

MEMORANDUM OF UNDERSTANDING

WATER SUPPLY AND SANITATION SECTOR PROGRAMME SUPPORT (SPS)

EGYPT - DENMARK

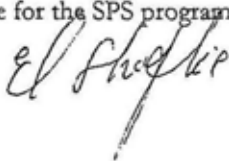
1. Introduction

The Water Supply and Sanitation sector in Egypt has been supported by Danida since the mid-1980s. The Danish assistance to this sector has given priority to poverty alleviation and decentralisation, especially with focus on Upper Egypt. The Danish strategy for supporting this sector in Egypt emphasises the need for improving the services in rural areas, small towns and provincial cities in Aswan and Qena governorates in Upper Egypt. The Danish assistance will support the implementation of a sector reform framework facilitating decentralisation of sector mandates, functions and responsibilities from central government to autonomous water authorities at governorate level. Danish assistance will give priority to popular participation in all stages of the programme development process.

A Danida Programming Mission visited Egypt in late November 1999. Based on this mission's recommendations a SPS Formulation Mission was fielded in January 2000 to take this preliminary work forward in the form of identification and formulation of the SPS Document and its Components. The Formulation Mission recommended an approach for the Danish assisted SPS that complies with Egypt's Sector Reform Framework as well as with Danida's new policy on water supply and sanitation. Based on the Formulation Mission's report, the Egyptian authorities and Danida agreed to launch a Danida Appraisal Mission to appraise the scope and contents of the proposed SPS and the two-year Preparation Phase. The mission was fielded at the end of August 2000, and the Appraisal Mission's report was submitted in October 2000.

During the annual consultations between Egypt and Denmark in February 2001, it was confirmed that the SPS programme was planned for an initial seven years. It was further confirmed that the initial financial commitment is for a five-year period, by consolidating the documentation for the identified two-year Preparation Phase and the subsequent three-year Phase 1.

The present Memorandum of Understanding (MoU) has been prepared by a Danida Appraisal Mission visiting Egypt from 19<sup>th</sup> to 26<sup>th</sup> March 2001, which will lead to the final formulation of the SPS Document (including Component Descriptions) for the five-year period, and reflects the agreement reached with the Egyptian authorities on the modalities and scope for the SPS programme.



## 2. Objectives and Strategy of the Water Supply and Sanitation SPS

The SPS will support the Government of Egypt in implementing its strategy for sector reform and support institutional and capacity strengthening of sector institutions at the national and governorate level. The objectives for the SPS reflect both the GOE and the GODK development and sector policy priorities.

### SPS Development Objective

*Improved health and living conditions of the rural and urban population in Upper Egypt, through improved access to and reliability of safe water and sanitary facilities and improved hygiene practices, with special focus on the poor.*

### SPS Immediate Objectives

*Supported national level sector institutions, and the Aswan and Qena Water Authorities, have strengthened their capacity and skills to undertake and co-ordinate their respective functions as defined under the Sector Reform Decree; and*

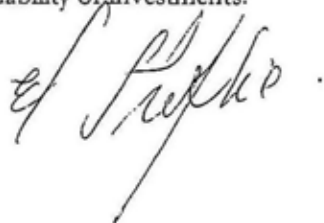
*Participating rural and urban communities in Aswan and Qena Governorates have been supported in the sustainable and hygienic use of water supply and sanitation services.*

The objectives generally focus on i) support to the ongoing Sector Reform both at national as well as governorate level; and ii) improved water supply and sanitation services in the two selected governorates Aswan and Qena.

The SPS will contribute to poverty reduction by focusing SPS support in the poorest regions of Egypt, and the integration of approaches that will ensure the needs of the poor are highlighted and addressed. The development of appropriate tariff structures will need to consider the level of affordability of a defined basic service level, as well as possible cross-subsidy options. Cross-subsidy options to be considered may include either a cross-subsidy from non-household customer classes and/or from service levels in excess of the defined basic service level. Moreover, improved water supply and sanitation services will in particular benefit women, especially in rural areas where water collection is often hard and time-consuming work.

While the SPS strategy is outlined for seven years, Danish assistance to Egypt's water supply and sanitation sector is planned for an initial financial commitment of five years. This is comprised of a two-year Preparation Phase and a three-year Phase I. While a two-year Phase II has been outlined and proposed, the term for further SPS financial support will be subject to joint GOE/GODK review and approval

The involvement of communities, NGOs, and small contractors in the planning and implementation support to improved water supply and sanitation services, according to a demand responsive approach, has been agreed upon as important principles for achieving sustainability of investments.




### 3. Scope of the SPS

The combination of capacity development at national as well as governorate level and support to implementation of water and sanitation infrastructure in rural and urban-small town areas are considered important SPS strategic approaches. The dual focus of the SPS strategy is reflected in the proposed three components; one supporting the Sector Reform Framework at the national level, and the two other components providing broad scale sector assistance in Qena and Aswan Governorates. Each component is expected to serve specific objectives, yet will be mutually supportive in order to achieve sustainable results and contribute to achievement of the SPS objectives.

<b>Component I</b> National Sector Reform & Capacity Development	<ul style="list-style-type: none"> <li>▪ Sector Reform Support, including contribution to the detailed integrated Action Plan for the implementation of the Sector Reform.</li> <li>▪ Capacity Development with focus on tasks that facilitates decentralisation of sector roles and functions to the governorate level.</li> </ul>
<b>Component II</b> Aswan Water-Supply and Sanitation	<ul style="list-style-type: none"> <li>▪ Continue the ongoing Institutional Support to Aswan Water Authority;</li> <li>▪ Water Demand Management Programme;</li> <li>▪ Integrated Rural WS&amp;S with an initial focus on Edfu District;</li> <li>▪ Urban-Small Town WS&amp;S.</li> </ul>
<b>Component III</b> Qena Water Supply and Sanitation	<ul style="list-style-type: none"> <li>▪ Institutional Support to Qena Water Authority;</li> <li>▪ Water Demand Management Programme;</li> <li>▪ Integrated Rural WS&amp;S with an initial focus on Esna District,</li> <li>▪ Urban-Small Town WS&amp;S.</li> <li>▪ Esna Medina Wastewater Project</li> </ul>

The estimated SPS budget for the planned seven-year timeframe amounts to DKK 1,192 Million. A summary of the budget for the seven-year timeframe is shown overleaf.

*E. Steppé*

*[Signature]*

Table 1 SPS Total Budget Frame (7 years) by Component and by Funding Source (DKK million)

COMPONENT	TOTAL	Danida Grant	Danida Mixed Credit	GOE Grant	User Payment
I. National Reform & Capacity Development	40	40	-	-	-
II. Aswan Water Supply & Sanitation*	323	189	-	104	30
III. Qena Water Supply & Sanitation	562	350	-	166	46
Esna Medina Wastewater Project (Mixed Credit)	180	-	90	72	18
Unallocated	87	87	-	-	-
<b>GRAND TOTAL</b>	<b>1,192</b>	<b>666</b>	<b>90</b>	<b>342</b>	<b>94</b>

Note\*: The ongoing Aswan Water Authority Project (DKK 34 Million Danida grant and DKK 3 Million GOE grant not included in the budget estimate).

The initial five-year commitment will support both the two-year Preparation Phase and the subsequent Phase I comprised of three years. The total SPS budget for this commitment is estimated at DKK 845 Million.

Table 2 SPS Budget for the five-year Preparation Phase and Phase I (DKK million)

COMPONENT	TOTAL	Danida Grant	Danida Mixed Credit	GOE Grant	User Payment
I. National Reform & Capacity Development	32	32	-	-	-
II. Aswan Water Supply & Sanitation*	205	119	-	66	20
III. Qena Water Supply & Sanitation	368	231	-	108	29
Esna Medina Wastewater Project (Mixed Credit)	180	-	90	72	18
Unallocated	60	60	-	-	-
<b>GRAND TOTAL</b>	<b>845</b>	<b>442</b>	<b>90</b>	<b>246</b>	<b>67</b>

Note\*: The ongoing Aswan Water Authority Project (DKK 34 Million Danida grant and DKK 3 Million GOE grant not included in the budget estimate).

*E. Shadhi*

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#### 4. Esna Medina Wastewater Project

The Esna Medina Wastewater Project, which had been recommended for support under the Danish Mixed Credit Programme, is proposed to be implemented through the existing Government Framework Agreement on Mixed Credits outside the SPS. Under this arrangement, guaranteed subsidised credits will be provided for procurement of equipment partially tied to Danish suppliers. The indicative project cost for the Esna Medina Wastewater Project has been estimated at DKK 180 Million. This cost estimate does not include any costs of lowering the groundwater table in Esna Medina that may or may not be necessary. Of this indicative cost estimate of DKK 180 million, it is proposed that 50% or DKK 90 million to be provided by Danida as mixed credit support. Of the remaining 50%, it is proposed that 40% is funded by the GOE and 10% is contributed by customers/users.

It is agreed that preparations of the Esna Medina Wastewater Project can proceed immediately, and the role of the SPS will be to monitor and provide institutional support during implementation and operation of the scheme.

#### 5. Technical Assistance

It is agreed that the SPS program will encompass the following SPS advisers: i) one Danish Chief Technical Adviser and two Egyptian Sector Experts at the NCMU to MOHUUC in Cairo; and ii) one Danish Sector Specialist at each of the two governorate water authorities. The recruitment of the SPS advisers will be initiated as soon as the Danida Board have approved the SPS program. Further Technical Assistance and Consultancy support will be provided by Danish and Egyptian consultants.

#### 6. Preconditions for the SPS approval

Prior to submission for Danida Board approval, the following pre-conditions should be met:

- GOE final approval of the Sector Reform Framework and Legislation, that includes establishment of Qena Water Authority as a Public Economic Authority, and the national reforms. However, considering GOE's new strategy and procedure for reform approval, it is agreed that there will be joint reviews and assessments of the reform progress so as to enable GODK to decide on submission of the SPS for Danida Board approval.
- GOE and governorate agreement to SPS strategic approaches in support of sector reform objectives, which include:
  - Agreement to implement full O&M cost recovery tariffs within a 5-7 year time frame as defined in table 3;
  - Agreement that GOE will cover operation and maintenance costs as defined in table 3 and in the SPS Document.

*El Shafie*

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- GOE and governorate agreement to GOE and Governorate funding and capital cost sharing according to the funding modalities as stated in the Agreed Minutes of the Development Cooperation Consultations between GOE and GODK, 11 –15 February 2001, and as defined in the SPS Document.

## 7. Performance Benchmarks and Monitoring

During the joint annual GOE-Danida SPS Reviews, GOE and GODK will jointly assess and evaluate the progress of the SPS and the degree to which agreed upon performance benchmarks can be anticipated to be achieved by the end of the Preparation Phase and Phase I. The reviews should include an assessment of the pace at which sector reform is progressing, i.e., in accordance with the national sector reform strategy and implementation plan. In light of the latter assessment, the annual GOE-Danida SPS Review will further evaluate the appropriateness and effectiveness of the SPS strategy, and its strategic principles and approaches, i.e., in terms of its performance in supporting and/or accelerating sector development, and in ensuring that GOE and Danida policy priorities are addressed.

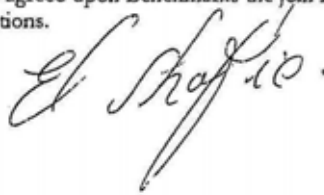

With emphasis on process support, the anticipated outcome of the Annual Review are recommendations on how the SPS approach can be further improved or adjusted to better support sector development and meet the objectives of the SPS programme. In this context, it has been agreed to in principle for the establishment of performance benchmarks, which will serve as indicators of the capacity and commitment of supported institutions to effect sector reforms and organisational improvements.



Table 3 Proposed Performance Benchmarks (AWA &amp; QWA)\*

Performance Benchmark	Preparation Phase Target	SPS Year 5 Target	SPS Year 7 Target
1. Cost Recovery (%) (of Operations and an Appropriate Level of Maintenance)	50%	80%	100%
2. Collection Rate (%) (%Collection of Total Amount Billed, i.e., Excluding Arrears)	75%	90%	98%
3. Billing Rate (%) (Bills Regularly Prepared and Issued)	75%	90%	100%
4. Installation of Water Meters (%)	50%	80%	100%
5. Functioning Meters (%)	75%	90%	95%
8. Staffing Plan Prepared (In accordance with/ based on Secondary Cities Staffing Level Assessment)	100%	NA	NA
8. Staffing Level according to Plan (In accordance with/ based on Secondary Cities Staffing Level Assessment)	100%	100%	100%
9. Unaccounted for Water (%)	40%	25%	20%
10. SPS District Communities Informed about the SPS (%)	100%	100%	100%
11. Number of Communities, which have shown interests and commitment to participate in the SPS (%)	AWA=10 QWA=10	AWA=25-30 QWA=40-50	AWA=40 QWA=65
12. Number of Communities where implementation is in progress	AWA=5 QWA=5	AWA=20-25 QWA=30-40	AWA=40 QWA=65

Note\*: Performance Benchmarks (including tariff structures, speed of cost recovery, poverty orientation/cross-subsidisation etc.) will be defined and agreed on during the first six months of the SPS. Based on the agreed upon Benchmarks the joint Annual Reviews will assess progress and give recommendations.

## 8. Next Steps

The revised Process Action Plan and milestones as anticipated for the SPS for Year 2001 and Year 2002 is presented in the table below.

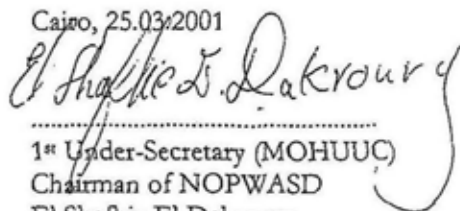
Table 4 *Process Action Plan, 5 years SPS and Esna Wastewater Project*

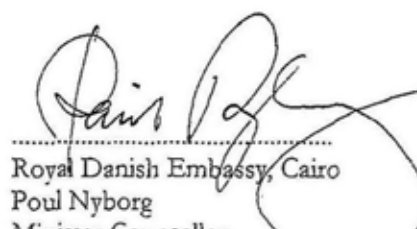
Date	SPS Programme	Esna Wastewater Project (Mixed Credit)
April 2001	Final SPS Document and Appraisal Report	Feasibility Study that will assess appropriate and cost-effective technical solutions that address the problem with the high groundwater table. In the affirmative this task will also include revision and modification of the Tender Documents.
May		
June	GOE approval of Sector Reform Framework and Legislation	
July		Pre-Qualification of Contractors
August	5 years SPS (Preparation Phase & Phase I), Danida Board approval	
September	5 years SPS (Preparation Phase & Phase I), Danish Parliament's Finance Committee approval	Tendering
October		
November	5 years SPS (Preparation Phase & Phase I), Government Agreement signed	Appraisal by Danida (Secretariat of Mixed Credits)
December		
Jan. 2002		
February		
March	5 years SPS (Preparation Phase & Phase I), Government Agreement ratified	
April	Start of SPS activities	

## 9. Approval by the Governments of Egypt and Denmark

The proposals in the present Memorandum of Understanding present the scope of the Water Supply and Sanitation SPS and the Process Action Plan (PAP) to bring the SPS from a formulation to an implementation stage. The proposals will be subject to approval by the governments of Egypt and Denmark.

Cairo, 25.03.2001

  
 .....  
 1<sup>st</sup> Under-Secretary (MOHUUC)  
 Chairman of NOPWASD  
 El Shafhie El Dakrouy

  
 .....  
 Royal Danish Embassy, Cairo  
 Poul Nyborg  
 Minister Counsellor



**ADDENDUM TO**  
**MEMORANDUM OF UNDERSTANDING OF MARCH, 2001**  
**WATER SUPPLY AND SANITATION SECTOR PROGRAMME SUPPORT (SPS)**  
**EGYPT - DENMARK**

**1. Background**

In March 2001 a Memorandum of Understanding (MoU) was signed between Egypt and Denmark on the modalities, scope and conditions for Danish assistance to the drinking water and sanitation sector in Egypt over a five-year period. The MoU outlined Danish Sector Programme Support (SPS) for seven years with an estimated budget of DKK 1,192 Million (Danish grant DKK 666 Million; GOE contribution DKK 342 Million; user payment DKK 94 Million; and DKK 90 Million mixed credit for the Esna Medina Wastewater Project). While the SPS strategy is seven years, the MoU contained agreement on an initial financial commitment of five years covering a Preparation Phase (2 years) and Phase 1 (3 years). The total budget for the initial five years SPS is DKK 665 Million (Danish grant DKK 442 Million; GOE contribution DKK 173 Million; user payment DKK 46 Million).

From October 1-9, 2001 a Danida mission reviewed the progress of the reforms in the sector and progress of Danish support to the sector in Aswan, Qena and at national level. In this context the conditions for approval and agreement on the SPS Programme were also reviewed. The results of the review are presented as follows.

**2. Progress of the Sector Reform**

The Presidential Decree for eight new *Public Economic Authorities* (PEA), including Qena Water Authority, is expected by end December 2001. The Decree includes an article (article 14) allowing the PEA Chairman to decide on required PEA staffing as well as an article (article 4) including two customer representatives as members of the PEA board of directors. These articles will also apply for existing PEAs (Presidential Decree 281/1995 covering seven governorates including Aswan). It is considered a positive step towards further decentralisation and cost-efficient independent management of the PEA.

A Prime Minister Decree to establish an *Inter-Ministerial Policy Co-ordination Committee* is expected by end December 2001. The Committee will, inter alia, set criteria for investment priorities, determine basic service level for domestic water consumption, arrange for subsidies based on Regulatory Agency recommendations, and submit an annual report on the progress of the sector reform to the Prime Minister. It will consist of the 1<sup>st</sup> Under-Secretary of eleven water and sanitation related Ministries and central government organisations. The Committee will be headed by the Minister of MOHUUC. Danida has provided technical assistance to the establishment of a Technical Secretariat to the Committee.

The *Central Department for Private Sector Projects* in MOHUUC was established by Minister of Housing Decree in February 2001. The Department will support private sector participation ranging from BOT/BOOT in larger cities to O&M service contracts in smaller rural towns. USAID is currently providing technical assistance to the Department. Its function will, inter alia, be to provide technical assistance on concessions and tariff structures to cities and governorates. However, its full-fledged operation awaits the approval of the *Law on Concessions and Establishment of a Regulatory Agency* (see below). With the approved Prime Minister Decree No. 695/2001 for the establishment of a *Ministerial Committee and a Working Group to Regulate National and Local BOT and BOOT Projects* GOE has taken another positive step towards further private sector participation in the water and wastewater sector. The Decree will facilitate concessions in all infrastructure sectors (water and wastewater, telecommunication, electricity and transportation). The Committee will cover all sectors but its operation in the water and wastewater sector will have to await the approval of the *Law on Concessions and Establishment of a Regulatory Agency*.

A Ministerial Decree to establish a *Central Department for Utilities* in MOHUUC is expected by November 2001. The Department will replace the existing General Department. It will function as a “think tank” and provide technical assistance to PEAs. Danida has given technical assistance to the Department.

The draft *Law on Concessions and Establishment of a Regulatory Agency* includes the establishment of a Regulatory Agency. The Law will enable private sector participation and the Regulatory Agency will have a decisive role in tariff setting to cover operation and maintenance (O&M) within the first five years and thereafter full cost recovery of O&M and capital investments. The draft Law has been approved by the State Council and the Cabinet. It has been sent to the President’s office and will be submitted to the People’s Assembly in November 2001. Final approval is expected by mid 2002.

The Presidential Decree for the *re-organisation of NOPWASD* is expected end of 2002. The re-organisation is expected to be as in the overall sector reform proposal approved by the Cabinet on the 10<sup>th</sup> May 2000. After the re-organisation, NOPWASD will, inter alia, work as the Technical Secretariat for the Inter-Ministerial Policy Committee, assist in developing strategic sector plans nationwide, and implement large projects at the governorate level.

### **3. Progress of Danish Assistance to the Sector**

The two-year Danida assistance project to Aswan Water Authority and Edfu Sector is in progress. With Danish and Egyptian technical assistance good results have been made in preparations for institutional development, capacity building, training and investments in equipment and rehabilitation of existing supply systems in Edfu district to promote community involvement and cost recovery. The project is incorporating lessons learned and training methodologies from the USAID assisted Secondary Cities Project in Aswan. A sound foundation has been laid for the remaining project activities and equally importantly for the larger scale SPS. Termination of the project by end December 2002 is expected to coincide with the start-up of the SPS in January 2003.

Through a grant from the Danish Embassy technical assistance has been given to Egypt's sector reform at national level and in preparing for a PEA in Qena governorate. At national level assistance has been given to the Technical Secretariat of the Inter-Ministerial Policy Co-ordination Committee and MHUUC's Central Department for Utilities. The assistance has included proposals for organisational structure of the Department and establishment of a database for all water and wastewater projects in all governorates, ranging from village level to larger cities. In Qena assistance has included training of staff for the PEA once established. Results have been very promising in both the national level and in Qena, and there is a need to continue this assistance to prepare for the larger scale SPS activities.

Danida's appraisal of the five-year SPS programme is completed and its documents will be finalised based on this MoU Addendum. The total budget is DKK 665 Million (Danish grant DKK 446 Million; GOE contribution DKK 173 Million; user payment DKK 46 Million). The preparation phase is two years and has a total budget of DKK 110 Million.

The Feasibility Study for the Danida Mixed Credit (DKK 90 Million) for the Esna Medina Wastewater Project (total budget DKK 180 Million) is expected to be submitted to Danida by end November 2001 with a request for Danida's appraisal of the project. The appraisal could be undertaken in January 2002 and if in the positive, tendering could take place immediately thereafter.

#### **4. Strategy for SPS Agreement and Implementation**

Considering the positive results from ongoing Danida assistance and developments in the sector reform, the following strategy for agreement and start of the five year SPS will be as follows:

The overall SPS strategy is seven years. Danish grant and mixed credit assistance, GOE contribution and user payment is planned for an initial five years financial commitment.

##### *1. SPS Preparation Phase (2 years; total budget DKK 110 Million)*

Prior to government agreement between Egypt and Denmark on the five-year SPS Programme, the following conditions should be met:

- Presidential Decree for establishing a Public Economic Authority in Qena governorate.
- GOE and governorate agreement to SPS strategic approaches in support of sector reform objectives including:
  - Agreement to implement full O&M cost recovery tariffs within a 5-7 year time frame as defined in the MoU of March 2001.
  - Agreement that GOE will cover operation and maintenance costs as defined in the MoU of March 2001 and in the SPS Document.
- GOE and governorate agreement on GOE and Governorate funding and capital cost sharing according to the funding modalities as stated in the Agreed Minutes of the Development Cooperation Consultations between Egypt and Denmark, 11 –15 February 2001, and as defined in the SPS Document.

## 2. SPS Phase 1 (3 years; total budget DKK 555 Million)

To continue with the three-year Phase 1 (after the first two-year SPS Preparation Phase) that would include major investments in rural and small towns water and sanitation facilities, the following condition should be met latest end of the first year of the SPS Preparation Phase:

- GOE approval of the Law on Concessions and the Establishment of a Regulatory Agency including bye-laws, regulations and plans for its implementation.

## 5. SPS Preparation Phase (2 Years)

The total budget of the first two years will be DKK 110 Million (Danida grant DKK 84 Million; GOE contribution DKK 23 Million; and user payment DKK 3 Million). Activities will include: i) capacity building at national level and in the PEAs of Qena and Aswan; ii) rehabilitation of water supply infrastructure in Esna Medina; and iii) planning and demonstration of new water supply and sanitation infrastructure in selected villages and small towns in Qena (Esna district) and Aswan (Edfu district). The estimated budget details with respect to component and funding source is presented in Table 1.

Table 1. SPS Preparation Phase Budget by Component and by Funding Source (DKK Million)

COMPONENT	TOTAL	Danida Grant	GOE Grant	Users
<b>I. National Reform &amp; Capacity Development</b>	<b>15</b>	<b>15</b>	<b>0</b>	<b>0</b>
• SPS Danida Advisory Units (Cairo, Aswan and Qena)	3	3	-	-
• Sector Reform, including contribution to the integrated Action Plan for the implementation of the Sector Reform	6	6	-	-
• Capacity Development with focus on tasks that support the establishment and functions of the PEAs in Aswan and Qena	6	6	-	-
<b>II. Aswan Water Supply &amp; Sanitation*</b>	<b>31</b>	<b>22</b>	<b>7½</b>	<b>1½</b>
• Continuation of the ongoing Institutional Support to AWA (including Water Demand Management Programme)	16	13	3	0
• Rural WS&S (in addition to ongoing activities in Edfu)	10	6	3	1
• Small Towns WS&S with initial focus on Edfu District	5	3	1½	½
<b>III. Qena Water Supply &amp; Sanitation**</b>	<b>56</b>	<b>39</b>	<b>15½</b>	<b>1½</b>
• Institutional Support to QWA (including Water Demand Management Programme)	41	30	11	0
• Rural WS&S with initial focus on Esna District	10	6	3	1
• Small Towns WS&S with initial focus on rehabilitation of Esna Medina Water Supply	5	3	1½	½
<b>Unallocated</b>	<b>8</b>	<b>8</b>	<b>0</b>	<b>0</b>
<b>GRAND TOTAL</b>	<b>110</b>	<b>84</b>	<b>23</b>	<b>3</b>

Note\*: Aswan Water Authority Project (DKK 34 Million Danida + DKK 3 Million GOE grant not included).

Note\*\*: The Esna Wastewater Project financed by Danish Mixed Credit (DKK 90 Million) and GOE and user funds (DKK 90 Million) is not included in the budget estimate.

Note\*\*\*: The budget for the three components include 8% contingency.

## 6. SPS Phase 1 (3 Years)

The total budget of the subsequent three-year SPS Phase 1 is DKK 555 Million (Danida grant DKK 362 Million; GOE contribution DKK 150 Million; user payment DKK 43 Million). The main activities will be a continuation and consolidation of the activities carried out during the Preparation Phase with increased capital investments in rural and small towns water supply and sanitation following the GOE final approval of the Sector Reform Framework and Legislation. The estimated budget details with respect to component and funding source is presented in the following Table 2.

Table 2. SPS Phase 1 Budget by Component and by Funding Source (DKK Million)

COMPONENT	TOTAL	Danida Grant	GOE Grant	Users
<b>I. National Reform &amp; Capacity Development</b>	<b>17</b>	<b>17</b>	<b>0</b>	<b>0</b>
• SPS Danida Advisory units (Cairo, Aswan and Qena)	4	4	-	-
• Continuation of Sector Reform Support and Capacity Development with focus on tasks that support the functions of the PEAs in Aswan and Qena	13	13	-	-
<b>II. Aswan Water Supply &amp; Sanitation</b>	<b>174</b>	<b>101</b>	<b>57</b>	<b>16</b>
• Continuation of the Institutional Support to AWA (including Water Demand Management Programme)	11	8	3	0
• Expansion of the Rural WS&S programme	82	44	30	8
• Expansion of the Small Towns WS&S programme	81	49	24	8
<b>III. Qena Water Supply &amp; Sanitation*</b>	<b>312</b>	<b>192</b>	<b>93</b>	<b>27</b>
• Continuation of the Institutional Support to QWA (including Water Demand Management Programme)	38	28	10	0
• Expansion of the Rural WS&S programme	170	102	51	17
• Expansion of the Small Towns WS&S programme	104	62	32	10
<b>Unallocated</b>	<b>52</b>	<b>52</b>	<b>0</b>	<b>0</b>
<b>GRAND TOTAL</b>	<b>555</b>	<b>362</b>	<b>150</b>	<b>43</b>

Note\*: The Esna Wastewater Project financed by Danish Mixed Credit (DKK 90 Million) and GOE and user funds (DKK 90 Million) is not included in the budget estimate.

Note\*\*: The budget for the three components include 8% contingency.

## 7. Process Action Plan

The revised Process Action Plan and milestones for the SPS and the Esna Wastewater Project from to date and until the anticipated start of the SPS is presented in Table 3.

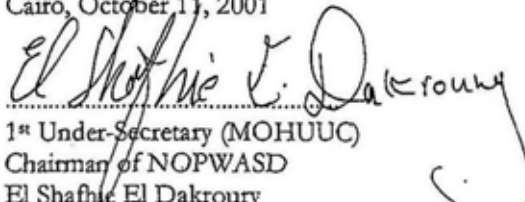
Table 3. Process Action Plan for the SPS and Esna Wastewater Project

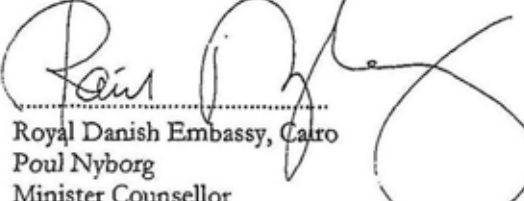
DATE	SPS PROGRAMME	ESNA WASTEWATER PROJECT (MIXED CREDIT)
October 2001	Addendum to MoU of March 2001 signed. Final SPS Document	Pre-qualification of contractors
November 2001	Local consultancy (Embassy grant) for Technical Assistance to reforms at national and Qena level (November 2001 to January 2003)	Feasibility Study, Engineering Design and Tender Documents completed.
December 2001	Presidential Decree for establishment of a PEA in Qena governorate	
January 2001		Danida Appraisal and Tendering (if positive)
February 2002	Government of Denmark approval of 5 years SPS	
March 2002	5 years SPS (Preparation Phase & Phase I), Government Agreement signed.	
July 2002	Recruitment of Danida Advisers (3) Tendering for Danish and Egyptian Consultants	
October 2002		
November 2002	5 years SPS (Preparation Phase & Phase I), Government Agreement ratified	
December 2002	Contracts with Danida Advisers (3) Contracts with Danish and Egyptian Consultants	
January 2003	Start of SPS	
December 2003	Review of SPS including assessment of the progress of sector reforms – in particular the Law on Concessions and the Establishment of a Regulatory Agency	

## 8. Approval by the Governments of Egypt and Denmark

This Addendum updates the strategy for the SPS Agreement and its implementation. It supplements the agreements on the scope and conditions for the SPS (and its Process Action Plan) made in the MoU of March 2001. The proposals will be subject to approval by the governments of Egypt and Denmark.

Cairo, October 11, 2001

  
 1<sup>st</sup> Under-Secretary (MOHUUC)  
 Chairman of NOPWASD  
 El Shafiq El Dakrouy

  
 Royal Danish Embassy, Cairo  
 Poul Nyborg  
 Minister Counsellor

添付資料 - 8 維持管理費（電気代・薬品費）算定根拠

1. 電気代の算定根拠（表 - 1）

表 - 1 電気代

2010年予測

施設名	配水量 (m <sup>3</sup> /年)	単価 (LE/m <sup>3</sup> )	電気代 (LE/年)
[上水道]			
・浄水場	189,532,000	0.065	12,319,580
・コンパクトユニット	5,405,750	0.057	308,128
・井戸	64,218,000	0.049	3,146,682
[下水道]			
・下水処理場 <sup>*1</sup>	169,050,000	0.038	6,423,900
	259,155,750		22,198,290

注) 1. 主要15都市及び主要16村落の下水処理場が2007年までに完成と想定

2003年推定(シミュレーション)

施設名	配水量 (m <sup>3</sup> /年)	単価 (LE/m <sup>3</sup> )	電気代 (LE/年)
[上水道]			
・浄水場	83,650,000	0.065	5,437,250
・コンパクトユニット	7,787,500	0.057	443,888
・井戸	80,272,500	0.049	3,933,353
[下水道]			
・下水処理場	29,200,000	0.038	1,109,600
	171,710,000		10,924,090

注) 上水道の単価は2003年8月～10月の実績値を採用

下水道の単価は2002/03年度の実績値を採用

増圧ポンプ場(上水)及び中継ポンプ場(下水)も含む。

2. 薬品代の算定根拠（表 - 2）

表 - 2 薬品（塩素・硫酸アルミニウム）代の算定根拠

浄水場名	配水量 (m <sup>3</sup> /年)	対象水量 x 1.1	単価(LE/m <sup>3</sup> )		薬品コスト(LE/年)		
			塩素	硫酸バンド	塩素	硫酸バンド	合計
Zagazig	27,216,000	29,937,600	0.0140	0.0133	419,126	398,170	817,296
Abassa	47,250,000	51,975,000	0.0140	0.0133	727,650	691,268	1,418,918
Kafr Saqr	36,288,000	39,916,800	0.0140	0.0133	558,835	530,893	1,089,729
Faqous	18,144,000	19,958,400	0.0140	0.0133	279,418	265,447	544,864
Huseinia	24,192,000	26,611,200	0.0140	0.0133	372,557	353,929	726,486
Hihya	12,250,000	13,475,000	0.0140	0.0133	188,650	179,218	367,868
Minya El Qamh	18,144,000	19,958,400	0.0140	0.0133	279,418	265,447	544,864
Compact Unit	5,405,750	5,946,325	0.0140	0.0133	83,249	79,086	162,335
	188,889,750	207,778,725	0.01365(平均値)		2,908,902	2,763,457	5,672,359

注) 1. 単価は「シャルキーヤ県北西部上水道整備計画」基本設計報告書の維持管理費用の値を採用

2. 対象水量は、浄水場での処理水量で配水(給水)量に逆洗水量など場内使用水を考慮して配水量の10%を加えた水量である。

なお、「シャルキーヤ県北西部上水道整備計画」基本設計調査報告書で算定されたヒヒヤ浄水場の薬品投入量、単価等については、表 - 3を参照。

表 - 3 ヒヒヤ浄水場における薬品費の算定

費目	想定費用						
	項目	A	B	C (A x B)	D (C x 365 日/年)	E	F (D x E)
1. 塩素費		投入量 (kg/hr)	運転時間 (hr/日)	日消費量 (kg/日)	年間消費量 (Ton/年)	塩素購入費 (LE/Ton)	年間費用 (LE)
	前塩素、中塩素、 後塩素の合計	16	24	384	140	1400	196,224
2. 硫酸 アルミニウム費		A	B (A x 365 日/年)	C 硫酸アルミニウム			D (B x C)
		日消費量 (kg/日)	年間消費量 (Ton/年)	購入費 (LE/ton)			年間費用 (LE)
	固形硫酸アルミニウ ム (14%濃度)	660	241	775			186,698
備考: 日消費量は、平均消費量の想定値を示す。							