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Tunisia Urban Water Supply (P064836)

MIDDLE EAST AND NORTH AFRICA | Tunisia | Water Global Practice |
IBRD/IDA | Specific Investment Loan | FY 2006 | Seq No: 24 | ARCHIVED on 04-Oct-2017 | ISR29310 |

Implementing Agencies: Societe Nationale d'Exploitation et de Distribution des Eaux (SONEDE), Societe Nationale d'Exploitation et de Distribution des Eaux (SONEDE)

Key Dates

Key Project Dates

Bank Approval Date:17-Nov-2005

Effectiveness Date:21-Mar-2006

Planned Mid Term Review Date:10-Jan-2011

Actual Mid-Term Review Date:10-Jan-2011

Original Closing Date:30-Jun-2012

Revised Closing Date:30-Jun-2018

Project Development Objectives

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Project Development Objective (from Project Appraisal Document)
The Project development objectives are to: - Sustain the reliability and quality of water service in Greater Tunis and selectedurban centers, through augmentation, upgrade and renewal of water supply infrastructure. - Enhance the competitiveness andsustainabilityof SONEDE operations, through modernization of management practices and information systems, for better costcontrol, enhanced revenue and more responsive customer service.

Has the Project Development Objective been changed since Board Approval of the Project Objective?
Yes

Board Approved Revised Project Development Objective (If project is formally restructured)
Revised project development objective: To ensure the continuity of water service (twenty four (24) hours per day, seven (7) days a week) to the population in Greater Tunis and other targeted cities; and (ii) improve the financial viability of SONEDE.

Components

Name
Component 3: Management capacity building:(Cost $6.70 M)
Physical contingencies:(Cost $4.50 M)
Component 1: Improvements to the Greater Tunis water supply system:(Cost $43.10 M)
Component 2: Improvements to water supply systems in other urban centers:(Cost $13.20 M)
Financial contingencies (incl. front-end fees):(Cost $5.90 M)

Overall Ratings

Name	Previous Rating	Current Rating

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Progress towards achievement of PDO	Unsatisfactory	Moderately Satisfactory
Overall Implementation Progress (IP)	Unsatisfactory	Moderately Unsatisfactory
Overall Risk Rating	Substantial	Substantial

Implementation Status and Key Decisions

Infrastructure works

Project implementation is getting back on track with a number of important decisions reached to streamline implementation and maximize project outcomes by the upcoming project closing date in June 2018.

Options are being considered regarding the rehabilitation works of the three water treatment stations in Ghedir El Golla and Belli to achieve the best positive outcomes by the project closing date.

Regarding the extension of the water treatment plant 4 (ST4) in Ghedir El Golla, it is estimated that physical works would be completed at 90% by the project closing date.

Implementation of SIC

The installation of the SIC has progressed satisfactorily with the set up of the new version of the pilot progiciel validated for the most part, the database of the pilot site functioning properly, and all mistakes having been resolved by the service provider.

Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	--	Substantial	Substantial
Macroeconomic	--	Moderate	Moderate
Sector Strategies and Policies	--	Moderate	Moderate
Technical Design of Project or Program	--	Moderate	Moderate
Institutional Capacity for Implementation and Sustainability	--	Moderate	Moderate
Fiduciary	--	Substantial	Substantial
Environment and Social	--	Low	Low
Stakeholders	--	Low	Low
Other	--	Low	Low
Overall	--	Substantial	Substantial

Results

Project Development Objective Indicators

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▸ Events of intermittent supply due to water shortage in the distribution systems covered by the project (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	0.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

Although SONEDE does not have data loggers that can measure pressure in distribution networks, on a continuous basis, the Direction of Exploitation provides reliable data (such as rationing "ordres de services" issued by District office) which allows to monitor water shortages. For the Greater Tunis, the technical audit conducted in August 2017 has verified that there has not been any water cut in the network due to shortage of water supply, thanks to the commissioning of ST4 in Ghedir El Golla (Phase 1 completed in 2015) for which the treatment capacity is superior to the current water demand. The commissioning of ST4's Phase 2 will allow to cover projected water needs until 2022.

For the cities served by the Belli treatment facility, if not rehabilitated water cuts may occur earlier as this facility currently operates at full nominal capacity (2 m3/second). There has not been any water cuts during the project implementation so far, as confirmed by the August 2017 technical audit site visit during the summer peak. In addition, the rehabilitation of the facility --envisaged under a follow-up operation/PforR--, combined with demand management measures and regular maintenance, will increase STB1 capacity to 0.5 m3/second (or 25% over the nominal capacity) during future peak seasons. This would ensure that the outcome risk for the PDO does not materialize by the time of project completion, ICR and IEG review.

▸ Working ratio (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	121.00	116.00	114.00	100.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

The value is maintained above the 100% target, meaning that SONEDE covers its operational expenses through its revenues. The value for 2016 is based on SONEDE financial statements for which the financial audit is pending. The value for 2017 (117%) is estimated.

As specified in the results framework, ISR#23 and in the definition of the financial covenant, the calculation method for this indicator exclude depreciation costs. If depreciation cost are added, the working ratio decreases below 100%.

▸ Direct project beneficiaries of which females (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	5.65	--	6.82	6.38
Date	13-May-2014	--	31-Aug-2017	29-Jun-2018

Comments

This indicator is slightly above the target value for 2017. It includes the number of household connections and beneficiary people in the targeted areas of the project works (figures are calculated on the basis on average people per household connection)

The positive result is due to the operationalization of ST4 (2 m3/second) which increases the total treatment capacity of the Ghedir El Golla facility to 7.4 m3/second and thus respond to the increase in water demand. Indeed, SONEDE has installed about 300,000 new household connections since 2014 in the project areas --although not all connection are attributed to the infrastructure financed under the project.

In terms of women beneficiaries, according to the 2014 national census, women constitute 50.01% of the Tunisian population, hence the beneficiaries can be considered men and women equally.

Overall Comments

Intermediate Results Indicators

▸ [Original project] Completion rate of construction works of ST4 potable water plant in Greater Tunis (2 m3/s) - Component 1- Improvements to the Greater Tunis water supply (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	100.00	100.00	100.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

The final reception (and final payment) of the first phase (2 m3/second construction phase operational since June 2015) is expected at the end of calendar year 2017, after the remedy of a technical reserve by SONEDE.

▸ [Additional Financing] Completion rate of expansion works of ST4 potable water plant in Greater Tunis (1 m3/s expansion) - Intermediate Result 1: Component 1- Improvements to the Greater Tunis wate (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	5.00	30.00	100.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

The rate of completion of woks of 30% is based on the technical audit's site visit, August 2017.

▸ [Original Project and Additional Financing] Number of connections in areas in Greater Tunis covered by the project - Intermediate Result 1: Component 1- Improvements to the Greater Tunis water suppl (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	760,000.00	757,261.00	850,000.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

The 2013 baseline data of 720,000 connections should be adjusted to the actual verified value of 669,272 (720,000 minus 669,272 = 50,728 connections), and the actual verified values as per the August 2017 technical audit have been adjusted accordingly. After of 2016, the actual values are slightly lower (2%) than the target values.

▸ [Additional Financing] Completion rate of rehabilitation and upgrading works at Greater Tunis water plant - Intermediate Result 1: Component 1- Improvements to the Greater Tunis water supply (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00
Date	30-Jun-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

As noted above, the cancellation of this activity would allow SONEDE sufficient time to negotiate the contract and finance the rehabilitation works under different funding arrangements.

▸ [Original project] Completion rate of reinforcement of power supply: Intermediate Result 1: Component 1- Improvements to the Greater Tunis water supply (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	90.00	100.00	100.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

Both extra-muros et intra-muros networks have been entirely completed.

The final commissioning of works for the extra-muros network was issued on May 15, 2017.

The provisional commissioning of works for the intra-muros network was issued on May 16, 2017. The training of SONEDE users by the contractor is ongoing. SONEDE plans to issue the final commissioning of works in May 2018 after the finalization of the training.

Disbursement rate is 100% for the extra-muros portion and all but the training component for the intra-muros portion.

▸ [Original project] Completion rate of replacement of raw water intake pumps - Intermediate Result 1: Component 1: Improvements to the Greater Tunis water supply (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	55.00	80.00	100.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

This indicator is well on target. The pipe to supply the Belli facility from the raw Madjerda water canal (1.3 km ductile iron, 1,600 mm diameter, equipment) has been entirely delivered in April 2017, as well as the other equipment, as verified by the August 2017 technical audit, with 100% disbursement. The contractor for labor works has been selected and the contract award is expected to be issued during the first week of October 2017 with a completion date within the project timeframe.

▸ [Original Project and Additional Financing] Volume of water sold m3/year: Intermediate Result 1: Component 1- Improvements to the Greater Tunis water supply (Cubic Meter(m3), Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	103.70	134.70	137.99	151.20
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

The baseline value in 2013 has been adjusted to the actual billed consumption that year (127,209 m3 rather than 129,000 m3 -- noting that these water sales includes all SONEDE customers including large customers, not only households). The sale volumes in Greater Tunis are slightly lower (5% lower) than the projected value.

This could be due to either slower demographic growth or lower demand in the Greater Tunis area. As per the Additional Financing appraisal, water sales increased from 10.37 million m3 in 2006 to 126.4 millions m3 in 2012, or 3.5% per year on average. According to most recent SONEDE statistics, water sales have increased by only 2% on average over 2013-2016. The next technical audit will determine, working with the Bank's economics team for Tunisia and the National Statistical Institute of Tunisia, whether this lower demand is linked to demographics or to consumption behavior in the Greater Tunis.

▸ [Original Project] Piped household water connections that are benefiting from rehabilitation and upgrading works: Intermediate Result 2: Component 2- Improvements to water supply systems in urban cen (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	430,000.00	450,000.00	480,000.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

The figure for year 2017 is an estimate.

▸ [Original Project] Volume of water sold in targeted cities (North and Center) M m3/year: Intermediate Result 2: Component 2- Improvements to water supply systems in urban centers (other cities) - Un (Cubic Meter(m3), Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	44.90	61.30	63.20	67.30
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

Estimated for year 2017: 63.2 million m3/year volume of water sold in targeted cities of the North and Center regions.

▸ [Original Project] Completion rate of works in other cities of the North and Center: Intermediate Result 2: Component 2- Improvements to water supply systems in urban centers (other cities) (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	100.00	100.00	100.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

▸ [Additional Financing] Completion rate of rehabilitation works of the Belli water treatment facility - Intermediate Result 2: Component 2: Improvements to water supply systems in urban centers (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	5.00	0.00	100.00
Date	19-Jun-2014	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

As noted above, the cancellation of this activity would allow SONEDE sufficient time to negotiate the contract and finance the rehabilitation works under a new project.

▸ [Additional Financing] Piped household water connections that are benefiting from rehabilitation and upgrading works undertaken under the project - AF: Belli water complex (Center-East cities) (Amount(USD), Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	630,000.00	630,000.00	490,000.00
Date	09-Jun-2014	12-May-2017	31-Aug-2017	29-Jun-2018

▸ [Additional Financing] Volume of water sold in targeted cities (Center-East) (m3/year) - Intermediate Result 2: Component 2- Improvements to water supply systems in urban centers (other cities) (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	97.60	98.20	79.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

Estimated for year 2017: 98.2 million m3/year volume of water sold in targeted cities of the East region.

▸ [Original Project] Rate of completion of financial planning model - Intermediate Result 3- Management Capacity Building (Amount(USD), Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments
This activity was replaced by the Financial Equilibrium Study funded by the Bank as recorded in the January 2015 Aide-Memoire.

▸ [Original Project] Implementation of a joint customer management system (SIC) - SONEDE and ONAS - Intermediate Result 3: Management Capacity Building (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	35.00	40.00	100.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

▸ [Original Project] Rate of completion of HR system - Intermediate Result 3- Management Capacity Building (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	100.00	100.00	100.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments
SONEDE uses the new computerized human resource management system (*Système Informatique et Gestion Automatisée des Ressources Humaines or* SIGA-RH) since 2011. It includes key functions such as salary, benefits, personel files, hiring, leave. The

technical audit of August 2017 has confirmed that this system is operational and works satisfactorily.

▸ Rate of completion of rolling equipment purchase - - Intermediate Result 3- Management Capacity Building (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	100.00	100.00	100.00
Date	31-Dec-2006	12-May-2017	31-Aug-2017	30-Jun-2018

Comments

SONEDE has purchased the four following equipment: Tractor 6x4 (Renault), fully commissioned February 9, 2015; Truck (10 t, DAF), fully commissioned October 2, 2015; Carrying-device fully commissioned June 4, 2015; Mechanical shovel (Hidromek), fully June 21, 2016. All the equipment have been paid to the suppliers.

▸ [Additional Financing] Number of meters purchased and installed (cumulative) - Intermediate Result 3: Management Capacity Building (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	93,800.00	93,800.00	70,000.00
Date	09-Jun-2014	12-May-2017	31-Aug-2017	30-Jun-2018

Overall Comments

The August 2017 technical audit confirmed that the meters (Class C), all delivered between May and November 2015, are conform with relevant ISO norm no. 4064 are adapted to the needs of SONEDE. All meters have been verified by SONEDE and the Agence nationale de métrologie before their installation.

Under the project, SONEDE has distributed the meters in its four regional districts: 19,700 in the Centre region; 26,250 in the North region; 29,250 in the South region; 18,600 in the Greater Tunis region. These offices manage the installation at their level (rater than the central directorate. This will change as the SIC includes a database module that will allow the centralized monitoring of each meter). The August 2017 audit has verified that all meters purchased have been effectively installed. 10% of the contract value remains to be disbursed due to administrative issues.

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Data on Financial Performance

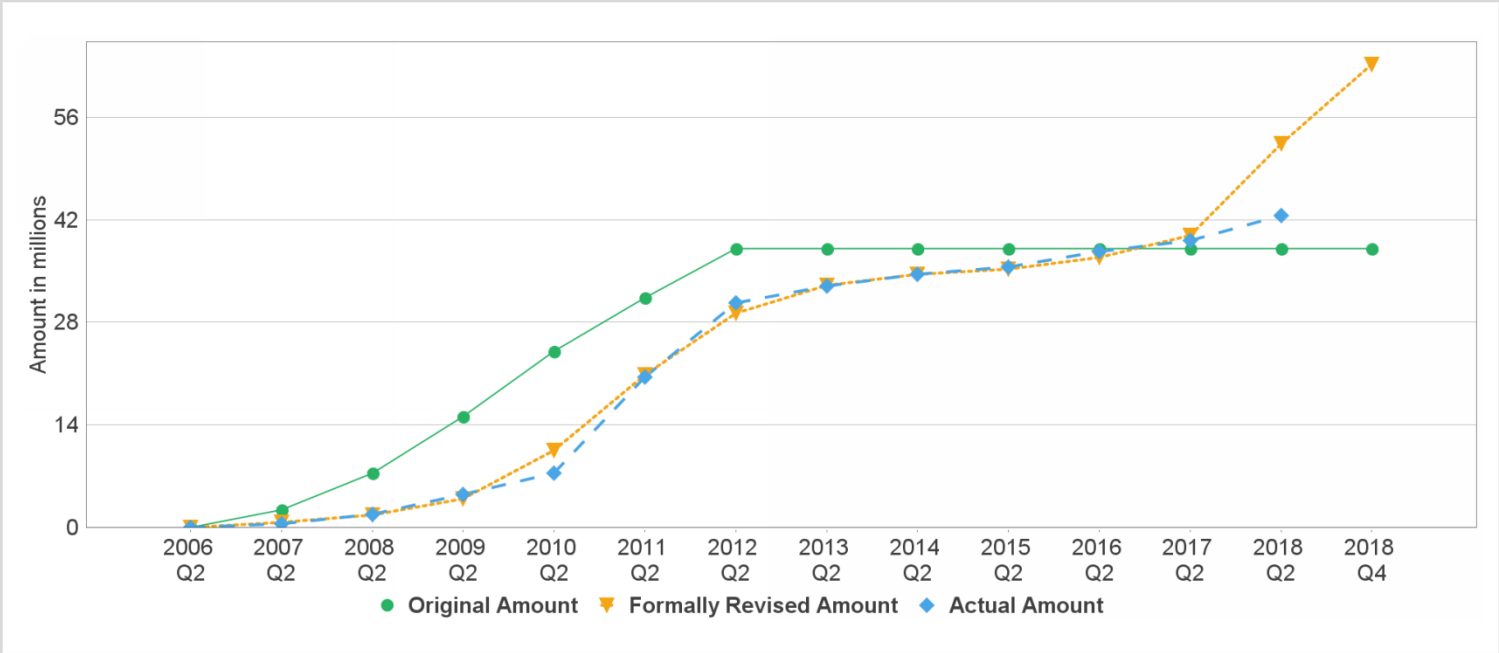
Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	Disbursed
P064836	IBRD-73390	Effective	USD	38.03	38.03	0.00	37.36	4.29	98%
P064836	IBRD-83950	Effective	USD	26.20	26.20	0.00	5.30	19.59	20%

Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P064836	IBRD-73390	Effective	17-Nov-2005	05-Dec-2005	21-Mar-2006	30-Jun-2012	30-Jun-2018
P064836	IBRD-83950	Effective	09-Jun-2014	19-Aug-2014	17-Jul-2015	30-Jun-2018	30-Jun-2018

Cumulative Disbursements



Restructuring History

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Level Approved on 07-Feb-2012 ,Level Approved on 29-Jun-2012 ,Level 2 Approved on 20-May-2014

Related Project(s)

P150033-Urban Water Supply additional financing

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