacities. The procurement team of the PCU (one senior procurement specialist and four procurement assistants) is fully experienced in World Bank procurement procedures. However, the workload of the unit will substantially increase with the combined implementation of the proposed project together with the additional financing of the PRICI and of the Transport Sector Modernization Project, and the procurement team should be strengthened accordingly. In addition, the procurement sections of the existing PIM have to be updated to reflect the recent amendments and modifications of the Côte d'Ivoire Procurement Code and to rectify some inadequacies noted with regard to contract management and delays in contract approval and signing.

60. The risk mitigation measures include the following: (a) no later than three months after credit effectiveness, the PCU will hire one procurement specialist and one procurement assistant and (b) before effectiveness, the PCU will submit an updated PIM to IDA for review and adopt it in accordance with the amended Procurement Code and the recommendations of the procurement assessment.

61. Procurement under the project will be carried out in accordance with the World Bank's '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; '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 in July 2014; 'Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers', dated January 2011 and revised in July 2014; and the provisions stipulated in the Financing Agreement. The World Bank's standard bidding documents (SBDs) shall be used for procurement of works and goods under International Competitive Bidding (ICB), and the World Bank's standard Request for Proposal (RFP) shall be used for large value contracts involving selection of international consultants.

62. Details on the procurement arrangements for this project are included in Annex 3, including the thresholds for prior review and procurement methods that will be applicable.

#### **E. Social (including Safeguards)**

63. **CE.** The project will improve quality and access to basic water services, and the identified beneficiaries are the population of the targeted urban centers. The project has been developed with a pro-poor focus and includes a program of subsidized water connections to ensure that even the poorest can benefit from the project. The delivery and ultimate sustainability of the PDO will be supported by CE efforts by raising awareness and consensus around individual project design, which will inform the design of the infrastructure projects, and help identify the beneficiaries of social connections and ensure that levels of service and customer satisfaction are sustained in the long run. To mainstream CE, the proposed project will also comprise additional activities that will ensure a voice for stakeholders through beneficiary feedback and increase accountability of the service provider toward the beneficiaries. Specific communication programs will be developed, and project budget has been allocated at the local level to enhance communication on the project's results on the ground, help target social

connection programs, and facilitate the reactivation of inactive service connections. CE will be monitored through (a) participation to the consultation process and (b) customer satisfaction surveys. Specific guidance on consultations/community engagement will be included in the PIM and as far as possible the project will ensure that consultations are meaningful and that they will include women and minority groups most at risk of being left behind.

64. **Safeguards.** The project will include rights-of-way for the water distribution networks and minimal land acquisition for water production, transmission, and storage and distribution facilities. However, the specific locations of project sites in the targeted cities are not yet known and are to be determined once the design studies are completed. Therefore, the borrower, through the PRICI's PCU, prepared a Resettlement Policy Framework (RPF) that has been consulted upon, cleared, and disclosed on September 28, 2016, in-country and at the World Bank InfoShop. The RPF outlines the principles and procedures to be followed in the event of land acquisition, impact on assets, and/or loss of livelihoods. During project implementation, the borrower will prepare a Social Impact Assessment (SIA) to determine whether land will be acquired and/or activities will create restriction of access or loss of assets. Then, specific Resettlement Action Plans (RAPs) in accordance to the SIA results will be prepared in consultation with the affected stakeholders, submitted to the World Bank for approval, and fully executed before the commencement on the ground of related civil works.

#### **F. Environment (including Safeguards)**

65. Three World Bank safeguard policies are triggered under the project: OP/BP 4.01 on Environmental Assessment; OP/BP 4.11 on Physical Cultural Resources; and OP/BP 4.12 on Involuntary Resettlement. Project activities involve rehabilitation and expansion works of existing piped water schemes, which means most of the adverse impacts and risks that will happen during construction and rehabilitation are constituted by dust, noise, and waste nuisance. Based on that, the project is classified category B because expected potential impacts will be minor, site specific, moderate, and easily manageable. In addition, conventional and well-mastered water treatment technologies envisaged under the project should minimize potential risks and impacts.

66. As mentioned above, the specific areas of intervention are not yet known. Consequently, the borrower prepared an Environmental and Social Management Framework (ESMF) that has been consulted upon, cleared, and disclosed on September 28, 2016, in-country and at the World Bank InfoShop. It contains measures and plans to reduce, mitigate, and/or offset adverse impacts and enhance positive impacts, provisions for estimating and budgeting the costs of such measures, and information on the agency or agencies responsible for addressing project impacts. During project implementation, the screening process will determine whether a subproject-specific Environmental and Social Impact Assessment (ESIA) and an Environmental and Social Management Plan (ESMP) is required. Any specific ESIA/ESMP prepared in accordance to the screening result will be approved in consultation with all the stakeholders before the concerned activity starts.

67. The borrower has reasonable capacity in implementing environmental and social safeguard measures in water and sanitation projects. In that respect, the borrower is successfully implementing the ESIA/ESMPs and RAPs of the previous water-related IDA-funded projects.

Recent supervision missions of the PRICI concluded that the implementation of ESIA and ESMPs was appropriate and the safeguard rating is Satisfactory. While the same institutional framework used for the PRICI will be adopted for the proposed project (the PCU monitoring the overall implementation of the ESIA/ESMPs, with ONEP being responsible for implementing its applicable portions of the ESIA/ESMPs related to water activities), any capacity strengthening measure deemed necessary to improve the safeguard function in this operation will be taken at both levels. Specifically, the PCU will hire a safeguards specialist, no later than three months after effectiveness. An amount of US\$0.36 million is earmarked in the project budget to support the implementation of the safeguard measures.

#### **G. Other Safeguard Policies**

68. No other safeguard policies are triggered for the project.

#### **H. World Bank Grievance Redress**

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

## Annex 1: Results Framework and Monitoring

### Cote d'Ivoire

#### Project Name: Urban Water Supply Project (P156739)

#### Results Framework

#### Project Development Objectives

##### PDO Statement

The proposed project development objective is to improve quality of, and increase access to, water services in selected urban areas and to strengthen capacity of ONEP for financial planning and financial management of the urban water supply sector.

**These results are at** project level

#### Project Development Objective Indicators

Indicator Name	Baseline	Cumulative Target Values						
		YR1	YR2	YR3	YR4	YR5	YR6	End Target
Number of people in urban areas provided with access to Improved Water Sources under the project (Number) - (Core)	0.00	0.00	0.00	0.00	140,000.00	160,000.00	180,000.00	180,000.00
People with access to enhanced water supply services due to the Project (Number)	0.00	0.00	0.00	100,000.00	150,000.00	200,000.00	369,000.00	369,000.00
Direct project beneficiaries (Number) - (Core)	0.00	0.00	100,000.00	200,000.00	340,000.00	440,000.00	549,000.00	549,000.00
Female beneficiaries (Percentage - Sub-Type: Supplemental) - (Core)	0.00	0	48.70	48.70	48.70	48.70	48.70	48.70
Average hours of water supply in	20.00	20.00	20.00	22.00	24.00	24.00	24.00	24.00

centers targeted by the Project (Hours per day)								
Sector financial model used for financial planning and decision making (Yes/No)	No	No	No	No	Yes	Yes	Yes	Yes

### Intermediate Results Indicators

Indicator Name	Baseline	Cumulative Target Values						End Target
		YR1	YR2	YR3	YR4	YR5	YR6	
New piped household water connections that are resulting from the project intervention (Number) - (Core)	0.00	0.00	0.00	5,000.00	10,000.00	10,000.00	10,000.00	10,000.00
Inactive household connections re-activated in centers targeted by the Project (Number)	0.00	0.00	0.00	2,000.00	4,000.00	6,000.00	8,000.00	8,000.00
Production capacity constructed under the Project (Cubic Meter (m3))	0.00	0.00	10,000.00	15,000.00	20,000.00	25,000.00	33,000.00	33,000.00
Water storage capacity constructed under the Project (Cubic Meter (m3))	0.00	0.00	1,000.00	1,600.00	2,300.00	2,300.00	2,300.00	2,300.00
Water transmission and distribution pipes constructed under the Project (Kilometers)	0.00	0.00	50.00	65.00	80.00	95.00	113.00	113.00
Direct beneficiaries involved in the consultation process (Number)	0.00	0.00	2,000.00	6,000.00	8,000.00	14,000.00	18,000.00	18,000.00
Improvement in customer	30.00	30.00	30.00	45.00	55.00	75.00	90.00	90.00

satisfaction (Percentage)								
Completion of the audit of contracts between Government, ONEP and SODECI (Yes/No)	No	No	Yes					Yes
Completion of assets inventory (Yes/No)	No	No	Yes					Yes
Completion of financial model (Yes/No)	No	No	Yes					Yes

## Indicator Description

### Project Development Objective Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
Number of people in urban areas provided with access to Improved Water Sources under the project	This indicator measures the number of people in urban areas who benefited from ‘improved water sources’ under the project. Improved water sources include piped household connections (house or yard connections), public standpipes, public kiosks, boreholes, protected dug wells, protected springs, and rainwater collection. Hence, ‘improved water sources’ do not include, among others, water provided through tanker trucks or vendors, unprotected wells, unprotected springs, surface water (river, pond, dam, lake, stream, irrigation channel), or bottled water. The definition of what is considered an ‘improved water source’ follows the World Health Organization-United Nations Children’s Fund Joint Monitoring Program definition. Note that ‘improved water sources’ does not refer to the question of new versus rehabilitated water sources, but is the standard definition used to track progress on the Millennium Development Goals. = (Number of new social connections + Number of restored inactive connections) x (10 people)	Annual	Progress reports from PCU	SODECI
People with access to enhanced water supply services due to the Project	This indicator measures the cumulative number of people in urban areas currently having access to poor piped water services who received reliable water services with regard to continuity of the water distribution (24/7 water supply) with adequate pressure (1 bar) at the tap, from new facilities constructed under the project.	Annual	Progress reports from PCU	ONEP/SODECI
Direct project beneficiaries	Direct beneficiaries from water supply interventions under the project, of which female. = Sum of above target values; percentage of female beneficiaries	Annual	Progress reports from PCU	PCU

Female beneficiaries	Based on the assessment and definition of direct project beneficiaries, specify what percentage of the beneficiaries are female.	Annual	No description provided.	No description provided.
Average hours of water supply in centers targeted by the Project	This indicator measures the continuity of water services in the centers targeted by the project. (Methodology to be defined by ONEP's Control Department of Operations and Quality [ <i>La Direction du Contrôle de l'Exploitation et de la Qualité</i> ]).	Annual	Surveys by ONEP	ONEP
Sector financial model used for financial planning and decision making	Sector financial model endorsed by sector partners and used to valid investment financing decisions and propose tariff revisions.	Annual	No description provided.	ONEP

### Intermediate Results Indicators

Indicator Name	Description (indicator definition etc.)	Frequency	Data Source / Methodology	Responsibility for Data Collection
New piped household water connections that are resulting from the project intervention	Number of new social water connections installed under the project and billed by SODECI.	Annual	Activity reports from SODECI	SODECI
Inactive household connections re-activated in centers targeted by the Project	Number of previously inactive household connections which are reactivated and billed by SODECI in the centers targeted by the project.	Annual	Activity reports from SODECI	SODECI
Production capacity constructed under the Project	Capacity of production facilities constructed under the project (assuming 20 hours of operation per day).	Annual	Progress reports form supervising engineers	PCU
Water storage capacity constructed under the Project	Capacity of water storage tanks constructed under the project (headworks and distribution storage tanks).	Annual	Progress reports from supervising engineers	PCU
Water transmission and distribution pipes constructed under the Project	Length of water pipes (transmission and distribution) constructed under the project.	Annual	Progress reports from supervising engineers	PCU

Direct beneficiaries involved in the consultation process	Number of persons involved in the consultation process designed to select beneficiaries of social connections and reactivated connections.	Annual	Reports of consultation process	PCU
Improvement in customer satisfaction	Percentage of water customers satisfied with quality and reliability of service.	Mid-term and completion	Customer satisfaction surveys	PCU/SODECI
Completion of the audit of contracts between Government, ONEP and SODECI	Technical audit of <i>affermage</i> contract and of the agreement between ONEP and the MIE completed.		Progress reports from PCU	ONEP
Completion of assets inventory	Assets inventory completed.		Progress reports from PCU	ONEP
Completion of financial model	Sector financial model finalized and shared by project actors (MIE, ONEP, SODECI).		Progress reports from PCU	ONEP

## Annex 2: Detailed Project Description

### CÔTE D'IVOIRE: Urban Water Supply Project

1. This annex reviews the existing challenges that urban water services face and how the PDO is addressed by the project components and it provides a detailed description of the activities financed under the project.

#### Access and Sustainability Challenges

2. As shown in Table 2.1, all targeted centers, with the exception of Bingerville, exhibit either a relatively low access rate or a substantial proportion of inactive connections, which results from the absence of effective water service in several neighborhoods. In the case of Bingerville, though the situation appears satisfactory, recent housing developments could not be connected to the water system in the absence of a distribution network and adequate water storage.

**Table 2.1. Water Access in the Targeted Centers (2015)**

Centers	Tiassalé/N'Douci	N'Zianouan	Agboville	Korhogo	Ferkéssé dougou	Bingerville	Béoumi
Population	48,372	12,924	52,170	249,246	57,336	65,647	26,177
Number of service connections							
Active connections	4,777	0	6,629	10,126	3,306	9,743	2,318
Inactive connections	531	0	2,723	3,251	1,622	959	806
Access rate (%)	50	0	63	80	64	80	76

*Source:* ONEP.

3. In addition, the backlog of renewal investments in the centers led to the deterioration of existing facilities, particularly for production facilities using surface water (water intakes and WTPs) and groundwater (boreholes) and for water storage facilities. The deteriorated condition of facilities, compounded by other deficiencies, led to various sustainability issues in the delivery of water services, which are listed in Table 2.2.

**Table 2.2. Sustainability Issues in the Targeted Centers**

Center	Status of facilities	Impact
<b>Tiassalé/N'Douci</b>	Deteriorated water intake and insufficient production capacity	Intermittent service throughout the towns and absence of service in high-lying areas, leading the population to use unsafe water river Installing new service connections is not possible
<b>N'Zianouan</b>	Urban center equipped with defective rural water facilities (no service from SODECI)	No water service
<b>Agboville</b>	Eutrophication of the raw water reservoir preventing effective water treatment in the dry season WTP functioning at 200% of design capacity all year long	Undrinkable water in dry season (color, odor). Intermittent service or lack of service leading to termination of service contracts by water customers Installing new service connections is not possible

Center	Status of facilities	Impact
<b>Korhogo</b>	Deteriorated raw water transmission pipe and insufficient production capacity	Intermittent service High proportion of inactive connections
<b>Ferkéssédougou</b>	Raw water intake not functioning during the dry season Deteriorated WTP	Intermittent service Very high proportion of inactive connections
<b>Bingerville</b>	City supplied from Abidjan production facilities Insufficient water storage facilities	Recently drilled boreholes cannot be commissioned Installing new service connections is not possible, particularly in new housing developments
<b>Béoumi</b>	Raw water reservoir empty in the dry season and receiving urban wastewater all year long Deteriorated WTP functioning at 60% of design capacity	No water service in dry season (replaced by truck service) Intermittent service all year long Installing new service connections is not possible

### Shortcomings of Financial Planning and Sector Regulation

4. The absence of information on the value of fixed assets and of consolidated financial statements prevents the portrayal of a clear financial picture of the sector. Sector regulation is hampered by (a) the impact of the crisis on billing and collection, which led to the setting up of makeshift solutions to keep the sector running and compensating SODECI's losses and (b) the fact that the public party to the PPP largely depends on SODECI's willingness to share detailed information and is not in a position to develop adequate tools for financial planning and rate setting.

### Relationship between Project Components, the PDO, and Challenges

5. The overall objective of the proposed project is to improve quality of, and increase access to, water services in selected urban areas and to strengthen capacity of ONEP for financial planning and financial management of the urban water supply sector.

6. The PDO will be achieved through (a) financing a priority investment program to quickly address difficulties arising from water shortages in eight urban centers (total population: 512,000); (ii) providing access to water services through social connections; and (iii) improving the financial visibility in the sector and facilitating better execution of the current PPP contractual arrangements. The project will also seek to promote social inclusion and foster accountability through CE. The project's responses to the access and sustainability challenges are detailed in Table 2.3.

**Table 2.3. Project's Response to Challenges**

Issues/Centers	Project Response	Monitoring
<b>Quality and reliability of water services</b>		
Water quality		Progress reports (from supervision engineers)
Reliability and continuity of service	Water shortages due to insufficient water production resulting from:	Additional production capacity installed†
	<ul style="list-style-type: none"> <li>deterioration of raw water</li> </ul>	Rehabilitation or replacement of
		Additional water storage

Issues/Centers		Project Response	Monitoring
	intake facilities	water intakes	constructed†
	• defective WTPs	Rehabilitation of water treatment facilities	Progress reports
	• insufficient yield of production boreholes	Rehabilitation or replacement of boreholes	
	Insufficient water quantity	Expansion of water treatment capacity	
	Insufficient water pressure due to insufficient water storage	Rehabilitation and construction of elevated water storage tanks	
<b>Access to water services</b>			
Absence of water service	Insufficient distribution network	Expansion of secondary and tertiary networks	Distribution pipes constructed†
	Excessive cost of service connections: all centers	Installation of subsidized (social) service connections in all centers	New piped household water connections that are resulting from the project intervention†

Note: † Project's monitoring indicator.

7. To strengthen ONEP's financial planning the project will help (a) carry out the valuation of sector assets and liabilities; (b) assess the execution of the *affermage* contract and of ONEP's agreement with the Government since the end of the crisis, to highlight the actual shortcomings and the potential areas for improving sector performances; and (c) developing a financial model of the sector that will serve as a fully shared instrument for investment and financial planning and rate setting.

### Detailed Project Activities

8. The detailed project activities, together with their costs (including contingencies and excluding taxes) are listed below.

**Component A - Urban Water Supply (US\$45.64 million).** The following activities are planned under this component:

#### A.1. N'Douci/Tiassalé (US\$5.04 million)

This subcomponent will help increase the availability of water and improve the quality of water services in Tiassalé and N'Douci by

- (a) expanding the water production capacity by approximately 10,000 m<sup>3</sup> per day by constructing a new raw water intake (from the Bandama River) and one pumping station and constructing one WTP in Tiassalé with a capacity of 500 m<sup>3</sup> per hour;
- (b) expanding the water transmission capacity by supplying and laying a 7 km pipe (ductile cast iron [DCI], DN 400 mm) linking the WTP to the N'Douci storage tank;
- (c) securing the power supply by constructing one dedicated power line linking the production facilities to the grid; and
- (d) increasing access to safe water by installing approximately 2,000 social connections.

#### *A.2. N'Zianouan (US\$2.71 million)*

This subcomponent will help establish piped water services in N'Zianouan by

- (a) creating water transmission capacity by supplying and laying a 24.8 km pipe (polyvinyl chloride [PVC], DN 200) linking the Tiassalé WTP to the new storage tank in N'Zianouan;
- (b) creating a storage capacity of approximately 300 m<sup>3</sup> through the construction of an elevated storage tank in N'Zianouan;
- (c) securing the power supply by constructing one dedicated power line linking the production facilities to the grid; and
- (d) increasing access to safe water by (i) supplying and laying approximately 32 km of water distribution pipes and (ii) installing approximately 1,000 social connections.

#### *A.3. Agboville (US\$10.00 million)*

This subcomponent will help increase the availability of water and improve the quality of water services in Agboville by

- (a) expanding the water production capacity by approximately 10,000 m<sup>3</sup> per day by constructing a new raw water intake and a new WTP (500 m<sup>3</sup> per hour);
- (b) expanding the water transmission capacity by supplying and laying a 2.7 km pipe (DCI, DN 300 mm) linking the WTP to the Arriko storage tank and a 3.9 km pipe (DCI, DN 250 mm) linking the WTP to the Adahou storage tank;
- (c) securing the power supply by constructing one dedicated power line linking the production facilities to the grid; and
- (d) increasing access to safe water by installing approximately 2,000 social connections.

#### *A.4. Korhogo/Ferkéssédougou (US\$10.51 million)*

This subcomponent will help increase the availability of water and improve the quality of water services in Korhogo and Ferkéssédougou by

- (a) securing and expanding the water production capacity by constructing a new WTP with a capacity of 14,000 m<sup>3</sup> per day;
- (b) expanding the water transmission capacity by supplying and laying a 23 km pipe (DCI, DN 400 mm) linking the WTP to the Ferkéssédougou storage tank;
- (c) securing the power supply by constructing one dedicated power line linking the production facilities to the grid; and
- (d) increasing access to safe water by installing approximately 500 social connections.

*A.5. Bingerville (US\$10.57 million)*

This subcomponent will help increase the availability of water and improve the quality of water services in Bingerville by

- (a) expanding the water production capacity by approximately 9,000 m<sup>3</sup> per day by drilling and equipping three new boreholes, installing a booster pumping station, and constructing a WTP (pH correction and disinfection) with a capacity of 500 m<sup>3</sup> per hour;
- (b) expanding the water transmission capacity by supplying and laying a 7 km pipe (DCI, DN 300 to 400 mm) linking the WTP to the new Bingerville storage tank;
- (c) expanding the storage capacity by approximately 2,000 m<sup>3</sup> through the construction of one elevated storage tank;
- (d) securing the power supply by constructing one dedicated power line linking the production facilities to the grid; and
- (e) increasing access to safe water by installing approximately 3,000 social connections.

*A.6. Béoumi (US\$4.77million)*

This subcomponent will help increase the availability of water and improve the quality of water services in Béoumi by

- (a) expanding the water production capacity by approximately 4,000 m<sup>3</sup> per day by constructing a raw water pumping station, a WTP (200 m<sup>3</sup> per hour), and a treated water booster pumping station (200 m<sup>3</sup> per hour);
- (b) expanding the water transmission capacity by supplying and laying a 12.2 km pipe (DCI, DN 300 mm) linking the WTP to the Béoumi storage tank;
- (c) securing the power supply by constructing one dedicated power line linking the production facilities to the grid; and
- (d) increasing access to safe water by installing approximately 1,500 social connections.

*A.7. Technical studies (US\$2.04 million)*

This subcomponent will help finance consulting services for (a) the control and supervision of the above works and (b) complementary technical studies.

**Component B - Institutional Support (US\$4.37 million):** The following activities are planned under this component:

*B.1. Institutional Support (US\$1.29 million).*

This subcomponent will help provide tools for improving sector planning and financial visibility, by carrying out

- (a) an audit of the sector's contractual arrangements (*affermage* contract and ONEP agreement);
- (b) an inventory of the UWS sector assets; and
- (c) a financial model of the UWS sector.

*B.2. Capacity Building (US\$0.54 million).*

This subcomponent will help strengthen ONEP capacities through the provision of technical assistance (including twinning with experienced assets-holding companies of the subregion) for

- (a) planning, implementation, and M&E of sector investments;
- (b) FM, including the appropriation of the financial model; and
- (c) monitoring and control of water operations.

*B.3. Support to Project Management (US\$2.54 million) through the provision of*

- (a) consulting services and operating costs for the PCU and the dedicated ONEP team;
- (b) vehicles and information technology equipment for the PCU;
- (c) support to the implementation of safeguards;
- (d) technical and financial audits of the project; and
- (e) impact evaluation studies and CE activities.

9. The detailed costs of the project activities are provided in Table 2.4.

## Appendix to Annex 2

**Table 2.4. Detailed Costs of Project Activities**

No	Component/Activity	Quantity	Unit	Unit price (US\$, Thousands)	Cost (US\$, Millions)
<b>A</b>	<b>Urban Water Supply</b>				<b>45.64</b>
<b>A.1</b>	<b>Tiassalé/N'Douci</b>				<b>5.04</b>
<b>1.1</b>	<b>Production</b>				
1.1.1	Raw water pumping station 500 m <sup>3</sup> /hour		Lump sum		0.74
1.1.2	WTP 500 m <sup>3</sup> /hour		Lump sum		2.33
<b>1.2</b>	<b>Transmission pipes</b>				
1.2.1	DCI pipe DN 400	7.00	km	146.4	1.03
<b>1.3</b>	<b>Power supply</b>				
1.3.1	Dedicated power line		Lump sum		0.59
<b>1.4</b>	<b>Social connections</b>				
1.4.1	Construction of social connections	2,000	Number	0.179	0.36
<b>A.2</b>	<b>N'Zianouan</b>				<b>2.71</b>
<b>2.1</b>	<b>Transmission pipes</b>				
2.1.1	PVC pipe DN 200	24.80	km	57	1.42
<b>2.2</b>	<b>Storage</b>				
2.2.1	Elevated water storage tank 300 m <sup>3</sup>		Lump sum		0.35
<b>2.3</b>	<b>Distribution network</b>				
2.3.1	Extension secondary and tertiary networks	32.00	km	21	0.69
<b>2.4</b>	<b>Power supply</b>				
2.4.1	Dedicated power line		Lump sum		0.08
<b>2.5</b>	<b>Social connections</b>				
2.5.1	Supply and installation of social connections	1,000	Number	0.179	0.18
<b>A.3</b>	<b>Agboville</b>				<b>10.00</b>
<b>3.1</b>	<b>Production</b>				
3.1.1	Raw water facilities 500 m <sup>3</sup> /hour		Lump sum		1.50
3.1.2	WTP 500 m <sup>3</sup> /hour		Lump sum		6.87
<b>3.2</b>	<b>Transmission pipes</b>				
3.2.1	DCI raw water pipe DN 400	0.55	km	234	0.13
3.2.2	DCI pipe DN 300 from WTP to Arriko	2.68	km	161	0.43
3.2.3	DCI pipe DN 250 from WTP to Adahou	3.90	km	132	0.52
<b>3.3</b>	<b>Electricity supply</b>				
3.3.1	Dedicated power line		Lump sum		0.20
<b>3.4</b>	<b>Social connections</b>				
3.4.1	Supply and installation of social connections	2,000	Number	0.179	0.36
<b>A.4</b>	<b>Korhogo/Ferkéssédougou</b>				<b>10.51</b>
<b>4.1</b>	<b>Production</b>				
4.1.1	WTP 700 m <sup>3</sup> /hour	1.00	Lump sum		6.32
<b>4.2</b>	<b>Transmission pipes</b>				
4.2.1	DCI pipe DN 400 to Ferkéssédougou	23.00	km	164	3.78
<b>4.3</b>	<b>Power supply</b>				
4.3.1	Dedicated power line		Lump sum		0.33
<b>4.4</b>	<b>Social connections</b>				
4.4.1	Supply and installation of social connections	500	Number	0.179	0.09
<b>A.5</b>	<b>Bingerville</b>				<b>10.57</b>

No	Component/Activity	Quantity	Unit	Unit price (US\$, Thousands)	Cost (US\$, Millions)
<b>5.1</b>	<b>Production</b>				
5.1.1	Boreholes (3 x 150 m <sup>3</sup> /hour)		Lump sum		1.34
5.1.2	WTP 500 m <sup>3</sup> /hour (pH correction and disinfection) and ground storage tank 500 m <sup>3</sup>		Lump sum		4.70
5.1.3	Pumping station 500 m <sup>3</sup> /hour		Lump sum		0.51
<b>5.2</b>	<b>Transmission pipes</b>				
5.2.1	DCI pipe DN 400	4.00	km	250	1.00
5.2.2	DCI pipe DN 300	3.00	km	174	0.52
<b>5.3</b>	<b>Storage</b>				
5.3.1	Elevated water storage tank 2,000 m <sup>3</sup>		Lump sum		1.78
<b>5.4</b>	<b>Power supply</b>				
5.4.1	Dedicated power line		Lump sum		0.18
<b>5.5</b>	<b>Social connections</b>				
5.5.1	Supply and installation of social connections	3,000	Number	0.179	0.54
<b>A.6</b>	<b>Béoumi</b>				<b>4.77</b>
<b>6.1</b>	<b>Production</b>				
6.1.1	Raw water pumping station 200 m <sup>3</sup> /hour		Lump sum		1.47
6.1.2	WTP 200 m <sup>3</sup> /hour		Lump sum		1.25
6.1.3	Booster pumping station 200 m <sup>3</sup> /h		Lump sum		0.40
<b>6.2</b>	<b>Transmission pipes</b>				
6.2.2	DCI pipe DN 300	12.21	km	81	0.99
<b>6.3</b>	<b>Distribution network</b>				
6.3.1	PVC pipes DN 63-160	0.00	km		0.00
<b>6.4</b>	<b>Power supply</b>				
6.4.1	Dedicated power line		Lump sum		0.39
<b>6.5</b>	<b>Social connections</b>				
6.5.1	Supply and installation of social connections	1,500	Number	0.179	0.27
<b>A.7</b>	<b>Works supervision and studies</b>				<b>2.04</b>
<b>7.1</b>	<b>Works supervision and control</b>				<b>1.55</b>
7.1.1	Tiassalé/N'Douci/N'Zianouan		Lump sum		0.21
7.1.2	Agboville		Lump sum		0.36
7.1.3	Korhogo/Ferkéssédougou		Lump sum		0.36
7.1.4	Béoumi		Lump sum		0.21
7.1.5	Bingerville		Lump sum		0.27
7.1.6	Power supply lines		Lump sum		0.14
<b>7.2</b>	<b>Studies</b>				<b>0.48</b>
7.2.1	Technical studies		Lump sum		0.48
<b>B</b>	<b>Institutional Support and Project Management</b>				<b>4.36</b>
<b>B.1</b>	<b>Institutional support</b>				<b>1.29</b>
1.1	Audit of contracts and agreements		Lump sum		0.36
1.2	Assets inventory		Lump sum		0.66
1.3	Financial model		Lump sum		0.27
<b>B.2</b>	<b>Capacity building</b>				<b>0.54</b>
2.1	FM		Lump sum		0.18
2.2	Planning, investments implementation, and M&E		Lump sum		0.18
2.3	Operations monitoring		Lump sum		0.18
<b>B.3</b>	<b>Support to project management</b>				<b>2.54</b>

No	Component/Activity	Quantity	Unit	Unit price (US\$, Thousands)	Cost (US\$, Millions)
3.1	Consultants and operating costs of the PCU		Lump sum		1.10
	Vehicles and information technology equipment		Lump sum		0.27
3.2	Operating costs and staff costs of ONEP team		Lump sum		0.42
3.4	Support to safeguards		Lump sum		0.27
3.5	Environmental and social audit		Lump sum		0.09
3.6	Technical audits		Lump sum		0.11
3.7	Financial audits		Lump sum		0.11
3.8	Impact assessments and CE activities		Lump sum		0.18
	<b>Total</b>				<b>50.00</b>

## Annex 3: Implementation Arrangements

### CÔTE D'IVOIRE: Urban Water Supply Project

#### Project Institutional and Implementation Arrangements

1. The proposed project will replicate implementation arrangements used in the previous water-related IDA-funded projects (EUIP and PRICI). Under these multisector projects, ONEP was the executing agency of the UWS components, whereas day-to-day implementation activities, including fiduciary responsibilities, reporting, and monitoring were vested into a PCU. These arrangements were carried out to the World Bank's satisfaction and their replication is expected to expedite implementation. This institutional option was confirmed by the Government at the identification stage. It will be formalized with the adoption and signing of the following agreements: (a) a project management contract between the MIE and the PCU and (b) an implementation support contract between ONEP, the MIE, and the PCU.

#### *Project Administration Mechanisms*

2. **Oversight and supervision by the MIE.** A CSP chaired by the Minister of Economic Infrastructure will be in charge of the overall oversight and the strategic leadership of the proposed project. The CSP will ensure that project activities are consistent with the sector strategy and coordinate with other ministerial departments. The CSP will include representatives of the Ministry of Economy and Finance, the Ministry of Budget, the Ministry of Sanitation and the Union of the Cities and Communes of Côte d'Ivoire. The PCU will act as the CSP's secretary.

3. **Project management and coordination by the PCU.** The existing PCU will ensure the management and overall coordination of the proposed project. It will (a) manage the implementation of all project components; (b) carry out FM and procurement; (c) prepare annual work plans and budgets, to be approved by the CSP and IDA; (d) ensure M&E and reporting (including safeguards and financial reporting); and (e) carry out CE and communication activities. The team dedicated to the project within the PCU will consist of (a) one project manager, reporting to the PCU coordinator; (b) one procurement specialist and one procurement assistant, reporting to the senior procurement specialist of the PCU; (c) one accountant and one disbursement assistant, reporting to the financial and administrative manager of the PCU; and (d) one social specialist. Project management will also benefit from the involvement of the PCU's M&E, safeguards, and communication units.

4. **Procedures and manuals.** Together with the proposed project, the PCU will manage the PRICI, its additional financing, and the Transport Sector Modernization and Corridor Trade Facilitation Project (P156900). Accordingly, the project's procedures will be described in a PIM, which will consist of (a) a tome covering all administrative and fiduciary procedures, which will apply to all projects managed by the PCU and (b) a tome that will include procedures specific to the proposed project.

5. **Responsibilities of ONEP.** ONEP will (a) ensure that selected project activities under Component A are consistent with the project objectives; (b) prepare all technical parts of bidding documents and terms of reference of consultant services related to Component A; (c) monitor the

execution of technical studies and works; and (d) report to the PCU on physical and financial implementation of Component A. ONEP will appoint a project team consisting of one project manager and one project assistant that will be seconded to the PCU for the project duration and remunerated accordingly.

## **Financial Management and Disbursements**

### ***Financial Management Assessment***

6. An FM assessment of the implementing unit (PCU) of the PRICI designated to manage the Urban Water Supply Project, was carried out in March 2016. The objective of the assessment was to determine whether the PCU has acceptable FM arrangements in place to ensure that the project funds will be used only for intended purposes, with due attention to considerations of economy and efficiency. The assessment complied with the FM Manual for World Bank-financed investment operations effective March 1, 2010.

7. Arrangements are acceptable if they are capable of accurately recording all transactions and balances, supporting the preparation of regular and reliable financial statements, safeguarding the project's assets, and are subject to auditing arrangements acceptable to the World Bank. These arrangements should be in place when project implementation starts and be maintained as such during project implementation. The assessment concluded that the FM of the PCU satisfies the World Bank's minimum requirements under OP/BP 10.00 and therefore is adequate to provide, with reasonable assurance, accurate and timely FM information on the status of the project as required by the World Bank.

8. The overall fiduciary risk rating is assessed as Moderate and mitigation measures proposed (see FM Action Plan, Table 3.1) will strengthen the internal control environment and maintain the continuous timely and reliability of information produced by the PCU and an adequate segregation of duties.

**Table 3.1. FM Action Plan**

<b>Action</b>	<b>Responsible Party</b>	<b>Deadline and Conditionality</b>
1- Update of the PIM including fiduciary procedures to include specific arrangements related to execution agencies and overall coordination	PCU	Before effectiveness
2- Recruit an accountant and a disbursement assistant with qualifications and experience satisfactory to the World Bank	PCU	Three months after effectiveness
3- Recruit an external auditor	PCU	Six months after effectiveness

### ***Financial Management Arrangements***

9. **Internal control system.** The internal control system will comprise the CSP, which will oversee the project activities, FM procedures included in the PIM to describe roles and responsibilities and define control activities, and an internal audit function to carry out ex post reviews and evaluate the performance of the overall internal control system. In addition, to the internal audit function already in place, in line with the new Decree No. 475 governing the

modalities of donor-financed project implementation in Côte d'Ivoire, the Directorate of Inspection of the Ministry of Finance will oversee the internal audit function of the project. The composition, mandate, and regularity of meetings of the CSP will be strengthened to ensure adequate oversight of the project and timely adoption of work program and annual budgets.

10. **Planning and budgeting.** The PCU will prepare a detailed annual work plan and a budget, which should be approved by the project CSP. The PCU will submit the approved annual work plan and budget to the World Bank, for 'no objection', before the end of previous calendar year.

11. **Accounting.** The Accounting System of the Organization for the Harmonization of Business Law in Africa (SYSCOHADA), is the assigned accounting system in West African Francophone countries, and will be applicable. The PCU will customize the existing accounting software to meet project requirements.

12. **Interim financial reporting.** The interim unaudited financial reports are prepared every quarter and submitted to the World Bank on time. The frequency of preparing interim unaudited financial reports as well as its format and content will remain unchanged.

13. **Annual financial reporting.** The PCU will produce project annual financial statements, which will comply with SYSCOHADA and World Bank requirements. Financial statements may comprise

- project presentation and project developments and progress during the year, to provide context to (or other explanations of) financial information reported;
- statement of sources and uses of funds which recognize all cash receipts, cash payments, and cash balances;
- a statement of commitments;
- accounting policies adopted and explanatory notes;
- a management assertion that project funds have been expended for the intended purposes as specified in the relevant financing agreements.

14. **Auditing.** The PCU will submit audited project financial statements satisfactory to the World Bank every year within six months after closure of the fiscal year. A single opinion on the audited project financial statements in compliance with the International Federation of Accountants will be required. In addition, a management letter will be required. The management letter will contain auditor observations and comments and recommendations for improvements in accounting records, systems, controls, and compliance with financial covenants in the Financing Agreement. The PCU should recruit a technically competent and independent auditor within six months after the project effective date. The project will comply with the World Bank's disclosure policy of audit reports and place the information provided on the official website within one month of the report being accepted as final by the team.

## Disbursements

15. **Upon credit effectiveness, transaction-based disbursements will be used.** The project will finance 100 percent of eligible expenditures inclusive of taxes. A new designated account (DA) will be opened at the Central Bank (*La Banque Centrale des Etats de l' Afrique de l' Ouest*) and a project account in a commercial bank under terms and conditions acceptable to IDA. The ceiling of the DA will be established at CFAF 3 billion. An initial advance up to the ceiling of the DA will be made and subsequent disbursements will be made against submission of Statements of Expenditures reporting on the use of the initial/previous advance. The option to disburse against submission of quarterly interim unaudited financial reports (also known as report-based disbursements) could be considered, as soon as the project meets the criteria. The other methods of disbursing the funds (reimbursement, direct payment, and special commitment) will also be available to the project. The minimum value of applications for these methods is 20 percent of the DA ceiling. The project will sign and submit Withdrawal Applications electronically using the eSignatures module accessible from the World Bank's Client Connection website.

16. Table 3.2 specifies the categories of eligible expenditures that may be financed out of the proceeds of the financing, the allocations of the amounts of the financing to each category, and the percentage of expenditures to be financed for eligible expenditures in each category.

**Table 3.2. Allocation of IDA Financing**

Category	Amount of the Credit Allocated (expressed in EUR)	Percentage of Expenditures to be Financed (inclusive of taxes)
Goods, works, non-consulting services, consultants' services, operating costs and training under the project	44,800,000	100
<b>Total amount</b>	44,800,000	

## Procurement

17. **National procurement system and ongoing reforms.** Following the 2004 Country Procurement Assessment Report, and the review of the 2005 Procurement Code (Decree No. 2005-110 dated February 24, 2005), a new Procurement Code (Decree No. 2009-259) was published on August 6, 2009, in line with the Procurement Directives of the West Africa Economic and Monetary Union and international good practices, and key implementing regulations and documentation have been adopted. The Procurement Code was further amended and modified on July 15, 2015 through Decree No. 2015-525, also with implementing regulations thereunder. A national procurement capacity-building program was adopted and is being implemented at the central and deconcentrated entities level. An electronic system for collecting and disseminating procurement information and for monitoring procurement statistics has been set up and needs to be spread over all of the contracting authorities. An audit of single-source awarded contracts from 2011 to 2013 was carried out in May 2014, the findings of which were published. However, persisting issues that affect the transparency and efficiency of the national procurement system remain. They are: (a) the impact of the establishment and operation

of procurement cells in the ministries is somewhat limited and (b) the training of enforcement officers as scheduled in the amended Procurement Code is not yet effective. In addition, the volatile sociopolitical situation resulting from the crisis does not guarantee effective functioning of the system and also has considerably increased fraud and corrupt practices. The new government is trying to fight against this risk by implementing instruments such as the Code of Ethics at the level of ministers and officials, but in the absence of evaluation, the results are not yet visible at this time.

### ***Capacity Assessment and Remedial Actions***

18. An assessment of the capacity of the executing agency (ONEP) and of the PCU to implement procurement was carried out by the World Bank's procurement specialist in February 2016. The assessment reviewed the organizational structure and staffing for implementing procurement, as well as procedures, past performances with regard to turnaround times, payment delays, and effectiveness of contract management. The assessment found that

- (a) ONEP possessed technical expertise and that the PCU possessed satisfactory know-how and experience in World Bank procurement procedures, which were acquired during the implementation of the past and ongoing IDA-financed projects;
- (b) the existing procurement team of the PCU (consisting of one senior procurement specialist and four procurement assistants) should be strengthened, as the PCU is expected to implement the proposed project in parallel with two other IDA-financed operations (the additional financing for the PRICI and the Transport Sector Modernization and Corridor Trade Facilitation Project, scheduled to start in June 2016 and the second semester of 2016, respectively);
- (c) the procurement procedures specified in the existing PIM are obsolete, in view of the changes introduced in the 2015 Procurement Code; and
- (d) while contractors are paid on time, the turnaround times for approval of awards and contract signing are excessive (about 60 days on average) and contract management exhibits inadequacies (19 out of 120 PRICI contracts required amendments and almost all contracts were not completed within the contractual delay).

19. An agreement has been reached on the following corrective measures:

- (a) No later than three months after the effective date, the PCU shall recruit one procurement specialist and one procurement assistant.
- (b) The existing PIM shall be updated before effectiveness to be in accordance with Decree No. 2015-525 and its implementing regulations and the Procurement Directives and to reorganize the functioning of the procurement team to better take into account contract management aspects.
- (c) Specific attention should be given to the timely hiring of qualified technical consultants and to their participation in the bid evaluation process.

### ***Procurement Arrangements***

20. **Procurement responsibilities.** The specific procurement responsibilities of ONEP and the PCU include the following:

- (a) The PCU will be responsible for the coordination of all procurement activities, in close collaboration with ONEP, and in line with the PIM and the World Bank Guidelines, including the following: (i) preparing and updating the procurement plans (PPs); (ii) preparing, finalizing, and launching the requests for proposals and bidding documents; (iii) drafting of minutes of bids opening/proposal and preparation of the evaluation reports; (iv) submitting procurement documents (terms of references, RFP, bidding documents, evaluation reports, contracts, and so on) to the World Bank when prior review is required; (v) preparing the contracts and overseeing the payments to contractors; and (vi) drafting of procurement progress report and coordinating activities
- (b) ONEP will prepare the technical parts of the bidding documents and the terms of reference of consultants and participate in the evaluation process, in close collaboration with the PCU.

21. **Applicable guidelines.** Procurement for the proposed project will be carried out in accordance with the World Bank's '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; '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 in July 2014; 'Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers', dated January 2011 and revised in July 2014; and the provisions stipulated in the Financing Agreement. The various items under different expenditure categories are described in general in the following paragraphs.

22. **Fraud, coercion, and corruption.** All procuring entities, as well as bidders, suppliers, and contractors, shall observe the highest standard of ethics during the procurement and execution of contracts financed under the project in accordance with paragraph 1.16 and 1.17 of the Procurement Guidelines and paragraphs 1.23 and 1.24 of the Consultant Guidelines.

23. **Procurement documents.** Procurement will be carried out using the World Bank's SBD for all ICB for goods and works and for RFP for the selection of consultants through competitive procedures. The recipient will develop standard documents based on the World Bank's SBD for National Competitive Bidding (NCB) for goods and works and the World Bank's RFP for the selection of consultants through methods other than Quality- and Cost-Based Selection (QCBS), with modifications that will be submitted to IDA for prior approval.

24. **Advertising procedure.** The General Procurement Notice, Specific Procurement Notices, Requests for Expression of Interest and results of the evaluation and contracts award should be published in accordance with advertising provisions in the guidelines mentioned above. For ICB and RFPs that involve international consultants, the contract awards shall be published in the United Nations Development Business online within two weeks of receiving IDA's 'no objection' to the recommendation of contract award. For goods, the information to be published shall specify: (a) name of each bidder who submitted a bid; (b) bid prices as read out at bid opening; (c) name and evaluated prices of each bid that was evaluated; (d) name of bidders whose bids were rejected and the reasons for their rejection; and (e) name of the winning bidder, and the price it offered, as well as the duration and summary scope of the contract awarded. For consultants, the following information must be published: (a) names of all consultants who submitted proposals; (b) technical points assigned to each consultant; (c) evaluated prices of each consultant; (d) final point ranking of the consultants; and (e) name of the winning consultant and the price, duration, and summary scope of the contract. The same information will be sent to all consultants who submitted proposals. The other contracts should be published in a national gazette periodically (at least, quarterly) and in the format of a summarized table covering the previous period with the following information: (a) name of the consultant to whom the contract was awarded; (b) the price; (c) duration; and (d) scope of the contract.

25. **Procurement of works.** Works procured under this project will include but are not limited to (a) rehabilitating and expanding water production, storage, and transmission facilities in the targeted urban centers; (b) expanding water distribution networks; and (c) installing water service connections. Contracts of works estimated to cost US\$10,000,000 equivalent or more per contract shall be procured through ICB. Contracts estimated to cost less than US\$10,000,000 equivalent may be procured through NCB. Contract estimated to cost less than US\$200,000 equivalent per contract may be procured through Shopping procedures. For Shopping, contracts will be awarded following evaluation of bids received in writing on the basis of written solicitation issued to several qualified suppliers (at least three). The award will be made to the supplier with the lowest price, only after comparing a minimum of three quotations open at the same time, provided he has the experience and resources to execute the contract successfully. For Shopping, the project procurement officer will maintain a register of suppliers that is updated at least every six months.

26. Direct contracting may be used where necessary if agreed in the PP in accordance with the provisions of paragraph 3.7 of the Procurement Guidelines.

27. **Procurement of goods.** Similar goods that could be provided by a same vendor will be grouped in bid packages estimated to cost at least US\$1,000,000 per contract and will be procured through ICB. Contracts estimated to cost less than US\$1,000,000 equivalent may be procured through NCB. Goods estimated to cost less than US\$100,000 equivalent per contract may be procured through shopping procedures. For Shopping, the project procurement officer will maintain a register of suppliers that is updated at least every six months.

28. **Selection of consultants.** The project will finance consultant services such as surveys, technical and financial audits, technical assistance, activities under the institutional strengthening component, engineering designs and supervision of works, trainers, and workshop facilitators. Consultant firms will be selected through the following methods: QCBS; (b) Selection based on

the Consultants' Qualification (CQS) for contracts with amounts less than US\$300,000 equivalent and which are related to exceptional studies and researches which require a rare and strong expertise; (c) Least-Cost Selection (LCS) for standard tasks such as insurances and financial and technical audits costing less than US\$300,000; (d) Single-Source Selection, with prior agreement of IDA, for services in accordance with the paragraphs 3.8 to 3.11 of the Consultant Guidelines. Individual Consultants will be hired in accordance with paragraph 5.1 to 5.6 of the World Bank Guidelines; Sole source may be used only with prior approval of the World Bank. Whatever the cost, any terms of reference needed for consultant selection must get prior approval of the World Bank.

29. Short lists of consultants for services estimated to cost less than US\$300,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines, if a sufficient number of qualified individuals or firms are available. However, if foreign firms express interest, they will not be excluded from consideration.

30. **Procurement of consulting services other than those covered by Consultant Guidelines.** Possibly, these might include designing, editing, and printing project promotion supports; providing logistic support such as car rental for field visits, travel services and logistic support for workshop and the like, for which LCS or Shopping will be used.

31. **Training, workshops, seminars, and conferences.** Training (including training material and support), workshops, and conference attendance, will be carried out on the basis of approved annual training and workshop/conference plan. A detailed plan with the nature of training/workshop, number of trainees/participants, duration, staff months, timing, and estimated cost will be submitted to IDA for review and approval before initiating the process. The appropriate methods of selection will be derived from the detailed schedule. After the training, the beneficiaries will be requested to submit a brief report indicating the skills that have been acquired and how these skills will contribute to enhance his/her performance and contribute to the attainment of the project objective.

32. **Operating costs.** Operating costs financed by the project are incremental expenses, including office supplies, vehicles operation and maintenance, maintenance of equipment, communication costs, supervision costs (that is, transport, accommodation, and per diem), and salaries of locally contracted staff. They will be procured using the procurement procedures specified in the PIM.

### ***Procurement Plan***

33. The recipient developed a draft PP for project implementation that provides the basis for the procurement methods. This plan has been agreed upon between the recipient and IDA on October 13, 2016. Immediately upon approval of the credit, and with the recipient's agreement, the plan will be published on the World Bank's public website and will be available on the website maintained by the PCU. The PP will be updated at least annually in agreement with the World Bank team or as required to reflect the actual project implementation needs and improvements in institutional capacity.

34. For each contract to be financed by the credit, the following are agreed between the recipient and the World Bank in the PP: the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame. The prior review and procurement method thresholds indicated in table 3.3 are intended for the initial PP.

**Table 3.3. Thresholds for Procurement Methods and Prior Review**

<b>Expenditure Category</b>	<b>Contract Value (Threshold, US\$)</b>	<b>Procurement Method</b>	<b>Contract Subject to Prior Review</b>
1. Works	≥ 10,000,000	ICB	All
	< 10,000,000 (*)	NCB	
	< 200,000	Shopping	
	No threshold	Direct Contracting	All
2. Goods	≥ 1,000,000	ICB	All
	< 1,000,000 (*)	NCB	
	< 100,000	Shopping	
	No threshold	Direct Contracting	All
3. Consultants firms	> 300,000	QCBS; QBS; LCS; FBS	All
Individuals	> 100,000	EOI	All
	< 100,000	Comparison of 3 CVs	
Selection (Firms and Individuals)	No threshold	Single-Source Selection	All
<b>All ToRs regardless of the value of the contract are subject to prior review.</b>			

*Note:* (\*) For example, in specific circumstances, when there is no sufficient number of qualified firms to ensure competition in the local context, ICB will apply even if the estimated amount is below the thresholds. FBS = Fixed Budget Selection; EOI = Expression of Interest; QBS = Quality-Based Selection; IC = Individual Consultant.

### ***Frequency of Procurement Supervision***

35. The World Bank's prior and post reviews will be carried out on the basis of thresholds indicated in Table 3.3. IDA will conduct six-monthly supervision missions and annual post procurement reviews; with the ratio of post review at least one for every five contracts. IDA may also conduct an independent procurement review at any time until two years after the closing date of the project.

### **Environmental and Social (including safeguards)**

36. **CE.** The project will improve quality and access to basic water services and the identified beneficiaries are the population of the targeted urban centers. The project has been developed with a pro-poor focus and includes a program of subsidized water connections to ensure that even the poorest can benefit from the project. The delivery and ultimate sustainability of the PDO will be supported by CE efforts by raising awareness and consensus around individual project design, which will inform the design of the infrastructure projects, help identify the beneficiaries of social connections, and ensure that levels of service and customer satisfaction are sustained in the long run. To mainstream CE, the proposed project will also comprise additional

activities that will ensure a voice for stakeholders through beneficiary feedback and increase accountability of the service provider toward the beneficiaries. Specific communication programs will be developed, and project budget has been allocated at the local level to enhance communication on the project's results on the ground and help target social connection programs and facilitate the reactivation of inactive service connections. CE will be monitored through (a) participation in the consultation process and (b) customer satisfaction surveys. Specific guidance on consultations/community engagement will be included in the PIM and as far as possible the project will ensure that consultations are meaningful and include women and minority groups most at risk of being left behind.

37. **Social safeguards.** The project will include rights-of-way for the water distribution networks and minimal land acquisition for water production, transmission, and storage and distribution facilities. However, the specific locations of project sites in the targeted cities are not yet known and are to be determined once the design studies are completed. Therefore, the borrower, through the PRICI's PCU, prepared an RPF that has been consulted upon, cleared, and disclosed on September 28, 2016, in-country and at the World Bank InfoShop. The RPF outlines the principles and procedures to be followed in the event of land acquisition, impact on assets, and/or loss of livelihoods. During project implementation, the borrower will prepare an SIA to determine whether land will be acquired and/or activities will create restriction of access or loss of assets. Then, specific RAPs in accordance to the SIA results will be prepared in consultation with the affected stakeholders, submitted to the World Bank for approval, and fully executed before the commencement on the ground of related civil works.

38. **Environment (including Safeguards).** Three World Bank safeguard policies are triggered under the project: OP/BP 4.01 on Environmental Assessment; OP/BP 4.11 on Physical Cultural Resources; and OP/BP 4.12 on Involuntary Resettlement. Project activities involve rehabilitation and expansion works of existing piped water schemes, which means most of the adverse impacts and risks that will happen during construction and rehabilitation are constituted by dust, noise, and waste nuisance. Based on that, the project is classified category B because expected potential impacts will be minor, site specific, moderate, and easily manageable. In addition, conventional and well-mastered water treatment technologies envisaged under the project should minimize potential risks and impacts.

39. As mentioned above, the specific areas of intervention are not yet known. Consequently, the borrower prepared an ESMF that has been consulted upon, cleared, and disclosed on September 28, 2016, in-country and at the World Bank InfoShop. It contains measures and plans to reduce, mitigate and/or offset adverse impacts, and enhance positive impacts, provisions for estimating and budgeting the costs of such measures, and information on the agency or agencies responsible for addressing project impacts. During project implementation, the screening process will determine whether a subproject-specific ESIA and an ESMP are required. Any specific ESIA/ESMP prepared in accordance to the screening result will be approved in consultation with all the stakeholders before the concerned activity starts.

40. The borrower has reasonable capacity in implementing environmental and social safeguard measures in water and sanitation projects. In that respect, the borrower is successfully implementing the ESIA/ESMPs and RAPs of the previous water-related IDA-funded projects. Recent supervision missions of the PRICI concluded that the implementation of ESIA's and

ESMPs was appropriate and the safeguard rating is Satisfactory. While the same institutional framework used for the PRICI will be adopted for the proposed project (the PCU monitoring the overall implementation of the ESIA/ESMPs, with ONEP being responsible for implementing its applicable portions of the ESIA/ESMPs related to water activities), any capacity strengthening measure deemed necessary to improve the safeguard function in this operation will be taken at both levels. Specifically, the PCU will hire a safeguards specialist, no later than three months after effectiveness. An amount of US\$0.36 million is earmarked in the project budget to support the implementation of the safeguard measures.

### **Monitoring & Evaluation**

41. M&E will be managed by the PCU, which includes an experienced M&E unit. The unit will collect data from SODECI, ONEP, and works supervision teams to elaborate the project monitoring indicators, as follows:

- (c) SODECI will provide data on access, service connections, and service conditions, which will be verified by ONEP before transmission to the PCU.
- (d) Intermediate indicators linked to works contracts (on water storage, production, and distribution) will be drawn from the progress reports prepared by the supervision engineers.
- (e) The status of indicators linked to the institutional strengthening will be assessed by ONEP.

42. Specific indicators of CE have been included in the result framework. Monitoring will be based on (a) participation of beneficiaries in the consultation process and (b) satisfaction surveys to be carried out at project start, midterm, and completion.

### **Role of Partners (if applicable)**

n.a.

## Annex 4: Implementation Support Plan

### CÔTE D'IVOIRE: Urban Water Supply Project

#### Strategy and Approach for Implementation Support

1. The strategy for implementation support has been developed based on the nature of the project and its risk profile. Special attention will be given to help address risks linked to the stakeholders and to the financial sustainability of the water sector, which will include (a) assessing progress in carrying out the institutional strengthening activities and (b) helping to bring consensus on measures designed to improve the sector's financial visibility and the execution of PPP arrangements.

#### Implementation Support Plan

2. **FM.** Based on the outcome of the FM risk assessment, the following implementation support plan is proposed. The objective of the implementation support plan is to ensure that the project maintains a satisfactory FM system throughout the project's life.

**Table 4.1. Support to FM**

FM Activity	Frequency
<b>Desk reviews</b>	
Interim financial reports review	Quarterly
Audit report review of the program	Annually
Review of other relevant information such as interim internal control systems reports	Continuous as they become available
<b>On-site visits</b>	
Review of overall operation of the FM system	Annual (Implementation Support Mission)
Monitoring of actions taken on issues highlighted in audit reports, auditors' management letters, internal audit, and other reports	As needed
Transaction reviews (if needed)	As needed
<b>Capacity-building support</b>	
FM training sessions	During implementation and as and when needed

3. The main focus of implementation support to implementation during the course of the project is provided in Table 4.2.

**Table 4.2. Implementation Support Plan**

Time	Focus	Resource Estimate	Staff Weeks	Partner Role
First 12 months	Technical and procurement review of the bidding documents	Water and sanitation specialists	6	n.a
	Procurement training	Procurement specialists	4	
	FM supervision and training	FM specialist	3	
	Social impact and land acquisition	Social specialist	4	
	Environmental supervision and training	Environmental specialists	6	
	Financial and institutional aspects	Financial analyst/private sector	4	

		specialist		
	Team leadership	Task team leader	6	
12–48 months	Project construction	Water and sanitation specialists	10	n.a
		Procurement specialists	9	
	Environment and social monitoring and reporting	Environmental specialists	6	
		Social specialist	6	
	FM disbursement and reporting	FM specialist	9	
Financial and institutional aspects	Financial analyst/private sector specialist	10		
	Team leadership	Task team leader	24	

4. Staff skill mix required is summarized in Table 4.3.

**Table 4.3. Staff Skill Mix**

<b>Skills Needed</b>	<b>Number of Staff Weeks</b>	<b>Number of Trips</b>	<b>Comments</b>
Water and sanitation specialists	16	6	Washington D.C and regional office based
Procurement	13	—	Country Office based
Social specialist	10	—	Country Office based
Environment specialist	12	—	Country Office based
FM specialist	12	—	Country Office based
Financial analyst/private sector specialist	14	4	Washington D.C and regional based
Task team leader	30	—	Country Office based

## Annex 5: Economic and Financial Analysis

### CÔTE D'IVOIRE: Urban Water Supply Project

1. The economic analysis section of this annex aims to assess the economic impact of the components of the proposed project through a cost-benefit analysis of the water activities. In the absence of consolidated financial statements of the sector and of financial forecasts, the financial analysis section aims to assess (a) the current financial information available for the sector and (b) the financial impact of the project's activities, as measured by the project's FIRR.

#### Economic Analysis

##### *Methodology and Scope*

2. The economic analysis consists of a cost-benefit analysis of the water supply activities of the proposed project. As explained in the project description, these activities help (a) address the current water shortages and restore adequate water services in eight urban centers and (b) expand access to water services by implementing social connections programs and facilitating the reactivation of currently inactive service connections. The cost-benefit analysis encompasses 90 percent of the total project costs and considers an investment program consisting of the water supply component and the incremental (with/without project) costs and benefits associated with these investments. All calculations are carried out over a 40-year period, using constant 2016 prices and excluding taxes and financing costs.

3. **Investment costs.** The cost estimates are drawn from preliminary design studies and outcome of the most recent bids carried out by ONEP and the PCU. Detailed investment costs of the water systems are given in Table 5.1.

**Table 5.1. Investment Costs for Economic Analysis (CFAF, millions)**

Water Systems	Cost Estimate
Agboville	5,800
Béoumi	2,792
N'Douci/Tiassalé	2,895
N'Zianouan	1,567
Korhogo/Ferkéssédougou	6,087
Bingerville	6,0698
<b>Total</b>	<b>25,209</b>

*Source:* Design studies, ONEP, and PCU.

4. **Incremental operating costs.** As the project facilities will often replace deteriorated facilities, the variable costs (energy and chemicals) may be substantially modified. The energy and chemical costs of the new facilities are drawn from the design studies; other operating costs are estimated on the basis of the current SODECI expenditures. Table 5.2 provide estimates of operating costs in the with/without project situation.

**Table 5.2. Operating Costs**

Water System	Energy Cost (CFAF/m <sup>3</sup> produced)		Chemicals Cost (CFAF/m <sup>3</sup> produced)	
	Without Project	With Project	Without Project	With Project
Agboville	36.4	24.2	78.8	30.0
Béoumi	28.8	43.4	44.0	17.3
N'Douci/Tiassalé	38.8	14.8	32.0	17.3
N'Zianouan	—	14.8	—	17.3
Korhogo	36.2	36.2	97.7	18.2
Ferkéssédougou	56.3	20.4	48.0	18.2
Bingerville	27.6	27.6	6.6	6.6
Commercial costs	CFAF 3,000 per connection per year			
Maintenance costs	0.5% of investment costs per year			

5. **Incremental benefits.** The incremental benefits generated by the project activities are listed in Table 5.3, which also links activities and the PDO.

**Table 5.3. Project Benefits**

Development Objective/Activities	Incremental Benefits
Improving access to water services (existing consumers)	The installation of new production, transmission, and storage facilities will be used to eliminate water deficits in affected areas and generate additional water consumption from existing users.
Increasing access to safe water (service connections)	Incremental water revenues from new connections and reactivated connections Consumer surplus accruing to beneficiaries

6. **Incremental revenues.** The incremental consumption, water prices, and revenues are estimated on the basis of current data on water consumption and current water rates. The assumptions for estimating incremental revenues are summarized in Table 5.4.

**Table 5.4. Consumption and Water Rates**

Urban center	Number of People Served per Connection	Consumption (lpcd)	Average Revenue (CFAF/m <sup>3</sup> )
Agboville	4.83	50	235
Béoumi	8.37	45	235
N'Douci/Tiassalé	4.94	45	317
N'Zianouan	5.00	40	352
Korhogo	19.20	45	263
Ferkéssédougou	10.82	40	235
Bingerville	5.26	70	235

Source: ONEP/SODECI and World Bank estimates.

7. **Consumer surplus.** The consumer surplus is equal to the increase of water consumption multiplied by the difference of the water price paid before and after the project and by the price elasticity (0.5). Households that are not connected are supplied by neighbors and vendors. Their average daily consumption of potable water is about 10 lpcd and the average vending price is about CFAF 25 per bucket of 20 L (CFAF 1,250 per m<sup>3</sup>).

8. **EIRR and NPV.** The EIRR is estimated at 7.0 percent. The NPV of the project's benefits and costs is estimated at US\$5.5 million, using a discount rate of 6 percent.

9. Overall, the project's EIRR is modest. This may be explained by (a) the fact that water production in the targeted centers is based on surface water, which is costly with regard to investments and operating costs; (b) the WTPs are designed for a longer-term horizon than the one of the project; and (c) the same water tariffs apply throughout the country and are cross-subsidized by the low costs of Abidjan water. This is confirmed by the fact that the long-term marginal cost of water in the targeted centers amounts to CFAF 490 per m<sup>3</sup>, which is 100 percent higher than the average revenue per cubic meter sold.

10. **Sensitivity analysis.** A range of scenarios has been developed to test the sensitivity of the EIRR to the main elements of the cash flows. The variables tested for the sensitivity analysis were (a) investment costs, (b) operating costs, and (c) overall water demand. The outcome of the scenarios is given in table 5.5, which also provides the switching values of the variables. The project is particularly sensitive to the reduction of water demand, which exhibits the lowest switching value. However, an inadequate demand response to the project activities is unlikely, given the current water shortages in the project areas.

**Table 5.5. Results of the Sensitivity Analysis**

Scenario	EIRR (%)	NPV@6% (US\$, millions)	Switching Value (%)
Base scenario	7.0	5.5	
Investment cost increase 20%	5.5	-3.2	12.7
Operation and maintenance cost increase 20%	6.4	1.9	30.4
Overall demand decrease 20%	5.1	-4.9	-10.6

## **Financial Analysis**

### *Financial Impact of the Project*

11. The financial impact of project activities is assessed by the FIRR derived from the cost-benefit analysis. Financial calculations take into account the financial revenues and costs in the with/without project situations, including taxes and excluding non-cash generating benefits (consumer surplus). This FIRR reflects the rate of return computed from the perspective of the combined partners of the sector (Government, ONEP, sector funds, and SODECI). The FIRR is estimated at 1.4 percent, which shows the prevalence of non-cash generating benefits in the overall project benefits, and demonstrates that the financial benefits cover the financial costs. This also means that, in case of onlending of the IDA Credit to the FNE, the onlending conditions should not be harder than the IDA conditions.

### *Assessment of Current Financial Information on the UWS Sector*

12. The available information on the financial situation of the UWS sector and its performances exhibit substantial shortcomings, which are detailed below, and hamper the financial planning and regulation of the sector.

13. The financial statements of ONEP, SODECI, and the FDE do not provide detailed financial information at the UWS sector level because

- (a) ONEP's financial statements mix urban and rural activities, and there is no cost accounting that will enable their separation;
- (b) SODECI's financial statements mix all company activities (UWS, urban sanitation, and works contracting); there is no available cost accounting and the *affermage* contract does not include provisions to that effect;
- (c) FDE's statements are presented on a cash basis, which prevents gathering of information on the collection of revenues allocated to the fund and the situation of the contractual obligations of SODECI; and
- (d) none of the above financial statements records the sector's fixed assets. There is only a physical inventory, which is periodically updated jointly by ONEP and SODECI.

14. The impact of the crisis on SODECI's billing and collection prevented gathering of significant information on SODECI's performances, which in turn did not enable the inclusion of meaningful performance targets in the 2007 *affermage* contract. This is still the case, even though the end of the crisis could have enabled the actors to set contractual billing and performance targets based on a progressive return to a stable situation.

15. The contractual obligations of SODECI, with regard to information on operational costs and performances, are not fully complied with, as shown in the annual monitoring reports of ONEP's Control Department of Operations and Quality (*La Direction du Contrôle de l'Exploitation et de la Qualité*) and the 2014 independent midterm assessment of the *affermage* contract. Consequently, the data provided by SODECI in the *plan-calcul*, which helps to periodically update SODECI's contractual remuneration, cannot be easily verified against the historical records.

16. In view of the above, the establishment of a sound financial sector planning and an improved regulation framework is contingent upon

- (a) the establishment of consolidated financial statements of the urban and water supply sector within the perimeter of the *affermage* contract, which require the setting up and maintenance of an inventory of assets and liabilities;
- (b) the setting up and maintenance of an annual determination of cross-debts and liabilities between the sector actors;
- (c) the assessment of the current execution of contractual obligations of the sector actors, which will enable the setting up of operational performance targets; and
- (d) the setting up of a financial model of the sector, which will enable (i) validation of the periodical renegotiations of SODECI's remuneration, with due consideration of the operational performances and (ii) definition of the average water tariffs, in view of the financing needs.