Appendix A – Description of the Services
  - Terms of Reference
  - Methodology

Terms of Reference

for
CONSULTING SERVICES FOR TECHNICAL ASSISTANCE TO THE MINISTRY OF WATER AND ENVIRONMENT (MWE), TECHNICAL SECRETARIAT FOR THE WATER AND SANITATION SECTOR REFORM (TS) AND PROJECT MANAGEMENT UNIT (PMU)

1) Background

The Ministry of Water and Environment (MWE) was established in 2003. Its mandate spans three water sub-sectors (urban WSS, rural WSS and integrated water resources development and management) plus the environment sector. The irrigation sub-sector, remains under the Ministry of Agriculture and Irrigation.

The mandate of the MWE defines its role as a sector development entity, with essentially three functions that are of relevance to this Consultancy; namely: policy development, sector-wide planning and coordination, and monitoring and evaluation. The implementation functions; i.e., building water and sanitation schemes, undertaking field studies of water resources or environmental evaluation or monitoring are the responsibility of several autonomous entities, each responsible for a sub-sector.

In 1997, Cabinet Resolution 237 was issued, embracing a policy of decentralization, corporatization, commercialization and public-private-partnership (PPP) for the urban water supply and sanitation sub-sector. The Technical Secretariat for the Urban Water Supply and Sanitation Sector Reform (TS) was established in 1997, within the then Ministry of Electricity and Water and currently within the MWE, to develop and build capacity for the reform policy. The TS reports to an inter-ministerial Steering Committee, the Chairman of the TS works closely with the Minister of Water and Environment. The TS receives long-term technical support from the GTZ (German Technical Cooperation) and co-operates closely with the World Bank and other donors in all aspects of the reform process.

The essence of the reform policy is the decentralization of urban WSS service provision to Local WSS Corporations (LCs) and autonomous Public Utilities (PUs). The aim is to improve service delivery and enhance community representation in the management of the LCs and PUs (LCs are supervised by Board of Directors (chaired by governors), while PUs are supervised by advisory boards).

Consequently, the centralized arrangement of the National Water and Sanitation Authority (NWSA) with a Head Quarter (HQ) in Sana’a and branches in towns and cities throughout the country is being progressively replaced by a decentralized system of Local Corporations and autonomous Public Utilities (ex-NWSA branches) operating independently of NWSA-HQ. So
far the decentralization has covered 24 towns (9 LCs in the capitals of nine governorates and 15 PUs). Around sixteen NWSA-branches are still depending on support from NWSA-HQ and/or from LCs. Current donor support covers five branches (the “NWSA branches”), providing technical assistance to those branches to become autonomous.

During 2000 and 2001 seven LCs have been established by Republican Decrees, supervised by their Board of Directors and directly reporting to the Ministry of Water and Environment (MWE). Two more LCs were established during 2005 (Al Bayda and Hajjah). It is foreseen that more LCs will be established in the near future. Capacity building and institutional strengthening of LCs is ongoing, however, it needs to be further developed to enhance performance and improve service delivery. Especially senior staff within LCs will need to be further trained in the fields of strategic management, financial management, and project planning, implementation and management.

Human resources development (HRD) and capacity building are essential components of the reform process. A ten-years period is envisaged to complete the reform process.

Another cornerstone of the reform program is to separate policy making and regulatory functions from operational and managerial functions of service provision. Regulatory functions are expected to be established and developed in the coming years under an independent regulatory body.

The World Bank supports the ongoing reform process through an Adaptable Lending Program (APL), which provides the financing for the reform process and the investments needed for the development of the WSS services.

2) Objectives of the Consulting Services / Technical Assistance

The overall objective of the Consulting Services (or the Technical Assistance, TA) is to provide technical assistance to the MWE in support of the implementation of the institutional component of the APL. Specifically, the TA will consist of 3 Components (A, B and C); namely:

A) The Head Offices of the MWE. The objective in this Component is to build/strengthen the capacity of each Directorate General (GD) of the MWE in implementing its mandate in line with the overall mandate of the MWE (which essentially comprises policy development, sector-wide planning and coordination, and monitoring and evaluation). The aim is to develop a system for execution, flow and follow-up of work of these GD’s internally among the sections of each GD and among the various GD’s of the MWE and externally between each GD and its counterpart department(s) in the line entities on the one hand and its relevant Ministries and agencies on the other hand.

Three subcomponents are envisaged:

i) Sub-component 1: dealing with sector-wide planning and coordination, to develop the system for work execution, flow and monitoring and evaluation at the GD’s of the Ministry Head Offices and counterpart/ relevant departments in the line entities.

1 See the attached organogram.
2 Line entities are those which are under the MWE (see the organogram). They include the National Water Resources Authority (NWRA), the General Authority for Rural Water Supply Projects (GARWSP), The National Water and Sanitation Corporation (NWSC), the nine Local Water Supply and Sanitation Corporations (LCs), the Environment Protection Authority (EPA). Relevant or affiliated ministries and agencies include, but are not limited to, the ministries of Finance (MF), Planning and International Cooperation (MPIC), Legal Affairs (LA), Agriculture and Irrigation (MAI), etc. As well as agencies like the Central Organization for Control and Auditing, Social Fund for Development, Public Works Project, etc.
ii) Sub-component 2: dealing with information and communication technology. The Consultant is to integrate the output from subcomponent (1) into a Management Information System.

iii) Sub-component 3: supporting implementation of the outcomes/ recommendations of the Regulation Study (the Study is currently under preparation).

The detailed ToR's for this component are given in Annex A. This component will be supervised on a day-to-day basis by the Deputy Minister for Water Issues.

B) The Technical Secretariat (TS). The main objective in this Component is to implement, under supervision by of the Technical Secretariat the following four sub-components:

i) Subcomponent (1): Performance evaluation of the nine LCs to improve their service delivery and financial viability. This sub-component comprises a description and assessment to the extent possible of all financial, IT, economic, and accounting issues regarding planning, design, analysis and implementation of works carried out by these LC's, assessed against all "standard" major functions and practices within a water and sanitation service utility.

ii) Subcomponent 2: The design (and possibly partial implementation) of a capacity building program for senior staff (management and technical staff) in the nine LC's.

iii) Subcomponent 3: Decentralization assessment for the remaining NWSA branches and scheme of implementation, and

iv) Subcomponent 4: Supporting the implementation of the outcomes/ recommendations of the Regulation Study (the Study is currently under preparation).

The detailed ToR's of this Component are given in Annex B. This component will be directly supervised on a day-to-day basis by the Chairman of the Technical Secretariat (see footnote 6).

C) The Project Management Unit (PMU): The objective is to support the PMU in the day-to-day Contract management issues, quality control and review of studies, and ad-hoc technical assistance for sector related issues. Detailed ToR's of this Component are given in Annex C. This component will be directly supervised on a day-to-day basis by the Director of the PMU (see footnote 6).

---

3 A Steering Committee headed by the Minister of Water and Environment, with adequate representation of concerned departments and entities, will monitor the Consultant's work and outputs. It will also approve any amendments to the scope of work, objectives, etc.

4 The PMU manages more than 20 contracts of infrastructure construction (water supply and sanitation), consulting services (design and tender documents preparation), environmental assessment, Master Planning, etc.

5 Studies include reports and documents currently under preparation by various consultants contracted by the PMU for LC's and 14 smaller towns.
Section 6  Standard Forms of Contract

Organogram of the Ministry of Water and Environment (MWE)

Although these Directorate Generals (DG's) are shown linked to the Minister, they are commonly referred by the Minister to the respective Deputies when dealing with issues related to a given sector.

- Advisers to the Minister - Projects' Steering Committees (UWSSP, RWSSP, SBWMP)

Ministry's Cabinet/Council

Technical Secretariat for WSS Sector Reform (TS)

National Water Resources Authority (NWRA)

Environment Protection Authority (EPA)

National Water & Sanitation Corporation (NWSC)

Local Water Supply & Sanitation Corporations

General Authority for Rural Water Supply Projects (GARWSF)

* UWSSP= Urban Water Supply and Sanitation Project, RWSSP= Water Supply and Sanitation Project for Rural Areas, SBWMP= Sana'a Basin Water Management Project
Section 6 Standard Forms of Contract

Annex A

Detailed Terms of Reference for Component (A)

TECHNICAL ASSISTANCE TO THE HEAD OFFICES OF THE MINISTRY OF WATER AND ENVIRONMENT

The main objective of this Component of the Technical Assistance is to build/ strengthen the capacity of each General Directorate (GD) in the MWE in implementing its mandate in line with the overall mandate of the MWE (policy development, sector-wide planning and coordination, and monitoring and evaluation) as detailed for each GD in the MWE's By-laws.

The aim is to develop a system for execution, flow and follow-up of work of the various GD's at four levels:

1. internally at the GD level, among the various sections which make-up a given GD,
2. internally at the level of the MWE Head Offices, among the various GD's,
3. externally between each GD and its counterpart or relevant department(s) in the line entitie(s); i.e; entities which are part of the MWE
4. externally between each GD and its relevant/ line departments in other Ministries (e.g. Ministry of Planning and International Cooperation) and agencies outside the domain of the MWE (e.g., Social Fund for Development, Projects within the Ministry Head Offices, Public Works Project, etc).

The "system for execution, flow and follow-up of work" is used here to refer to a systematic and streamlined daily functioning of each section in a given GD according to standardized procedures to ensure systematic interaction and smooth flow and follow-up of work at, and with, the four levels. The standardized procedures shall be based on the mandate of each GD.

For this purpose, the mandate of each GD shall be carefully examined to distinguish between daily, monthly quarterly and annual functions or tasks. To the extent possible, standardized forms for the work processing shall be designed by the Consultant and tested.

A periodic reporting system (by the GD's as well as the line entities) shall also be proposed, in line with the monitoring and evaluation mandate of the MWE. The structure and contents of the various kinds of reports shall be also outlined by the Consultant. The follow-up functions shall also be integrated into the proposed system (e.g., through standardized forms, MIS, etc).

These are the three projects shown in the organogram, which are supervised by Steering Committees headed by the Minister of Water and Environment.
The GD's and entities that will be engaged in this component will be those dealing with Water Resources, Rural and Urban WSS, Planning and International Cooperation, Legal Affairs, Finance, Internal Auditing and Inspection and, to the extent relevant for management of water supply quality and wastewater, the GD for Environment Policies and Programs (see the MWE organogram).

As pointed out in the previous section on "Objectives of the Technical Assistance/Consultancy", this Component will be supervised on a day-to-day basis by the Deputy Minister for Water Affairs.

Two sub-components are envisaged; namely:

1) Sub-component 1: dealing with sector-wide planning and coordination. Focus will be on policy development, sector-wide planning and coordination and monitoring and evaluation in the fields of water resources, urban WSS, rural WSS and environmental management to the extent relevant to water. The role of the GD for Planning and International Cooperation (PIC) in coordinating the preparation of the annual investment plans of the various entities under the MWE, taking into consideration the policies, action plans and investment program of the water sector (National Water Sector Strategy and Investment Program, NWSSIP).

This sub-component shall also examine other tasks of the GD of PIC with regard to monitoring of implementation of the investment program of the various water and environment entities, the annual plan of reports/issues to be submitted to the Cabinet of Ministers, the progress of the Five-Year Development Plan, etc.

As part of this sub-component, human resources development, targeting the various GDs of the MWE together with their counterpart and relevant departments in the relevant entities. This component shall be carried out in coordination with the experts working on Components (B), particularly the water sector planning and management expert and the finance expert working on the WSS utilities (Component B).

2) Sub-component 2: dealing with information and communication technology. The Consultant is to integrate the output from subcomponent (1) into a Management Information System.

3) Sub-component 3: supporting implementation of the outcomes/recommendations of the Regulation Study (the Study is currently under preparation).

**SUB-COMPONENT 1: SECTOR-WIDE PLANNING AND MANAGEMENT**

**OBJECTIVE**

The expert for this subcomponent shall work closely with the Deputy Minister for Water to build/strengthen the capacity of the various GDs of the MWE in implementing their mandates, particularly with respect to those tasks/functions relevant to policy development, sector-wide planning and coordination, and monitoring and evaluation.

**SCOPE OF WORK**
In particular, the tasks of the sector-wide planning and management expert will include, but are not limited to:

a) Study and analyze the mandate and staffing competency of each GD within the MWE Head Offices, together with the mandates of line entities which are under the MWE, to determine the works to be executed by each GD's within the MWE and its counterpart or relevant department within the line entity(ies) and the inputs and outputs to be systematically delivered/ received by each GD/ department for mandate implementation. Again, when reviewing the mandates of the GD's/ departments (given in the By-laws of the MWE and line entities) focus shall be made on those tasks with relevance to policy development, sector-wide planning and coordination and monitoring and evaluation.

b) Develop the structure of workflow at the four levels mentioned earlier, for work execution, flow and follow-up.

c) Propose, test and implement the procedures, modalities and standard forms to implement the workflow structure, which is to be followed by the various entities to regularly and routinely deliver their inputs and to receive outputs from the MWE.

**REPORTING REQUIREMENTS (REGARDING A-C)**

. This report shall be in two volumes:

a) Volume (I): containing the proposed system for execution, flow and follow-up of work. This should include

i) Schematics of workflow at the four levels mentioned earlier,

ii) Work processing forms for standardization of works at the various sections and GD's.

iii) Short description of the daily, monthly, quarterly and annual tasks (periodic including reporting tasks) of each sub-section, section and GD within the MWE Head Offices and the offices of the Minister and the Deputy Ministers.

iv) The structure and outline of contents of the various types of reports (monthly, quarterly and annual), as determined by the Consultant, in consultation with the Component supervisor, required to fulfill the mandate of each GD.

v) Input requirements from counterpart departments in the line entities, along with schematic chart showing their points of engagements in work execution; standard work processing forms and daily, monthly, quarterly and annual inputs.
Sub-component 2: Information and communication technology (ICT), with relevance to water and environment applications

OBJECTIVE

The overall objective is to further the application of ICT’s in the MWE Head Offices and in line entities so as to expedite and facilitate the flow of work among various GD’s and departments.

Specifically, the aim is to automate or develop into an electronic form the flow of inputs and outputs among the GD's and the counterpart/ relevant departments in the line entities. This entails integrating into a management information system (MIS) the existing MIS in the Urban Water Supply and Sanitation (USSP) Sub sector, the process of work flow among the various GD's and counterpart/ relevant departments in the line entities (information, standard forms, reporting forms, follow-up procedures, monitoring and evaluation information, personnel data and training information, and other outputs from subcomponent 1).

The MIS will facilitate the exchange and the processing of reports and information at the MWE Head Offices and line entities. It should also integrate any MIS's which already exist some entities.

The expert will design the system in such a way that it will be in modules so that, if needed, only relevant modules will be installed at a given GD or department. A local software company will be recruited according to IDA procurement procedures to do the actual programming development and installation of the software in the various entities and departments in close collaboration with the expert.

The debugging of the system will be the responsibility of the IT expert. Training and supporting the concerned staff in implementing the system will be the responsibility of the software company and the IT expert in collaboration with HRD and Water Sector Planning and Management experts. The system will be installed and implemented in the MWE Head Offices and, to the extent needed, in the counterpart/ relevant departments in line entities.

An elaboration of an action plan for the required ICT infrastructure and applications that takes staff development in ICT is required.

SCOPE OF WORK

The principal components of the action plan on ICT consist of:

7 Costs of software and ICT infrastructure shall be covered from the Provisional Sum.
1) Detailed requirements and specifications of the internal and external connectivity required at the MWE Head Offices and the line entities. This will be based on a thorough review of the system of work execution, flow and monitoring and evaluation; as proposed by the water sector planning and management expert (subcomponent 1)

2) Specifications of the hardware/software components required at each connection point (GD in the MWE Head Offices and department in line entity),

3) Definitions of information systems required at connection point and the information profiles to be exported to and from each entity to the Ministry,

4) The organizational structure of the IT unit and the job descriptions of human resources needed to be deployed at each connection point,

5) Procedures and modalities to be followed in dealing with the Internet,

Furthermore the consultant will:

6) Produce project document(s) necessary for the implementation of the action plan,

7) Participate in the evaluation of bids/offers received for ICT infrastructure procurement (software and hardware) and supervise the installation and testing of the procured goods/services.

8) Adapt and integrate into the M&E module of the developed MIS the existing package used by the Ministry of Planning and International Cooperation for M&E of the Poverty Reduction Strategy. This package is to be adapted for M&E of the National Water Sector Strategy and Investment Programme (NWSSIP).

9) Integrate into the M&E module of the developed MIS the existing system for Performance Indicators of the water supply and sanitation corporations.

10) Assist and train the planning department of the MWE in the analysis of MIS-reports received from the various entities under the mandate of the MWE.

11) Assist and train the other GD's within the MWE Head Offices in the use of the MIS-system for their relevant mandates,

12) Assist and train the staff of the M&E unit in the implementation and follow-up of the M&E system for NWSSIP,

13) Provide necessary training for the relevant departments in line entities, to the extent needed for implementation of the developed MIS.