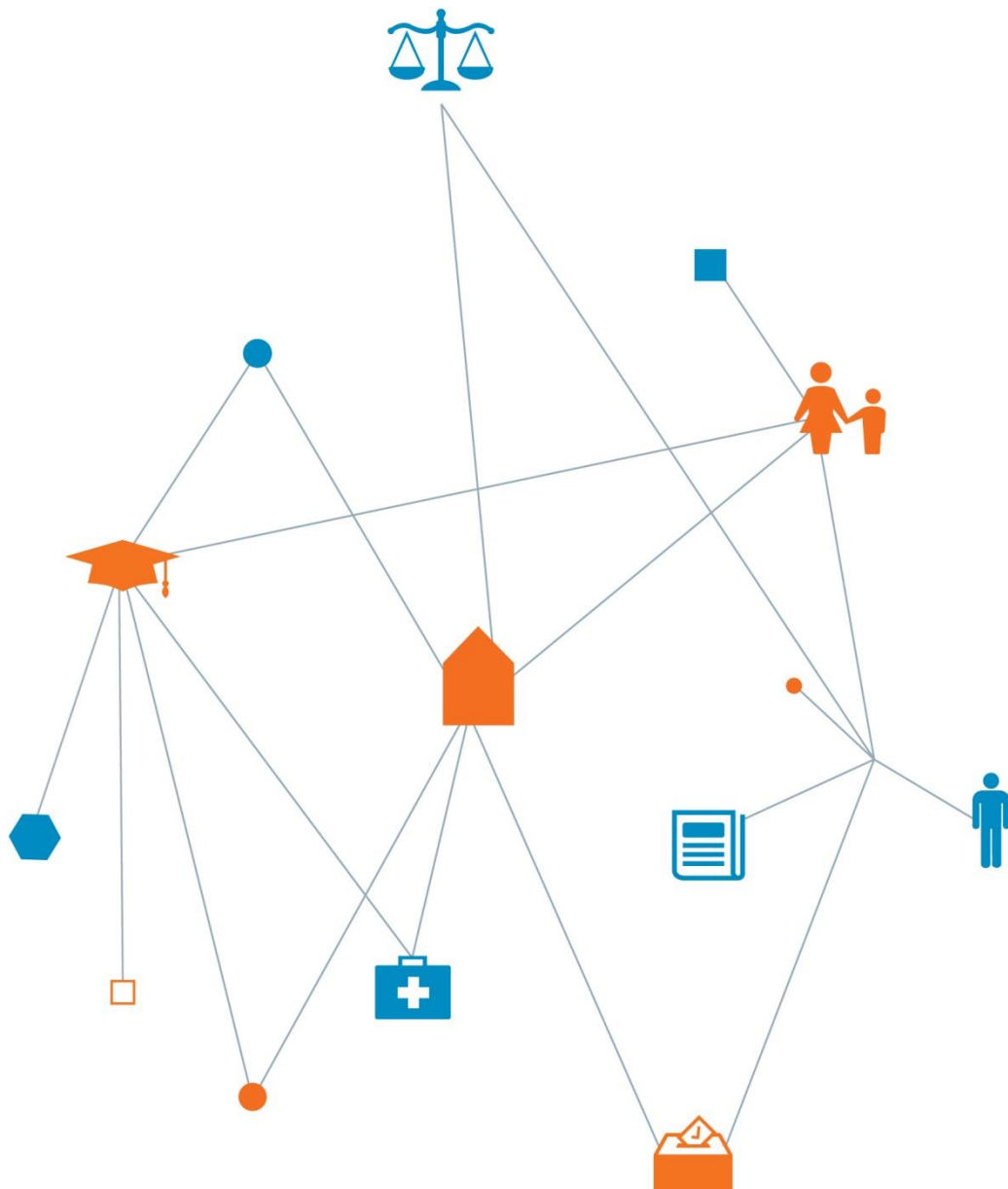coffey

One WaSH National Programme - Inception Report

Volume 1: Technical and Managerial Support for OWNP M&E

IRC

One WaSH National Programme – Inception Report, Volume 1

Department for International Development (DFID)

Technical and Managerial Support for Strengthening the Monitoring and Evaluation (M&E) system of the One WaSH National Programme (OWNP) of Ethiopia, and for Conducting an Impact Evaluation

Contract Reference PO6888

List of Partners

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This document has been approved for submission by Coffey's Project Director, based on a review of satisfactory adherence to our policies on:

- Quality management
- HSSE and risk management
- Financial management and Value for Money (VfM)
- Personnel recruitment and management
- Performance Management and Monitoring and Evaluation (M&E)

Richard Hooper, Dr Robina Shaheen - Project Directors

Signature:

Abbreviations and Acronyms

AfDB	African Development Bank
Akvo FLOW	A data collection tool
API	Application Programming Interface
BoE	Bureau of Education
BoFED	Bureau of Finance & Economic Development
CBOs	Community Based Organizations
CBPF	Capacity Building Pool Fund
CCRDA	Consortium of Christian Relief and Development Association
CD	Compact Disc
CMP	Community Managed Project
CSA	Central Statistical Agency
CSOs	Civil Society Organizations
CSV	Comma Separated Values (a file format)
CWA	Consolidated WaSH Account
COWASH	Community-Led Accelerated WASH
DFID	Department for International Development
DHS	Demographic Health Survey
IFMIS	Integrated Financial Management Information System
EMIS	Education Management Information System
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
FRMP	Fiduciary Risk Mitigation Plan
GPS	Global Positioning System
GTP	Growth and Transformation Plan
HEH	Hygiene and Environmental Health
HEW	Health Extension Worker

HMIS	Health Management Information System
HRD	Human Resource Development
HR	Human Resource
HSC	Health Science College
HSDP	Health Sector Development Program
IBEX	Integrated Budget and Expenditure system
ICRC	International Committee of the Red Cross
ICT	Information Communication Technology
IDA	International Development Assistance
IPs	Implementing Partners
IRC	International think-and-do tank focused on WaSH
IT	Information and Technology
JMP	Joint Monitoring Program
JTR	Joint Technical Review
KPI	Key Performance Indicators
M&E	Monitoring & Evaluation
MDG	Millennium Development Goal
MIS	Management Information Systems
MoE	Ministry of Education
MoFED	Ministry of Finance and Economic Development
MoH	Ministry of Health
MoU	Memorandum of Understanding (signed in 2012 between OWNP partners MoWE, MoH, MoE and MoFED)
MoWE	Ministry of Water and Energy (later Ministry of Water, Irrigation and Energy)
MoWIE	Ministry of Water, Irrigation and Electricity (from October 2015, previously Ministry of Water, Irrigation and Energy)
MSF	Multi-Stakeholder Forum
NGO	Non-Governmental Organization
NWCO	National WaSH Coordination Office
NWI	National WaSH Inventory

NWSC	National WaSH Steering Committee
NGO	Non-Governmental Organization
OWNP	One WaSH National Program
PBS	Promoting Basic Services (a program)
PMU	Project Management Unit
POM	Programme Operations Manual (for Consolidated WaSH Account)
PUT	Professionals United Together
RPF	Resettlement Policy Framework
RWCO	Regional WaSH Coordination Office
RWSC	Regional WaSH Steering Committee
S&HWG	Sanitation and Hygiene Working Group
SLA	Service Level Agreement
SNV	Netherlands Development Organization
TVETC	Technical and Vocational Education and Training College
TWU	Town Water Utility
UAP	Universal Access Program
UNICEF	United Nations Children's Fund
USD	United States Dollar
WaSH	Water, Sanitation and Hygiene
WaSH M&E MIS	Water, Sanitation and Hygiene Monitoring & Evaluation Management Information System
WaSHCO	Water, Sanitation and Hygiene Committee
WHO	World Health Organisation
WIF	WaSH Implementation Framework
WoFED	Woreda Finance and Economic Development Office
WPs	Water Points
WSF	Water and Sanitation Forum
WSP	Water and Sanitation Program (administered by the World Bank)
WSSD	Water Supply and Sanitation Directorate
WSWG	Water Sector Working Group

WWT	Woreda WaSH Team

Contents

Executive Summary

This is Volume 1 of the Inception Report which is the final deliverable of the inception phase for technical and managerial support for strengthening the M&E system of the One WaSH National Programme (OWNP). Volume two of the Inception Report focused on the impact evaluation of the OWNP whereas Volume 1 sets out a plan to operationalise an enhanced M&E framework for monitoring and reporting on the programme, the ICT-enabled tools and operational plans that are needed to implement this enhanced framework and data dissemination and use activities to ensure use.

Basis of Recommendations

This Inception Report is based on the findings of a Diagnostic Review Report which was submitted to DFID on 8 May and constituted the first deliverable of a six month inception phase which ran from May to September 2015. The Diagnostic Review Report provided an analysis of the current state of the OWNP and its findings include:

- The OWNP is a challenging multi-sector (water, education, health and finance) programme to report on with emerging coordination structures that need to be strengthened. Improvements in WaSH M&E can support this process.

- Existing WaSH M&E processes are sectoral and fragmented with relatively little experience to date of integrated reporting.

- Existing IT-enabled systems are in use in all sector ministries to monitor aspects of WaSH, although not yet at national level in water supply.

- The National WaSH Inventory has been a major advance with its results used in critical processes and decision making. There is potential for further integration and ownership of its data across sectors.

- WaSH M&E MIS software that has been in development since 2010 is now functional but is not yet operational (i.e. in use at all administrative levels) and does not fully meet current requirements.

- Introduction of ICT is at an early stage across WaSH sectors, but with developments underway in all WaSH sectors. There is potential to benefit and learn from these initiatives.

- Quality assurance has not received major attention yet with limited practice of triangulation or validation of data.

- There is strong demand for data but the use of data is generally neglected because it is not accessible or limited resources and priority is allocated to analysis and use.

- There are substantial capacity constraints which require a broad approach to capacity development.

- Development partners, through a range of projects, have made substantial financial commitments to WaSH M&E. As well as DFID's TA and financial support for the NWI this also includes the Capacity Building Pool Fund, AfDB financing through the Rural Water Supply and Sanitation Initiative Trust Fund, CWA Capacity Building activities, and through the Promoting Basic Services program.

[See chapter 2 for a detailed discussion of these issues. See table 1, section 1.2.2 for a summary of the current WaSH M&E system.]

Key Recommendations and Actions

On the basis of these findings, this report defines:

A. **An enhanced M&E Framework** for OWNP monitoring and reporting in an integrated manner across the sector ministries and other development partners.

B. An **Integrated Reporting Mechanism** across all sector ministries to enable the enhanced M&E framework.

C. Procurement and deployment modalities of an **ICT-enabled WaSH Management Information System (MIS)** and a mobile data collection solution to operationalise the enhanced M&E framework.

D. A **Four Year Work Plan** - made up of a number of 'sub-plans' in key areas – for capacity development of ministry staff and roll-out modalities of the use of these ICT-enabled technologies for monitoring and reporting nationwide.

The following recommendations and actions are proposed in relation to each of the above.

A. Enhanced M&E Framework

This report recommends an **updated indicator set** that can be collected across all sectors for integrated WaSH monitoring and reporting. This proposed set consists of a **set of 14 Core Key Performance Indicators and 80 Supplementary Indicators** which can be added on in a phased manner as M&E capacities improve across sector ministries and inter-agency coordination mechanisms are strengthened. It is anticipated that these indicator sets will be discussed further to align them with GTP2 and other requirements. [See section 3.3.1, Table 1 for a list of core indicators and Annex 3 for a full list of indicators, definitions and data sources. See section 3.5 for an indicative calendar which synchronises activities around collection, processing and analysis of these indicators with ministry reporting requirements on quarterly and annual basis.]

It is inevitable that monitoring and reporting requirements will keep changing over time in response to changing WaSH trends and the needs of various organisations involved in OWNP. A regular system of review and updating of indicators across sector ministries is essential. This report earmarks a set of "**Other Standard Indicators**" but does not specify these indicators at this point. This set of indicators will be gradually developed and kept updated as the programme runs its course.

The combined set of Core and Supplementary Indicators will also be able to **track environmental, social, resettlement and fiduciary risks** across WaSH sectors. [See section 3.4 for a discussion of how these risks will be tracked.]

B. Integrated Reporting Mechanism for Enhanced M&E Framework

This report recommends an integrated reporting mechanism whereby existing sectoral MIS systems (owned by line ministries in health, education and finance) are used to collect data from local levels which is then **imported at the federal level** into an ICT-enabled WaSH MIS (**s**) housed in the Ministry of Water Irrigation and Electricity (MoWIE) to support both water supply reporting (on a quarterly and annual basis) and production of integrated OWNP reports at woreda, town, zone, regional, and federal levels. The WaSH MIS will also enable quick access to WaSH data at all administrative levels. This will require sector line ministries to enter into a **data sharing agreement**.

In the longer term, it is expected that as this system stabilises and strengthens, it will progress to the next level where WaSH data is imported into an ICT enabled WaSH MIS directly at **woreda (district) level**. This will require improved physical factors including electricity, computers and reliable internet connectivity, and strengthening over time of institutional capacity to coordinate the collection, processing and analysis of data across all woredas in the country which is why it is a longer term goal.

The **National WaSH Inventory (NWI) is proposed to be updated on a five yearly cycle**. It will complement the integrated reporting on a quarterly and annual basis as it can incorporate indicators which are more suitable for collection at longer intervals and will help to triangulate the data generated by the WaSH MIS. Last updated in FY2010-11, this report recommends the second update of the NWI to be completed by FY 2015-16.

The integrated reporting mechanism outlined above emerged as the **preferred option out of four options discussed in stakeholder consultation workshops** with OWNP line ministries, donors and development partners in August and September 2015. These four options were:

1. Using existing sector MIS systems (health, education and finance) and operationalising the existing water supply MIS to support water supply data management (both regular reporting and asset inventory data), together with integrated OWNP reports produced at all levels (woreda, town, zone, regional, federal).

2. Using existing sector MIS systems (health, education and finance) to collect data from local levels and operationalising a new, integrated WaSH MIS to both support water supply data management (regular reporting and asset inventory) and to provide access to WaSH data at all levels to support production of integrated OWNP reports (woreda, town, zone, regional, federal). Health, education and finance sector data is imported at federal level and made available at all levels downwards (regions, zones and woredas).

3. As in option 2 but with data imported from health, education and finance sector MIS systems at woreda (district) level for entry into the new, integrated WaSH MIS.

4. Integrated data collection through an annually updated National WaSH Inventory only without using sector MIS systems.

[See section 3.1 for a discussion of these options.]

C. Enhanced ICT-enabled WaSH Management Information System (MIS)

To enable integrated reporting on the enhanced M&E framework, this report recommends the use of ICT-enabled MIS. After assessing the current levels of ICT use in the four line ministries, this report recommends the following actions [see section 4.4 for detailed discussion of procurement aspects]:

- **Modify existing WaSH MIS software to incorporate limited, improved functionalities**: The current scope of the existing WaSH M&E MIS will be changed to support its operationalisation. It will refocus on the reporting and analysis requirements as well as local data storage, while most user data input functions will be disabled. The outputs will include online dashboards with customisable reporting templates for regular OWNP reporting. This is to be done through extending the contract to PUT, the developers of the current custom built software. After these modifications, the current MIS software will be able to improve processing of OWNP and NWI data and generate programme reports although it will not use data entry functionalities and would have limited scope.

- **Procure, in parallel, alternate WaSH MIS software**: It is recommended that Commercially-Available-Off-The-Shelf (COTS) software be procured in parallel to the modification work to the existing software and customised to develop a new WaSH MIS solution that can capitalise on the latest technology available in the market and have the flexibility and support systems in place for quicker deployment. As integrated reporting mechanisms strengthen after a year, this will give MoWIE the option of switching over to a more powerful MIS software application *should it be the case that the existing software is unable to meet all requirements even after modifications*.

Utilise mobile device–based data collection software: It is recommended that data collection, for OWNP reporting as well as NWI, be reported through the use of COTS mobile data collection software. It is important to ensure that the data collected through mobile devices is in a format that is compatible with both the current and proposed new MIS software.

Development for low connectivity contexts: Internet connectivity, while improving, remains a major challenge for ICT-based solutions. Some of the proposed mitigation strategies to overcome connectivity issues include:

- Paper-based systems will still be streamlined and improved as a back-up
- Mobile phones will have a feature to capture large sets of data
- Mobile phones to be synced at Woreda level and data to be made available in reusable format for later import to the MIS system
- MIS to have feature to import bulk data
- Offline tools for low-level data analysis to be created

Deploy experienced ICT Project Management Support: It is recommended to deploy specialist ICT Project Management support to design contracts and technical specifications, manage related procurement processes and ensure that the solutions procured meet contract requirements.

This report recommends **design criteria** and **requirement specifications** for both the MIS (current and new) and mobile data collection solutions. [See section 3.1 for design criteria, and sections 3.2-3.4 for requirement specifications.]

D. Four Year Operational Plan

This report provides a four year detailed work plan to ensure that the enhanced M&E Framework is adopted and related ICT systems developed, tested and rolled out across sectors in a **phased and sustainable** manner. Support is not restricted to technical issues by any means, but is comprehensive and multi-faceted to address the wider governance and political economy challenges in WaSH data use. Plans include four work packages related to 1) OWNP systems enhancement, 2) capacity development, 3) data dissemination and use and 4) synergy and

complementarity, and four sub-plans relating to procurement of ICT solutions, the National WaSH inventory, data quality assurance and sustainability (an exit plan). Beginning in November 2015, this plan sets out a timetable for the adoption and implementation of the enhanced M&E framework by February 2019. Key phases of this work plan [see annex 4 for a detailed GANNT chart] are outlined below:

- **February 2016**: Procurement of mobile data collection solution completed and ready for launch

- **September 2016**: Procurement, development, testing of upgraded existing software and new MIS software completed and ready for launch

- **October 2016**: Second update of NWI (NWI2) completed using mobile data collection

- **October 2016, 2017, 2018**: OWNP Integrated Annual WaSH Report published every October (with 2016 report produced manually without using integrated WaSH MIS software)

- **June 2017:** First wave roll-out of integrated MIS completed

- **February 2017:** First Ethiopia WaSH Atlas produced on basis of NWI2 data

- **May 2018:** Second wave roll-out of integrated MIS completed

- **December 2018**: All regions enabled to collect, process and report on data at kebele and water point levels

- **February 2019:** Hand-over to the National WaSH Coordination Office and exit of technical and managerial support team

The adherence to these timelines will very much depend upon the start date for the implementation phase.

The overall work plan **cascades into components or 'sub-plans'** with detailed activities for key areas: OWNP systems enhancement [see section 4.2], Capacity development [see section 4.3], Procurement [section 4.4], Synergy and Complementarity [section 4.5], NWI Renewal [section 4.6], Data Quality Assurance [section 4.7], Data Dissemination and Use [section 4.8] and Exit [section 4.9].

Budget Estimate

The total indicative budget to implement the enhanced OWNP M&E framework is estimated at **£15.94 / $24.44 million** [GBP: USD = 1.53330 as on 28 Oct 2015] over the period 2015-2019.

[See section 5 for a full set of figures.]

A yearly overview of the required budget is given below.

Budget Item	2015 (£)	2016 (£)	2017 (£)	2018 (£)	2019 (£)	Total
Fees (F)	73,675.13	698,128.16	352, 711.84	165,300.16	8,051.47	**1,297,866.76**
Expenses (E)	20,722.00	7,115,177.54	3,997,850.45	3,505,378.45	7,236.00	**14,646,364.44**
TOTAL(F+E)	**94,397.13**	**7,813,305.70**	**4,350,562.29**	**3,670,678.61**	**15,287.47**	**15,944,231.20**

This indicative budget requirement includes costs that are over and above the current contract value for the OWNP technical support team (a consortium of IRC and Coffey International) and also above DFID's £1 million Critical Gaps Fund which is earmarked for the NWI. Other development partners and key stakeholders have plans and proposals to support WaSH sector M&E.

Consequently, a **structured budget review process** immediately following the inception phase is recommended so that the Consolidated WaSH Account donor group (AfDB, UNICEF, DFID and the World Bank), the WaSH ministries and other development partners can agree on the budget line items and the resources to be shared to meet the outstanding OWNP requirements through the four year period.

1 Background and purpose

1.1 About this report

The UK Department for International Development (DFID) engaged the Coffey International Development and IRC consortium to provide technical and managerial support to the One WaSH National Programme (OWNP) in monitoring and evaluation (M&E) and to undertake an impact evaluation. Tasks over a four year period are related to three main areas: strengthening and coordinating M&E systems across the WaSH sectors (Task 1- led by IRC), promoting dissemination and use of WaSH data (Task 3 - also led by IRC), and undertaking an impact evaluation of the nationwide OWNP (Task 2 - led by Coffey).

Consultancy support to the National WaSH Coordination Office (NWCO) began in March 2015, and the inception report is the key output of the inception phase to September 2015. This part of the inception report is related to tasks 1 and 3 only and has been prepared by the OWNP M&E support team from IRC. The other part of the inception report is related to task 2 only and has been prepared by Coffey. It is important to note that the report is structured in this way to comply with DFID requirements of independence between task 2 (impact evaluation) and tasks 1 and 3 (M&E support).

Building on the findings of a diagnostic report (produced in May 2015), this inception report sets out a plan to operationalise OWNP M&E. The key components of the inception report were discussed at a stakeholder consultation workshop held in Addis Ababa on 21 August 2015 and a follow up workshop held on 22 September 2015.

1.2 Current status of OWNP M&E: findings from the diagnostic review

The OWNP is a sector-wide approach to water, sanitation and hygiene (WaSH) that involves four key government ministries and their related sectors to modernise the way WaSH services are delivered to people. It combines the efforts of the Ministry of Water, Irrigation and Electricity (MoWIE) (lead by its Water and Sanitation Supply Directorate), Ministry of Health (MoH), Ministry of Education (MoE) and the Ministry of Finance & Economic Development (MoFED). It brings together government, development partners and Non-Governmental (NGO) activities in WaSH in a coordinated programme with total planned programme investments of 2 billion USD over a seven year period (2013-2020).

The OWNP aims to improve the health and well-being of communities in rural and urban areas by increasing equitable and sustainable access to water supply and sanitation and the adoption of good hygiene practices. It combines a comprehensive range of water, sanitation and hygiene interventions that include capital investments to extend first-time access to water and sanitation as well as investments focused on developing the enabling environment, building capacity, ensuring the sustainability of service delivery, and behavioural change. It addresses WaSH provision for households, rural and urban communities, as well as in schools, health and other institutions.

OWNP M&E objectives include[1]:

- to measure and report progress towards the intended One WaSH National Programme (OWNP) results, and;

- to strengthen accountability of the WaSH sector at all levels (i.e., federal, regional and Woreda) through the use of data and information from the WaSH M&E system.

This section of the report summarises key aspects of the current status of OWNP M&E and the enabling environment for OWNP M&E. It summarises the key findings from the diagnostic review of OWNP M&E (Coffey/IRC, 2015), field visits to three regions and further stakeholder consultations including additional assessments of M&E capacity (IRC, 2015a) and the WaSH M&E MIS (IRC, 2015b) that is under development. This background provides the foundation for the design decisions taken on further support to OWNP M&E and its operationalisation.

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[1] Based upon Terms of Reference (Annex 5).

1.2.1   OWNP: a challenging multi-sector programme with emerging coordination structures

The OWNP is a challenging multi-sector and multi-stakeholder programme to report on. It involves multiple ministries and levels, and its organs and coordination mechanisms are generally new, still under development and all the intended capacities not yet in place. Water, Sanitation and Hygiene are challenging to integrate because implementation is through the relevant government sectors and their processes. This leads to emphasise on a vertical reporting approach within the concerned line ministries. *Strengthening horizontal coordination (between sectors) is critical for integrated WaSH reporting and decision making because the programme spans different sectors.*

At federal level, links between the four ministries are gradually being strengthened as NWCO capacity is increased and as activities under the Consolidated WaSH Account (CWA) financing are rolled out. Some platforms, such as the National WaSH Steering Committee (NWSC), are not yet active and there is also not always a strong understanding of the OWNP by non-focal persons. For example, at all levels the OWNP is widely considered to be equivalent to the CWA. This presents a barrier to the development of an integrated or coordinated M&E system for the entire OWNP. *Awareness and ownership of OWNP objectives, and the need for coordination, sharing of data and integrated reporting could be further developed.*

Some key structures to enable horizontal coordination such as the Regional WaSH Coordination Offices (RWCOs), with staffing from all the four sectors, are also not yet fully in place. This means that Project Management Units and their assigned staff from the implementing ministries partly fulfil the coordination role. At woreda level, horizontal coordination between sectors is somewhat easier to realise through the Woreda WaSH teams where these are in place. Linkages are weaker in woredas that are not supported through the CWA or other donor-supported WaSH programmes.

1.2.2   Existing WaSH M&E processes: sectoral and fragmented with little integrated reporting

The WaSH sectors are intended to gradually move towards 'one plan, one budget, and one report' reducing the administrative and reporting burden on critical staff and supporting greater efficiency. The starting point of the existing WaSH landscape is rather fragmented and complex with numerous programmes, plans, financing channels and reports across the WaSH sectors. There is clearly great potential that improved and more integrated M&E will facilitate improved information flows and support coordination, with the OWNP being able to more quickly monitor, evaluate and communicate its successes and failures. It can also help to realise the strengths of a multi-sectoral approach (using links between water supply, sanitation provision and hygiene behaviours in decision-making).

Table 1 summarises the key reporting processes within government related to WaSH. There are already considerable efforts in WaSH M&E across the three main sectors and in finance as a supporting ministry. Further data is collected through the household surveys administered by the Central Statistical Agency. Integrated WaSH monitoring, through combined data collection processes, is a recent development through for example the NWI in 2010/11. There is some overlap between these efforts although they are largely complementary. Water supply indicators used by MoWIE and the CSA overlap but this has proven useful as data collection methods are different and variation in results has led to scrutiny and improved methodologies. There is little overlap between other efforts except with relation to the NWI.

M&E responsibilities and efforts are typically fragmented (even within government) because of the complex financing arrangements in WaSH sectors and the many different Ministries, Departments, Offices, Processes, Sub-processes and Case Teams involved. Fragmented responsibilities result from the many different funding modalities, for example the block grant, consolidated WaSH account, bilateral and multilateral (UN) programmes and projects, NGO projects and emergency WaSH interventions.

Cooperation between the units managing information systems and IT across WaSH ministries and alignment of data from the different MIS systems across the WaSH sectors is currently limited, and this hampers efforts to produce WaSH sector wide reporting, for example to combine health data on sanitation and education data on school WaSH with water sector data on rural and urban water supply. Ministries do not yet cooperate sufficiently to ensure data sets are complementary, avoid overlaps and ensure timely sharing. A further challenge is presented by the decentralised nature of the country. Regions and woredas especially have substantial powers and a strong stake in what data shows. A typical gap (affecting financial expenditure data for example) is that as data flows up the system it loses value due to aggregation at the different levels (regions reporting consolidated woreda-data to the federal level for example).

Major surveys by the Central Statistical Agency (CSA) with WaSH questions include the Demographic and Health Survey (every 5 years with recent mini-DHS for PBS recently), Welfare Monitoring Survey (every 5 years), Household Consumption Expenditure Survey (5 years), and Census (10 years). Strong links have not yet been established to the National Statistical System led by the CSA and there appears to be potential for wider use of household survey data within the OWNP if these links are strengthened, as well as learning from developments in M&E in other sectors.

There are established governance arrangements to link NGO reporting to the OWNP such as the consolidated reporting of the Christian Relief and Development Association (CCRDA) Water and Sanitation Forum, in addition to the agreement-related reporting requirements on NGOs to report to Finance and Economic Development at woreda, region or federal level. Efforts are underway to strengthen this reporting and will be supported and strengthened.

Table 1: Existing governmental monitoring processes related to WaSH

Processes	Water	Health	Education	Finance	Central Statistical Agency	Integrated WaSH
WaSH Indicators	Indicators are defined in multiple documents with the UAP and GTP indicators leading, and others defined in OWNP, CWA, NWI etc. Focus on access to improved schemes and functionality.	HMIS includes 3 key indicators on household sanitation and hygiene, and an indicator on water and sanitation at health institutions. HEH programme monitoring includes additional indicators and these are being expanded.	EMIS provides data on water and latrine facilities at schools with improved indicators included in the Education Sector Development Plan IV.	Expenditure data is collected according to standard budget codes.	WaSH indicators generally as per JMP definitions. Surveys with WaSH questions include the Demographic and Health Survey, Welfare Monitoring Survey, Household Consumption Expenditure Survey, and Census.	The National WaSH Inventory, OWNP and CWA have all identified indicators across WaSH
Data collection (and reporting frequency)	Critical coverage and functionality indicators are calculated based upon data that is annually reported by woreda water offices (rural water) and urban water supply utilities. Quarterly reporting processes are extensive, but based upon none standard indicators and variable definitions.	Data is collected frequently by health extension workers and reported through health centres to woredas. Data is aggregated and entered into HMIS (on quarterly basis) and reported at all levels. However, some sanitation data does not get aggregated at regional level, causing data gaps.	Annually from all schools under supervision of supervisors.	Quarterly from WoFED, BoFED, etc.	Household surveys employing trained enumerators. Statistical sampling. Some surveys and questions provide disaggregated data with respect to gender, age , religion etc.	Not currently routine. Major recent examples of integrated data collection were NWI 2010/11 (NWI in Somali excluded the household sanitation components) and collection of data from regions through standard formats for CWA annual report.
Data processing	Generally done using desktop software, e.g. Excel.	The HMIS is managed by a diploma holding expert at Woreda level who is in charge of transcribing paper-based submissions and generating CDs with the woreda results. The expert's computer is highly regulated to prevent viruses and reduce maintenance requirements.	Regions aggregate results from paper forms using Excel and submit this to MoE who manage the data in an Access database.	Data processing occurs in IBEX.	Centralised in CSA	NWI data was entered into a custom-made Access database.

Processes	Water	Health	Education	Finance	Central Statistical Agency	Integrated WaSH
MIS/ analysis	Rural and urban water supply included in WaSH M&E MIS but this is not yet operational. Excel is standard for analysis.	The HMIS supports the calculation of the indicators for which it is configured. Not all health data is in the HMIS and some indicators may be calculated in Excel or manually. Performance reviews at each level are an additional check to the analysis.	The EMIS data is analysed in MoE on an annual basis. There can be significant delays in reporting with reports coming up to a year later.	IBEX is currently used to generate reports. MoFED is currently piloting a new Integrated Financial Management Information System (IFMIS) with MoH.	There are a number of web platforms to generate indicators from CSA, e.g. CountryStat Ethiopia. Many datasets are created by CSA analysts.	Most analysis in Excel. Data from 2010/11 has been imported into the WaSH M&E MIS by PUT. WaSH M&E MIS (not yet operational)
Reporting	Annual reports are prepared by Planning Department (MoWIE wide) and by WSSD for various donor projects and programmes. Reports disseminated in sector meetings.	MoH publishes HMIS indicator results on an annual basis in its annual performance report. However, the key sanitation indicators have not yet been reported.	An Education Statistics Annual Abstract is produced.	Budgets are published annually and financial information can be accessed through IBEX.	The CSA website provides access to publications and a number of web platforms for downloading analysis and datasets published on a regular basis. The naming and coding publication, critical for integrated reporting is not yet regularly updated (last updated in 2012).	The first OWNP-CWA report was prepared in August 2015. However this was only integrated at federal level. Integrated reporting is not yet underway at regional or woreda levels.

1.2.3   Existing IT-enabled systems: in use to monitor aspects of WaSH

There are a large number of existing systems that already collect WaSH related data at both national and local levels. These systems include in health the HMIS (with 3 household sanitation indicators and 2 health institution indicators; located within the Health System Special Support Directorate) which is complemented by the Hygiene and Environmental Health directorate's programme monitoring system (with four additional WaSH indicators proposed). The Education sector also has an existing national level management information system in place (within the EMIS directorate) with School WaSH indicators (3 key indicators) and annual reports include reporting on these indicators. Finance has the national IBEX system to manage public expenditure according to standard budget codes.

All of these systems have gaps with respect to WaSH indicators and the quality of data collected. However, these are all functioning national scale data collection and reporting systems within OWNP implementing ministries, and there are opportunities (at relatively low cost) to improve the WaSH data that is captured by these systems and to ensure that it is utilised as far as possible. While IT-enabled MIS systems at national level are operational within the education, health and finance sectors, there is not yet a comparable national system in use in the water supply sector. This is a major challenge. There may be approaching 200,000 improved water supply schemes compared to approximately 20,000 health institutions and 37,000 schools to monitor.

There are however other IT-enabled systems in water supply at regional and more local levels. The Tigray Water Resources Board has deployed the most extensive system. This covers the whole region to monitor water supplies based upon data entry and management by woredas linked to a database managed at the regional level that relies upon internet connectivity. The system is operational despite, in particular, internet connectivity challenges, and the data is used in official coverage calculations. However, similar to many other sector databases the data held within the system is not being utilised to its full potential.

There is an opportunity to learn from these existing national and regional IT-enabled M&E systems in WaSH while introducing new systems. The introduction of new systems should also clearly be undertaken based upon careful consideration and plans on what to do with the existing systems.

1.2.4   The National WaSH Inventory: a major advance with potential for further integration

A key recent achievement in WaSH has been the undertaking of a National WaSH Inventory in 2010/11 and in 2014 in the Somali region. The latter undertaking deployed new mobile data collection technologies which greatly improved the speed and quality of data collection. A major success of the NWI was an improved national estimate of access to improved water supplies, and the results were accepted and used by both the parliament and later the WHO-UNICEF Joint Monitoring Programme (JMP) in determining that Ethiopia had successfully met the MDG water target.

While the NWI was multi-sectoral in its WaSH scope, and engaged health extension workers and teachers in data collection, it has not achieved the same level of ownership in the health and education sectors as in water who led the process. The NWI involved collection of data on hygiene and sanitation and institutional WaSH (in 2010/11 in Somali household sanitation was not included) that in future could duplicate sectoral data collection processes in the health and education sectors. This duplication would be costly if repeated and might also hinder development of ownership of NWI results by sectors that have their own M&E systems (including WaSH data).

The development of an integrated WaSH M&E MIS which currently holds NWI data does not yet link to the established data collection processes and management information systems in finance, education and health. Concerted efforts will be required to ensure integration and ownership within the ministries of health, education and finance.

1.2.5   WaSH M&E MIS software: functional but not yet operational

The WaSH M&E MIS has been in development since 2008 with software handed over to MoWIE in 2015. Our analysis shows that the WaSH M&E MIS is functional (key functions as originally intended) but is not operational i.e. is not in use. The system is technically functional for many operations. Most basic functions such as entering and editing data, generating analysis and outputting results are possible, despite a few bugs.

Despite a large-scale roll out of training (to over 300 woredas) we have not identified any significant use of the system. A telephone survey in September 2015 of 24 regional, zonal and woreda offices found that all (24/24 respondents) had knowledge of the database, and had received training but no respondent (0/24) reported using the MIS. These findings are consistent with earlier regional visits. The database contains only 2010/11 NWI data

that has been manually imported and new data is not being entered. The hardware and training roll-out has not yet led to use of the system.

In its current status, the WaSH M&E MIS does not meet the minimum requirements considered necessary for operationalization, for example training and other support activities will not lead to widespread use of the system. Our assessment identifies significant technical and operational challenges with the system and the testing processes that have been undertaken have not been sufficient to ensure that the system met user requirements and capabilities. Critically the software is not user friendly (easy to use, meaning it is not difficult to learn or understand, and that it is simple, clean, intuitive and reliable), and has limited flexibility without recourse to reprogramming work by the developers. Changes such as adding a new question, changing a calculation, or revising a spelling mistake, requires a contract with the developers or else a significant change in the capacity of the ministry to manage the software. This is challenging given that it is now necessary to fully update the indicators with new requirements such as revised GTP2 indicators, and internationally the new Sustainable Development Goals (SDGs).

Details of recommended improvements to the WaSH M&E MIS (PUT) together with activities to develop alternative solutions are included in this report (section 2.1.1). Operationalisation of the WaSH M&E MIS will require extensive capacity development and activities promoting dissemination and use of data.

1.2.6 Introduction of ICT: at an early stage across WaSH sectors

The introduction of Information and Communications Technologies (ICT) to support M&E across the WaSH sectors is at an early stage. The Health and Education reporting systems are largely paper-based (data becomes digital at woreda level in the HMIS and at regional level in the EMIS). There is no use at scale of internet and mobile communications technologies within these systems although pilots are underway with mobile data collection technologies in the health sector.

IBEX is a series of standalone databases at regional level and is not networked. Data is sent to federal level by hardcopy official letter and sometimes by email. There is some variation in regions with data entry being done at woreda levels where infrastructure is better. Currently at federal level it is only possible to access consolidated regional data, so analysis possibilities are limited (Prat, *et al.* 2014). It is only possible to access woreda level data at the regional or lower levels. Data is re-entered at federal level. When IBEX is networked, starting now in Tigray, woreda level data will be available up to federal level. Staff may also be able to dedicate more time to data analysis rather than data entry.

The water sector has not yet linked its routine reporting systems to an operational MIS system, but has made significant progress in establishing a nationwide inventory of the main sector assets. In 2014, the Somali part of this inventory successfully used mobile data collection tools at regional scale. It was possible to collect data from all water supply schemes and institutional WaSH facilities within approximately one month across a large and relatively remote region. MoWIE with the regional bureaus and supported by UNICEF, used Akvo FLOW as the mobile data collection tool. The Akvo FLOW platform combines a mobile app that uses Android for data collection with a web-based administrative dashboard where surveys can be created and assigned to phones and where data can be downloaded and edited to some extent. Lack of internet connectivity will be overcome through having criteria whereby the software will allow uploading of data from phones using data cable and not requiring internet connectivity. Our system designs and our approach for the rollout address the connectivity issue and we have continually tried to design processes which take maximum benefit of the limited infrastructure.

Key findings of the mobile-enabled exercise in Somali were that data could be collected much faster and more reliably than using paper based systems (GPS data entry was especially prone to errors earlier). These are the major advantages rather than cost savings. Going forward, costs will also strongly depend on whether data collection is intended to be part of a monitoring system (with on-going use of phones) rather than as a one-off exercise.

There is considerable ICT-related innovation in monitoring within bilateral programmes, projects and NGOs. Multi-level pilots such as those supported by COWASH/CMP, ICRC (Tigray), WaterAid and others show potential, and each provide important lessons on how to roll out nationally decentralised but coordinated WaSH M&E systems.

1.2.7 Quality assurance and control: limited practice of data control, validation and triangulation

There is little practice of validating data or triangulating data derived from different sources in the OWNP sectors. In the health sector for example the HMIS includes data quality management mechanisms (Lotus Quality Survey &

Data Quality Survey) but these are not implemented effectively and there is no systematic process in place to verify Hygiene & Environmental Health data (Jones, 2015). Although it has been used (see section 1.2.4), there are concerns about the quality of National WaSH Inventory (2010/11) data (for example with errors in geographic coordinates) and the validation processes. The unreliability of geographic coordinates is a particular limitation to the utility of the data. Data quality improved considerably through deployment of mobile data collection technology in Somali in 2014. However, beyond official approvals we are not aware of any systematic and analytical quality assurance (e.g. to check and verify a sample of the data).

There has been to date relatively little systematic use of nationally representative household surveys undertaken by the Central Statistical Agency or impact evaluations and other special studies and research. Such sources can provide alternative data for triangulation or to fill gaps. Quality could be improved and money saved by making use of a range of different data sources especially those that are well suited to monitoring critical issues such as tracking equity and gender impacts of the OWNP.

1.2.8   Strong demand for data but use is generally neglected

There is strong demand for data at all levels. However, much data is not fully utilised because it is not made accessible, because insufficient resources are allocated to data analysis, dissemination and use compared to data collection or because incentives are lacking. The NWI is an example where much wider use of data could have been made through publication (e.g. of a WaSH atlas) and providing sector stakeholders more access to the data.

The diagnostic review findings indicate that there is relatively little knowledge about the data available within the OWNP partner ministries, the Central Statistical Agency or the National WaSH Inventory and/or sharing of relevant information across ministries. There was also considerable duplication in the data collected as part of the (to date one-off) NWI and that collected by other ministries such as the Ministry of Health (MoH) and the Ministry of Education (MoE). There is potential to improve M&E and reduce costs through making wider use of existing data, and scarce resources could be put to further use to improve rather than duplicate such data.

Most recent WaSH M&E efforts that were assessed have not yet succeeded in making a clear link between the decisions that need to be taken and the data needed. There is a tendency (a) to collect excessive data, (b) to inadequately use existing data, (c) to have an absence or lack of capacity and systems to analyse, interpret and respond to data collected at the appropriate levels, in particular at the woreda level, and (d) to have weak standard processes, forms and procedures for using data. These are also common problems that are found elsewhere, especially in low capacity contexts. Although other factors are also at play a critical issue is low capacity including a lack of skills, and addressing the capacity gaps in WaSH M&E has received insufficient structured support to date. The plans presented later in the report aim to address all of these issues.

1.2.9   Capacity constraints: many and severe requiring a broad approach to capacity development

Further to the constraints facing inter-sectoral collaboration and coordination, as already discussed above (and in themselves a critical capacity issue), there are critical constraints with respect to Human Resources Development (HRD), resourcing more broadly including the physical and logistic resources needed to do M&E tasks, and the current supply of training and broader capacity building support.

With respect to Human Resources Development (HRD), M&E is perceived to have a lower priority than other core processes, and M&E staffing and training is not prioritised. There is high turnover of staff; numerous vacant positions (managerial, technical, expert and support) related to WaSH M&E; insufficient incentives or motivation; limited or no financial resources and opportunities to build staff M&E capacity; low levels of skills in M&E and IT. There is relatively better capacity in health and education M&E, but WaSH is not a focus or core competence in these sectors.

Policy knowledge is generally weak within the WaSH sectors. There is limited understanding of national policies, strategies and targets and their local relevance at regional, zonal and woreda levels, including about the OWNP, the MoU and the division of mandates, roles and functions of different stakeholders.

Resource gaps (physical, financial and human) between regions and woredas are also significant. Two regions, Tigray and Amhara, are mobilising kebele level water staffing and bringing the water supply sector into a position more similar to the health and education sectors. Woredas with larger donor investments (such as those now receiving CWA funds which makes provision for capacity building) have generally higher capacity and are better equipped. Physical capacity relevant to M&E includes equipment and transport logistics. Although considerable ICT equipment is available at regional level, its use is hindered by a significant shortage of skills to manage and use it

effectively. A lack of ICT facilities and equipment is notable from woreda level downwards. There are clear IT skills and systems constraints at all levels. Lack of transport facilities further hinders both M&E and collaborative efforts.

Although the health sector has the strongest of the WaSH sector monitoring systems, there is high turnover of HMIS experts who focus on capturing rather than interpreting or responding to WaSH data. There is also a lack of senior technical and middle management staff in the Planning and Programme departments. Health extension workers have been deployed to towns in recent years and inadequate teaching materials and facilities and a lack of training in waste management technologies have been noted. Limited knowledge of sanitation and hygiene significantly impacts on health staff's ability to gather and analyse monitoring data and to compile accurate reports. Similarly, education departments are primarily concerned with education-related targets, and the positive correlation between improved WaSH and achieving education targets is not foregrounded.

On the supply side, TVETCs and HSCs train water technicians and health officers with M&E related content but overall training supply is ad-hoc and there is a lack of continuity in training courses and no central coordinating body. There is also no system to monitor the efficacy or impact of training. The MoWIE Capacity Building Unit is not yet fully functional.

Training on WaSH M&E is very limited, and where training exists it is on M&E generally and theoretically, plus there is a general bias towards water over sanitation and hygiene monitoring. Courses also tend to be one-off without a system in place to update training when M&E systems are updated in keeping with sector changes. The M&E support provided will work to address these challenges, which are critical, and a work package is dedicated to this issue (see Capacity Development Section 4.3).

Training materials are usually not available in local languages and are either not provided or not commensurate with the level of trainee groups. The availability of training materials after completing training courses is a key issue given the high turnover and attrition of M&E and sector personnel.

1.3 Structure and key definitions

The remaining sections of this report present the following:

- **Enhanced M&E Framework** – this framework sets out proposals for what OWNP M&E will measure, including proposals for harmonisation and updating of indicators in line with GTP2 requirements, and the approaches that together form an overall OWNP M&E system.

- **Enhanced OWNP Management Information Systems** – is the design of integrated MIS systems for the OWNP building upon existing systems, filling gaps and IT-enabling. The design addresses the people (capacity), processes (from data collection through to dissemination and use of data) and the systems (IT) that will be needed to realise implementation of the framework.

- **Operational Plan** – presents a phased work plan (2015-19) to operationalise OWNP MIS including four workpackges related to enhancement/ operationalisation, capacity building, dissemination and use and synergy, and four sub-plans relating to procurement of IT, the National WaSH inventory, data quality assurance and sustainability (exit plan).

- **Cost Estimates** – set out the costs of implementation of the operational plan.

1.3.1 Comments on interpretation and reading of this report (key definitions)

- The '**programme**' refers to the One WaSH National Programme which covers the entire country and covers all WaSH activities throughout the country.

- **Consolidation WaSH Account (CWA)** refers to the part of the OWNP that is implemented through the pooled financing arrangement and its related management structures and processes. Currently the CWA arrangements are still considered by many as being synonymous with One WaSH or the One WaSH project.

- **Implementing partners** are the core government partners that deliver the OWNP and its on-going WaSH services. These are the three sector ministries MoWIE, MoH, MoE and MoFED and the related regional, zonal, woreda and lower level structures. Each of these institutions has existing M&E processes, capacities and systems.

- **Implementing partner MIS systems** refers to the MIS systems (HMIS, EMIS and IBEX) within the implementing partners. The water supply sector does not yet have an operational MIS system although a WaSH M&E MIS with water supply components has been built.

- **The 'WaSH sectors' or 'sectors'** refers to the combination of water (with its component responsibility for water supply), health (responsible for hygiene and sanitation), education (responsible for WaSH in schools) and finance sectors, in line with the MoU and the way that government is organised.

- **Capacity development** is defined broadly and refers to the systems, skills, knowledge, information, tools, and human, financial and logistical resources required for people to undertake particular tasks, roles or mandates. Training refers to formal or informal activities aimed at developing the skills, knowledge and competencies identified as necessary to undertake particular tasks, roles or mandates.

- **Monitoring** is defined as the routine collection of data in order to track progress toward objectives

- **Evaluation** is defined as analysis that measures the extent to which the programme (and not other causes) have led to observed progress

2 Enhanced OWNP M&E Framework

The key elements of the enhanced M&E Framework are a set of indicators (with associated definitions and targets and related goals) that OWNP M&E will track, and a set of recommended data sources on how these will be monitored. The framework also sets out further detail on the related processes including an outline calendar for implementation of OWNP M&E with links to the critical processes for data collection, dissemination and use.

The system in the WaSH M&E Framework and Manual Version 1.0 has not been fully implemented. Given that it was prepared before the critical documents that have defined the OWNP (OWNP programme document, WIF and POM etc.) it is partly outdated. However, many of its key elements remain valid and have been retained in the implementation plan proposed in this document.

While this report was being prepared, the government has been elaborating its critical integrated plan for the period 2016-2020. The Second Growth and Transformation Plan (GTP2) has major implications for M&E in the water supply sector (FDRE, 2015) and potentially the other WaSH sectors, although health and education plans were not yet available at the time of writing.

Questions have been formulated to frame the critical challenges in enhancing the M&E framework based on the findings of the diagnostic review (Coffey/ IRC, 2015) as summarised in section 2.1. These are presented in the next section.

2.1 Overview

2.1.1 Strategic aspects and approach to OWNP M&E

A number of critical strategic questions for the enhanced M&E framework and its related processes, systems and capacities have been considered during the inception phase. This section identifies the critical questions that have been addressed and provides an overview of the strategic directions that are recommended and proposed for the implementation phase.

How to streamline the numerous sets of WaSH targets, indicators and different definitions?

An expanding set of WaSH policy documents has established many new or amended targets and several different indicator sets are available. It is also common that indicators are differently defined. For example, in water supply alone there are indicators set out in the WaSH M&E Framework and Manual (FDRE, 2008), in the National WaSH Inventory (MoWIE, 2010), in the OWNP programme document (2013), in the Program Operational Manual (POM) for the CWA (FDRE, 2014) and in the (draft) water component of the Second Growth and Transformation Plan (FDRE, 2015). The lack of coherence between targets, indicators and definitions in rural sanitation and hygiene has also been carefully documented (Jones, 2015).

An updated set of draft WaSH indicators is proposed in this document. These are proposals and will require amendment and agreement by the implementing partners. It is also recognised that indicator development is a continuous process, and an annual review of indicators by the sector is proposed led by the NWCO as part of the implementation plan. For example, a new urban sanitation strategy is under development and it may soon be

agreed that additional indicators are required to track aspects of urban sanitation. Sufficient consistency should however be maintained to avoid tracking 'moving targets'.

We have made extensive proposals to consolidate and revise water supply indicators. In water supply, the proposed updated indicators in this document give primacy to the new (draft) GTP2 indicators and definitions. Other indicators have been derived from indicators proposed or assessed to be required by the OWNP (KPIs and results framework), key CWA policies including the POM, the OWNP Social Assessment, the Environmental and Social Management Framework (ESMF) and the Resettlement Policy Framework, as well as the M&E framework and manual. The updated process has aimed to avoid duplication of indicators and has given priority to the more recently approved indicators and/or definitions.

In sanitation and hygiene, indicators are based on the updated indicators in the Health MIS (Federal Ministry of Health, 2014) and include proposals for additional indicators based upon circulated proposals of the Hygiene and Environmental Health department which is currently engaged in a strategy development process (so these are draft indicators). Provisional indicators in urban sanitation are based upon the contents of the draft Urban Sanitation Strategy (FDRE, 2015b).

We have prioritised indicators in three categories identifying 1) an updated set of possible KPIs, 2) supplementary indicators and 3) other indicators.

The dynamic nature of WaSH policy making means that indicators need to frequently change. It is recommended that systems build in the flexibility to allow for the simple modification or addition of new indicators. Where indicators are added (e.g. for regions to address specific requirements) these should be approved or standardised wherever possible and included in updated indicator lists and manuals.

How best to establish integrated reporting and the use of WaSH data across all WaSH sectors?

During the inception phase, four alternative options were developed setting out different possibilities for WaSH data sources and their processing to support integrated reporting. The four options included:

1. Using existing sectoral MIS systems (health, education and finance) and operationalising a water supply MIS to support water supply data management (both regular reporting and asset inventory data), together with integrated OWNP reports produced at all levels (woreda, town, zone, regional, federal).

2. Using existing sectoral MIS systems (health, education and finance) to collect data from local levels and operationalising a WaSH MIS to both support water supply data management (regular reporting and asset inventory) and to provide access to WaSH data at all levels to support production of integrated OWNP reports (woreda, town, zone, and regional, federal). Health, education and finance sector data is imported at federal level and made available at all levels (for examples, regions, zones and woredas).

3. As option 2 but with data tapped from sectoral MIS systems at woreda level for entry into the WaSH MIS.

4. Integrated data collection through an annual National WaSH Inventory.

With each of the options 1-3 the National WaSH Inventory is envisaged as a 5 yearly exercise.

The recommended option, with agreement of all key stakeholders at the workshop on 22nd September, 2015, was to implement option 2, with option 3 being a desired long-term objective for a later phase of M&E enhancement. This includes operationalisation of a WaSH M&E MIS to include water supply data, but also to hold data on household sanitation and hygiene and institutional WaSH. Using the same indicators and definitions, regular data will be derived from the same quarterly and annual data collection processes that feed HMIS/HEH programme monitoring, EMIS and IBEX systems as well as water supply data collection and reporting by kebele, woreda and urban water supply utilities in towns.

Figure 1 summarises the approach (option 2) further. As well as holding water supply data, the integrated WaSH MIS database stores data from other sectoral systems, accessed through data exchange at federal level between OWNP partners. These systems are harmonised wherever possible to ensure indicators and units of data collection are compatible.

All data is collected at local levels and flows upwards to woredas, zones, regions and the national level through sectoral channels (health, education, water and finance). In health, education and finance sectors these data flows are supported by the existing approval processes of the HMIS, EMIS and IBEX systems.

The integrated WaSH MIS systems and mobile data collection tools have connectivity and functionality that supports similar upwards (woreda to federal) data flows for water supply data, and also support downward data flows for the approved data for all sectors. Water supply data is entered into the integrated WaSH MIS database at local levels (woreda for rural or region for towns) using mobile data collection tools and goes upwards to support regional and federal level reporting on this component. Other sectoral data flows downwards within the integrated WaSH MIS database so that, at each level, integrated reports can be produced. The desired time for data to flow upwards within each sector and be approved is 60 days, meaning that integrated reports can be produced with an optimal time lag of one quarter.

The National WaSH Inventory provides 5 yearly data on critical assets (WaSH infrastructure) but is updated to add new, expanded and rehabilitated schemes through sustained mobile data collection capacities at woreda and town levels. The use of CSA data provides an additional source of complementary data.

Figure 1 WaSH M&E based on sectoral MIS systems and with integrated WaSH MIS software to support integrated Reporting (option 2)
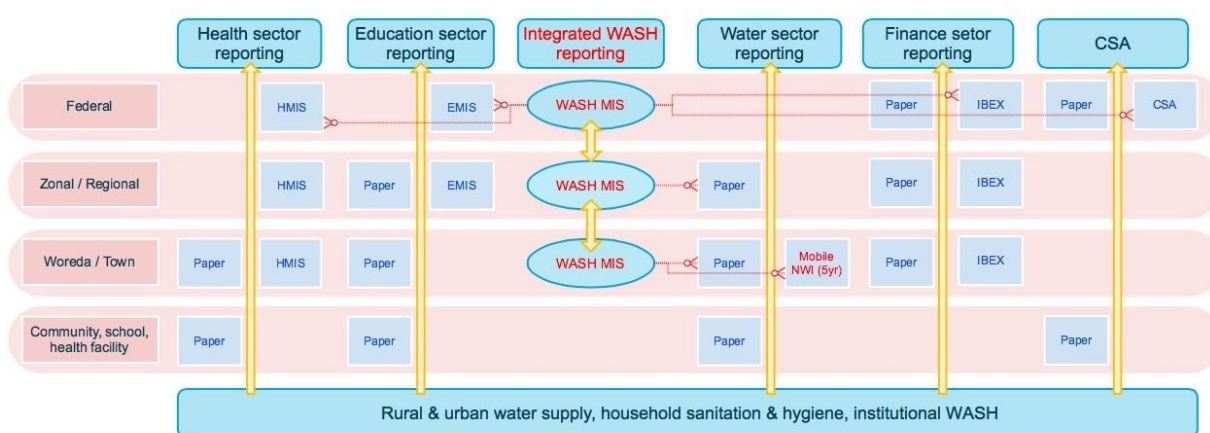
The use of data from sectoral systems reflects overall government mandates for sanitation and hygiene with the Ministry of Health (including health institution WaSH) and WaSH in schools with the Ministry of Education, the intended use of IBEX for all government expenditure, and the OWNP spirit as set out in its documents such as the WIF and MoU to work through the sectors. This also offers lower additional costs and better value for money as it utilises the existing data collection capacities, processes and systems as far as possible (e.g. in health, education and finance). Collecting data through sectoral systems will also readily support the operational use of data to improve WaSH services.

Most importantly, the recommended processes match most closely to the existing capacities and status of OWNP structures and there are lower risks compared to other options (see IRC, 2015 for further discussion of capacity constraints). However it is necessary to develop the human and physical capacities to manage and use an integrated WaSH MIS system in NWCO and at regional and woreda levels.

Investment in the sectoral systems to improve their WaSH aspects is expected to enhance engagement of these partners in the OWNP and should also more readily support the operational use of data to improve WaSH services. It also requires a data sharing agreement between the OWNP implementing ministries to share data from their systems, and commitment from the OWNP implementing ministries to upgrade the WaSH components of their MISs with support provided to do this (e.g. WaSH indicators updated and defined consistently, capacity strengthened so WaSH indicators are well understood at all levels and quality WaSH data collected e.g. HMIS, EMIS etc.).

In the long-term as WaSH institutions (e.g. Woreda WaSH Teams and Town WaSH Steering Committees) are operating effectively in woreda and towns, and as other supporting measures are put in place (including a more user friendly WaSH M&E MIS, staffing capacity and skills) there is the intention that data flows may change with data tapped from health, education and finance systems at woreda level (to option 3). This will be carefully planned to avoid duplication of effort (in data entry), by-passing of sectoral data quality approval processes and potentially duplication of results.

Integrated WaSH reporting is undertaken at each level (i.e. woreda WaSH teams, town WaSH teams, regional WaSH coordination offices, NWCO). At federal level it is proposed that a reporting team led by NWCO works with data drawn from the integrated WaSH M&E MIS database and staff from the sectors to produce a comprehensive flagship OWNP annual report. Similar but lighter reporting processes are envisaged at regional and woreda levels in line with demand and capacities at these levels.

Well-functioning WaSH institutions are required to lead production of integrated reports at federal and other levels. This will require capacity development of the NWCO and delegated staff from the implementing ministries to produce the annual report (and similar efforts at regional and woreda levels).

Apart from integrated reports, data use is to be promoted through an intervention package on dissemination and use that focuses on ensuring the use of data at local levels to improve service delivery as well as promoting use within each of the OWNP sub-sectors.

How to further operationalise the WaSH M&E MIS (PUT) system and maximise its potential

The OWNP M&E system requires a redevelopment or replacement of the existing WaSH M&E MIS software. The recommended approach, which has been agreed with the MoWIE and NWCO on 22nd September, 2015 is to build on the development of the existing WaSH M&E MIS (PUT) software to make it operational with reduced scope, while MoWIE/NWCO also require the development of an alternative software in order to reduce risks and provide an alternative option for future development. This will involve:

- Retaining and improving the existing WaSH M&E MIS but with a more focused scope in line with the revised data flows that are now envisaged. The recommendation is to focus on operationalising as a priority the database and reporting functionality. Since water supply (and NWI) data will be collected through mobile applications and other health, education and finance data is tapped at federal levels through sectoral systems, there is no requirement to operationalise data entry functions at woreda level using the WaSH M&E MIS.

- Implementation of improvements will require a new contract with the developers PUT to modify the WaSH M&E MIS in line with specifications detailed in his report.

- To purchase the WaSH M&E source code from the developers PUT subject to cost and audit (before purchase) to assess the options for long term use of the software and the potential for maintenance and modifications by the MoWIE IT department as well as the level of required reliance on either PUT or other software developers.

- To develop separate but compatible mobile data collection capabilities through the procurement and customisation of 'off the shelf' software to support NWI2 data collection to be completed this Ethiopian fiscal year (ending July 2016).

- To develop alternative database and analytical software capacities within the MoWIE/ NWCO to provide an additional option to store, process, approve, and analyse WaSH data. Alternative software will be procured if possible at the same time as mobile data collection software (and with source code that is open for modification and accessible).

How to ensure regular water supply sector reporting within a standard national system?

The OWNP M&E system with respect to water supply includes combining strengthened regular reporting (quarterly-annual frequency) together within regular but occasional (e.g. 5 yearly frequency) inventory of infrastructure assets (the NWI). The NWI was previously undertaken in 2010/11 so undertaking data collection for the NWI2 in 2016 will be consistent with a 5 year cycle.

Reporting and inventory processes are both already in place and can be strengthened through improvement of indicators and enhancement of capacities as well as through supporting ICTs. The use of mobile data collection tools will also be an integral part of the NWI2, with mobile technologies then embedded for use to update the inventory in all woredas and towns. As well as adding new (and rehabilitated or extended) facilities into the inventory, it is recommended that current water supply paper-based reporting is gradually migrated through additional forms using the same mobile application and phones. The objective is to phase out paper-based reporting as the capacities are put in place to do this digitally. Paper-based reporting systems will be improved while waiting for the deployment of mobile technologies through NWI2.

The water supply sub-sector needs to enhance its monitoring without having yet the same levels of capacity as other WaSH sectors. Only now is kebele level staffing being rolled out in Tigray and Amhara for example, and the sector does not have the same institutionalised M&E/MIS capacity as in the health and education sectors. A phased process of development is recommended making it possible to introduce regular kebele-level reporting where capacities are lower (minimum for all regions/ woredas by 2016) with capacity development to enable all regions to adopt infrastructure level (i.e. water point) monitoring systems by the end of 2018.

How to ensure data within OWNP MISs is widely and effectively used?

Use of data from the OWNP M&E system is intended to justify further investments in improving and maintaining M&E systems. Promoting use of data will:

- Start by focusing on promoting local level data use in operational responses (e.g. repairs to non-functional water schemes).

- Involve activities within all WaSH sectors as well as promoting the integrated use of data at different levels to strengthen cross-sectoral collaboration in WaSH.

- Include streamlining reporting processes and improving MIS reports to ensure that these systems generate the reports that are required in the correct formats (refer to section 4.7).

2.1.2   Key features of OWNP M&E

The framework developed will support monitoring of all indicators required within the framework of GTP2, the OWNP and the activities funded through the CWA which are an important priority. The processes and systems recommended are also designed with the flexibility and capacity to include indicators required by other critical components of the OWNP regardless of the funding channel.

The implementation approach proposed for water supply does not include continuous frequent monitoring on a water point/system (infrastructure basis) from the outset in all regions although the ICT systems will support his. Although there is water point mapping (for rural areas) in the NWI2, it not considered feasible for quarterly reporting in all regions to update KPIs on a water point basis. Initially kebele level reporting will be a minimum option with infrastructure level reporting adopted as capacities are developed.

Kebele level reporting is well suited to tracking the KPIs but is not well suited to tracking large numbers of supplementary indicators including indicators relating to environmental and social risks and resettlement. This approach is a pragmatic compromise to rapidly realise some monitoring and reporting in line with low capacities, while those capacities are developed and more sophisticated systems and processes introduced.

The proposed indicator framework includes indicators covering all the KPIs and other indicators in the existing OWNP results framework.

One further gap at this stage is that there is not an agreed approach to monitor household-led self-supply investments and this issue requires further work and agreement.

2.2 Design Considerations of Enhanced M&E Framework

The design of the enhanced M&E framework has been based upon the following design choices:

- To promote a balance between three key components in WaSH M&E: 1) People, 2) Processes, and 3) (ICT) Systems. The design takes into account:
    - The existing levels of capacity available within WaSH institutions (people).
    - The requirements of planning, reporting and decision-making processes to use data and builds on existing reporting practices (processes).
    - The use of ICT in management information systems (systems) to support reporting processes.

- To maximise use of existing sectoral data collection systems and to improve the WaSH indicator reporting within these systems.

- To build upon the National WaSH Inventory as undertaken in 2010/11 and 2014 (Somali) as an integrated data collection exercise to support WaSH M&E.

- To scale up the use of mobile data collection tools given their proven potential to improve the speed and quality of data collection.
- To ensure that the NWCO/ MoWIE are not permanently dependent on a single supplier where software is sourced from the private sector.

2.3 Detailed Design of Enhanced M&E Framework

2.3.1 OWNP indicator framework

Three categories of indicators are proposed.

2.3.1.1 Key performance indicators

The revised KPIs are a very limited set of key indicators that aim to capture the overall performance of the WaSH sectors. There are 14 indicators which is less than the number included in the OWNP design document. Over time the number of KPIs may be increased, but initially the main focus is on getting capacities, processes and systems in place to monitor this minimum set of indicators across the whole OWNP. These indicators cover most of the data required to track the key GTP2 targets. Proposed definitions and discussion on each of the indicators, including data sources and measurability, disaggregation and other issues are included in Annex 3.

Table 2: Proposed key performance indicators

No	KPI
KPI1	Water supply access coverage as per service level standard for GTP1
KPI2	Water supply access coverage as per service level standard for GTP2
KPI3	Rural water supply access coverage with piped system as per service level standard for GTP2
KPI4	Urban water supply utilities providing reliable water supplies
KPI5	Rural water supply schemes' non-functionality rate
KPI6	Equity: deviation from average in access to improved water supplies
KPI7	Urban water supply utilities' with Non-Revenue Water (NRW) less than or equal to 20%
KPI8	Percentage of schools with access to safe drinking water
KPI9	Percentage of schools with separate latrines for boys and girls.
KPI10	Percentage of health facilities with improved water supply
KPI11	Percentage of health facilities with sanitation facilities
KPI12	Proportion of households' access to latrine facilities
KPI13	Proportion of households using Latrines
KPI14	Kebele declared 'Open Defecation Free'

Source: Based on Annex 3.

Note: Most indicators are expressed in terms of institutional units (households, utilities, schools, health facilities) while the proposed Sustainable Development Goals (SDGs) are expressed in terms of people, e.g., "% of pupils enrolled in schools with basic water services."

2.3.1.2 Supplementary indicators

Proposed supplementary indicators have also been elaborated (see Annex 3) to meet the requirements of the OWNP and the CWA. These also include required indicators to report on environment and social risks,

resettlement and fiduciary aspects. These indicators are also standardised nationally. In annex 3, 78 updated supplementary indicators have been proposed.

2.3.1.3   Other indicators

This category of indicators has not been further elaborated at this stage. The category is included to highlight that other programmes will require other data and will develop further indicators. Regions will likely wish to expand data collection to cover indicators that are of regional priority (e.g. with respect to livestock and agriculture). An indicator review process is proposed so that wherever possible these other indicators are known, approved and where possible standardised with approved definitions.

2.3.2   Data sources

It is proposed for OWNP M&E to make use of four main sources of data described in the following sub-sections.

2.3.2.1   Regular sector monitoring and reporting

Regular sector monitoring and reporting involves data collection on quarterly to annual cycles for indicators defined by the WaSH sectors and supported by their Management Information Systems.

Water: The water sector does not yet have a national MIS system. A national MIS will be operationalised with data derived from existing (quarterly) reporting processes and the National WaSH Inventory. New Information and Communication Technologies (ICT) will be introduced to capture current paper-based reporting and to improve the speed and quality of data collected and support updating.

Health: The Health MIS (HMIS) is an established national monitoring system that includes some key sanitation and hygiene indicators. Data on additional sanitation and indicators is also collected through the Health and Environmental Hygiene program monitoring systems (refer to Annex 3).

Education: The Education MIS (EMIS) is also an established national monitoring system with indicators included on WaSH in Schools.

Finance: IBEX is the national system for managing government financial expenditure. Due to the many and complex financing channels in WaSH it only tracks a part of total WaSH expenditure including the CWA component. It is intended for use with respect to all channel 1 and 2 expenditure[2]. Increased and improved use of IBEX will be promoted, with additional surveys used to estimate total WaSH expenditure (including channel 3 expenditure).

2.3.2.2   National WaSH Inventory

The NWI will complement sector data providing occasional (every 5 years is proposed as the data collection frequency) inventory of WaSH infrastructure assets. NWI data is both a source of triangulation for KPIs, and potentially a source of data for additional indicators that are not included in regular reporting.

2.3.2.3   Additional sector monitoring studies

The OWNP is implementing its own impact evaluation which will include nationally representative household surveys to establish a baseline, mid-line and end-line. This is viewed as a component part of the OWNP M&E system and will include collecting additional data (for example on some indicators that are not included and cannot be easily included in the regular reporting or NWI).

Other studies are regularly undertaken across the WaSH sectors by government, development partners and the national and international academic communities. These include sustainability checks and behaviour change studies (focusing on sanitation and hygiene for example) which are undertaken periodically to provide more in-depth understanding on some of the more complex issues that the WaSH sectors face. These studies can be used to fill gaps in OWNP M&E and a coordinated process to review and use such sources is proposed.

2.3.2.4   Nationally-representative household survey (CSA) data

Household survey data provides complementary data that emphasises the use of water, sanitation and hygiene facilities. Such data is used by the JMP internationally to develop its global reports but is relatively under-utilised within government WaSH reporting. Being focused on use at the household level, this data is well suited to analysis

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[2] Channel 1a involves public finance from government treasury, Channel 1b is on-budget development assistance, Channel 2 is bilateral funding)

focused on questions of equity (although generally not questions of intra-household equity, gender issues etc.). It is proposed that wider use is made of household survey data to fill some of the gaps left by sector provider data, and for triangulation purposes.

2.4 Tracking Risks using the Enhanced M&E Framework

The OWNP through its CWA financing is introducing new mechanisms to anticipate and mitigate environmental and social risks with respect to development of water and sanitation systems, including new procedures to manage resettlement where this is required. The enhanced OWNP M&E Framework includes indicators to support the implementation of these provisions.

2.4.1 Tracking Environmental and Social Risks

Although Water, Sanitation and Hygiene related interventions are expected to have broadly positive environmental and social impacts, there is the potential for adverse impacts on both people and the environment. The CWA's Program Operational Manual (POM) establishes an environmental and social screening process to identify the potential for adverse impacts and to trigger appropriate follow up. This is further explained in the Environmental and Social Management Framework (ESMF) (FDRE, 2013b).

The following proposed standard indicators are included in the OWNP M&E framework (as supplementary indicators) to support tracking of risks in line with the ESMF. It is anticipated that data on these indicators will initially be collected and reported in CWA-funded woredas but with the potential for such tracking to be extended to other financing channels as required.

- Percentage of schemes with completed environment and social screening process.

- Percentage of schemes assigned to each environmental and social screening category (A, major adverse impacts; B1, potential adverse impacts requiring mitigation measures as specified in the Environmental and Social Management Framework; B2, further environmental and social impact assessment (ESIA) required and a specific Environmental and Social Management Plan; C, no significant issues).

- Percentage of B1 schemes with public consultation completed and reported.

- Percentage of B2 schemes with completed ESIA and ESMP and public consultation completed and reported.

These data will be collected by RWCO/PMUs on an annual basis. Inclusion of the indicators will support the preparation of the annual environmental monitoring report to be prepared at regional level as part of CWA-funded implementation.

Tools for climate screening such as those being piloted by COWASH have the potential to further enhance environmental screening and source protection.

2.4.2 Tracking exclusion risks

There is a risk that "focusing policies and programmes on broad-based understandings of underserved regions, populations and vulnerable groups will lead to overlooking inequalities between individuals within these regions, populations and groups" (Brocklesby, 2013). The social assessment undertaken as part of the development of the OWNP highlights large variations between woredas in the same region and between kebeles in the same woreda due to a "complex mix of environmental, social and institutional factors". It distinguishes between vertical inequalities within populations and groups (e.g. pastoralist communities, children, and kebeles within woredas) and horizontal inequalities between populations and groups (e.g. rural-urban populations), and recommends a focus on the vertical differences within underserved populations and vulnerable groups to better address the different needs amongst people who are under-served and to better target interventions. The report also finds that the "current sector data collection and monitoring system for the WaSH sector has yet to consider the full range of vertical differences within underserved populations and vulnerable groups. It does not capture coverage, access and use data below the household level. There is limited data on differential access and use by age, gender and disability." The report also flags the importance of cost of services to poor households with affordability being an important reason why many resort to unimproved sources.

OWNP M&E will specifically address these issues through:

- The OWNP impact evaluation which includes household surveys with questions focused on sub-household issues related to gender, disability, age in accessing WaSH services, and an approach that views the impact evaluation as an integral part of the M&E system

- Making greater use of household survey data collected by the CSA as recommended in the OWNP social assessment (such as the Ethiopia Demographic and Health Survey)

- Improvement of indicators with respect to social issues based upon recommendations made in the OWNP social assessment.

- Disaggregation where possible of data to highlight inequities, and development of metrics to report on inequalities using available data (see for example in Annex 3, KPIs 1-3 and 9, and supplementary indicators S6,9, S27, S29, S61 and S67)

- A specific section in the OWNP annual report on progress in addressing inequalities in access to WaSH services.

2.4.3 Tracking Resettlement Risks

Water and sanitation schemes may require acquisition of land and may involve resettlement of people. A Resettlement Policy Framework (RPF) has been put in place to support CWA-funded implementation and to ensure such issues are addressed systemically in line with legal requirements (FDRE, 2013c).

The following proposed standard indicators are included in the OWNP M&E framework (as supplementary indicators) to support tracking of risks in line with the RPF. It is again anticipated that data on these indicators will initially be collected and reported in CWA-funded woredas but with the potential for such tracking to be extended to other financing channels as required.

The following indicators are identified to support implementation of provisions related to resettlement issues:

- Percentage of schemes involving resettlement of people.

- Percentage of households and individuals relocated as a result of water and/or sanitation scheme activities.

- Percentage of schemes where compensation is paid relating to development of water and/or sanitation schemes.

- Average amount of compensation paid relating to development of water and/or sanitation schemes.

- Average time taken to make compensation payments (defined as time between date when displacement occurred and date when compensation was actually delivered).

- Number of grievances registered.

These data will be collected by RWCO/PMUs on an annual basis. Inclusion of these indicators will support the preparation of the annual monitoring report to be prepared by implementing agencies (as set out in the RPF).

2.4.4 Tracking Fiduciary Risks

Following a fiduciary risk assessment that identified and assessed the major risks, a Fiduciary Risk Mitigation Plan (FRMP) was developed to support management of funds through the CWA.

The following proposed standard indicators are included in the OWNP M&E framework (as supplementary indicators) to supporting tracking of risks in line with the FRMP. It is also anticipated that data on these indicators will initially be collected and reported in CWA-funded woredas but with the potential for such tracking to be extended to other financing channels as required.

- Volume of WaSH investments managed and reported through IBEX.

- Proportion of financial reports submitted on time.

- Proportion of WaSH institutions with annual audits completed.

- Proportion of WaSH institutions with up to date asset registers/ inventories.

These data will be collected by RWCOs/NWCO and BOFED/MoFED. Indicators with respect to tracking capital investment costs and cost recovery by service providers are also included in line with GTP2 (see Annex 3).

2.5 Calendar for enhanced OWNP M&E Reporting

Table 3 illustrates how on an annual basis data will be collected and reported within sectoral processes, shared with the NWCO (in the case of data from health, finance and education systems) and made available at each level for the preparation of integrated reports. Some of the key sector events, where OWNP reports are vital inputs, are also highlighted.

In years where the National WaSH Inventory is undertaken, such as 2016, additional data is collected and reported in the WaSH Atlas.

Table 3: Proposed OWNP M&E calendar[3]

Month	Sectoral data collection and reporting (water, health, education, finance)	Data exchange	Integrated reporting and use of OWNP M&E data
July	No activity	No activity	No activity
August		(end Aug) HMIS, EMIS and IBEX data is exported, provided to NWCO, and imported to WaSH M&E MIS	
September	(end Sep) Q1 physical and financial reporting by sectors		Annual reports produced in parallel at woreda, town, zonal, regional and national levels At federal level this includes annual CWA and OWNP report
October			Joint Technical Review 2 Multi-stakeholder forum (MSF): a forum for peer review of M&E findings.
November		(end Nov) HMIS and IBEX data is exported, provided to NWCO, and imported to WaSH M&E MIS	
December	(end Dec) Q2 physical and financial reporting by sectors		Q1 reports produced in parallel at woreda, town, zonal, regional and national levels
January	No activity	No activity	No activity
February		(end Feb) HMIS and IBEX data is exported, provided to NWCO, and imported to WaSH M&E MIS	
March	(end Mar) Q3 physical and financial reporting by sectors		Q2 reports produced in parallel at woreda, town, zonal, regional and national levels Joint Technical Review 1
April	No activity	No activity	No activity
May		(end May) HMIS and IBEX data is exported, provided to NWCO, and imported to WaSH M&E MIS	
June	(end June) Q4/annual physical and financial reporting by sectors		Q3 reports produced in parallel at woreda, town, zonal, regional and national levels

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[3] This is the activities that are proposed to be taken in any one reporting year

3 Technical and functional requirement specifications of enhanced WaSH M&E ICT systems

This section provides an overview of the critical technical and functional requirements for the WaSH M&E MIS and mobile data collection tools. There are a number of design criteria, which are cross cutting for these systems and there are a number of specific requirements for the MIS or the mobile data collection tools. During the tender processes (see section 4.4 on procurement), product requirement documents will be prepared based upon these specifications.

It is proposed that all water supply and NWI data input at woreda, town, zone, and regional levels will happen through the mobile data collection tool. The mobile data collection tool will allow users at all levels to view raw data and update data points subject to approvals. Outputs, including KPI reports, maps, and further visualizations will be generated through the MIS tools. This design does not prevent a single supplier to provide both the mobile data collection tool and the alternative MIS, which will reduce the overall complexity. Some data sources, including the HMIS, EMIS, IBEX, and CSA administrative data will be pulled into the MIS from federal level initially with the possibility to incorporate this at woreda level in the future.

3.1 Design criteria

Ten design criteria were developed and agreed in consultation with key MoWIE staff (at the options workshop held on 16 July 2015) to inform our recommendations on strengthening WaSH M&E ICT systems (Table 4). These are aligned with the international Principles for Digital Development[4]. These will be used to support the assessment of available technologies and to ensure that the procured ICT solutions work together. This is critical as it is envisaged to have two different software systems and a mobile data collection tool that supports both.

Table 4: Guiding design criteria for WaSH MIS

Design Criteria	
1	The systems will supply data required for integrated OWNP reporting, linking where required with the health (HMIS), education (EMIS) and finance (IBEX) systems.
2	The systems will be easily used and meet the needs of local actors with service delivery functions as well as the administrative reporting requirements going upwards from woredas, to zones, regions and the federal level for policy, planning and related decision-making.
3	The systems will facilitate the provision of data to users at different levels in easily accessible and value-added formats.
4	The systems will collect data on a standard set of core indicators (KPI) and non-core indicators with flexibility built-in to enable the modification or addition of indicators over time. This flexibility is designed to meet different process and project requirements so that projects will not need to duplicate data collection systems.
5	The systems will be developed to be consistent with the requirements of the National Statistical System and as far as possible with international norms and standards in WaSH M&E, for example the Water Point Data Exchange.
6	The systems will be open source or not tied to a single IT service provider.
7	The systems will be matched to the capacities (staffing, skills, logistics, and infrastructure) that are available at different levels for all required functions along the M&E cycle.
8	The systems will be matched to existing or feasible budgets and all the costs foreseen for initial set-up and ongoing maintenance and use of system can be realistically covered (eventually without long-term donor financing).

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[4] http://digitalprinciples.org/

9	The systems will facilitate updating, support versioning and facilitate verification.
10	The systems will enable management of users and the approval of data stored by the designated authorities, and provide a similar level of assurance and integrity to stamped paper-based reporting trails.

3.2 Shared requirements for all systems

All systems are expected to meet the Ethiopian and IP regulations on ICT systems and to provide accessible and modifiable source code whether open source or closed source. In addition, all systems will need to meet these shared functional specifications (see Table 5). It is also expected that vendors will provide access to issue lists, including the complexity and status of each issue.

Table 5: Shared functional specifications for all systems

Shared functional specifications
Mobile and desktop compatible web interface
Versioning of data and conflict resolution when importing data
Ticketed support system available from tool interface.
Low bandwidth
High availability
User permissions and roles customisable by administrative user, including geographic roles and permissions for regional, zone, and woreda staff
Localised or multi-language support
Data security e.g. backups, insurance for fire and theft.
Scalable for data management and number of users
User friendly with intuitive/easy access to the system and navigation.
Rich support documentation

3.3 MIS requirement specifications

The MIS requirement specifications (Table 6) relate to both the existing WaSH M&E MIS and the alternative MIS. The current scope of the existing WaSH M&E MIS will be changed to support its operationalisation. It will refocus on the reporting and analysis requirements as well as local data storage, while most user data input functions will be disabled. The outputs will include online dashboards with customisable reporting templates for regular OWNP reporting.

Table 6: Output and input specifications for WaSH MIS (both the existing WaSH M&E MIS and the alternative MIS)

Output specifications for WaSH MIS	Input specifications for WaSH MIS
Access to web-based MIS data, custom queries, pivot tables, and template reports by authenticated users according to permissions and roles	Shape files for administrative boundaries
Share data analysis using a URL	Import data from Health, Education, CSA and Finance using 3rd party read API or a CSV import. Respect unique IDs.
Longitudinal outputs	User search, basic and advanced
Export reporting templates to PDF and MS Word-editable file.	Configuration of aggregated analysis tables, figures and

	maps in the dashboard based on user role and permissions.
Export point data to WPDx standard[5]	Configuration of colour schemes, logos and branding
Mapping including using hierarchical administrative boundaries and visualisation of point based data to provide comprehensive assessment of KPIs.	Write API for authenticated applications with roles and permissions
Export to raw data to Excel and/or CSV.	User management interface for defining roles and permission and for creating users.
	Configuration by administrative user of automatic reporting periods, e.g. quarterly, annually, etc.
	Import data from mobile data collection tool using read API. Respect unique IDs.
	Configuration of MIS data, custom queries and template reports by authenticated users according to permissions and roles
	Configuration of advanced analysis (pivot tables, queries, KPI, etc.) in standard dashboard, maps and reports by authenticated administrative user
	Configuration of aggregated analysis tables, figures and maps on a public widget by administrative user[6].

3.4 Mobile data collection system requirement specifications

The mobile data collection solution will handle the majority of inputs into the MIS (i.e. for water supply and NWI data). Specifications are given in Table 7. Users will be able to submit data and approve data offline and online using mobile devices. There will be an administrative interface for designing and assigning surveys to devices and to ensure that each survey question is assigned an appropriate variable name for the purpose of importing the data into the MIS. The interoperability features of the mobile data collection for the purpose of the MIS will be critically assessed to control for integration risks.

Table 7: Output, input and functional specifications for data collection system

Outputs specifications	Input specifications	Functional specifications
Survey response import and export with CSV or MS Excel formats	Web-entry for importing bulk data import from devices or computer	Device registration and survey assignment
Device export through Bluetooth, USB, and/or storage card.	Manage census information and admin levels	Mobile data transfer via GSM data or WIFI
Real time response monitoring on dashboard	Finding entries, in order to edit or modify records	Longitudinal monitoring[7] and updating of records
Read API for export to MIS with variable and response codes and/or raw system data	Server based conflict resolution	Rich survey format including templates, photo capture, GPS, branching, validation, hierarchical multiple choice, looping, etc.
Field validation during data entry	Intuitive and integrated input system (training mode, accessibility options such as large buttons etc.)	User and/or device-based authentication with roles and permission for data entry

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[5] http://waterpointdata.org/
[6] A 'public widget' is a user input to configure the maps, calculations, figures. Like writing an excel equation
[7] Repeat monitoring of same point over time

Mobile-based viewing of previous data points, including location search and map view	Output codes for exporting data to MIS	Update mechanisms to ensure bug-fixes and compatibility
Write API (preferred)	Web-entry of surveys by authenticated user	Location or text-based record searching on field devices
Rich user warnings based on survey validation design (preferred)	Import data inventories.	Dynamic multiple type questions and feature to link multiple surveys and automatic update of new forms from the backend system
	Data cleaning and editing: device and web-based	Common supported platforms and devices with long-term support and upgrades
	GPS capture in survey	Device monitoring (network usage, etc.)
	Survey creation, modification and deletion	Copying, linking, exporting, importing of surveys
	Device management interface	
	Add visualisation parameters, e.g. shape files.	
	Offline response entry	
	Photo capture in survey	
	Reliable GPS readings (checking satellites, accuracy etc.)	
	Variable names for each question when exporting to MIS	
	Mobile search field for data	

4 Four year operational plan

4.1 Work Plan Structure

The proposed operational plan presents a phased work plan (November 2015- February 2019[8]) to operationalise OWNP M&E including four work packages related to 1) OWNP systems enhancement, 2) capacity development, 3) data dissemination and use and 4) synergy and complementarity, and four sub-plans relating to procurement of ICT solutions, the National WaSH inventory, data quality assurance and sustainability (exit plan).

This plan includes 23 intended outcomes across the 4 work packages, 75 outputs and 181 activities to be completed within a 40 month period. The details of the plan are set out in Annex 4 including outcomes, outputs, key deliverables, activities and intended level of effort.

Critical deliverables and milestones are summarised in Table 8.

Table 8 Key milestones

Key milestones
Annual report of total WaSH expenditure (by September each year)
OWNP annual report (by October in 2016, 2017, and 2018)
Updated list of WaSH health indicators with status and definitions (by Dec each year)
Updated list of WaSH education indicators with status and definitions (by Dec each year)
OWNP implementation report (annual and quarterly). Annual report by end February.
At least 4 briefing papers per year, 12 news articles per year, 6 blogs per year, and 12 presentations per year (summary report included in implementation report and published to website)
Training completion reports (for each training workshop)
Tender documents for alternate MIS software (December 2015)
Tender documents for mobile data collection software (December 2015)
Tender documents for modifications to existing WaSH M&E MIS software (December 2015)
Inter-agency data sharing agreement (by December 2015)
Alpha acceptance report (February 2016)
Report on piloting of mobile data collection (February 2016)
Report on training of trainers for NWI (March 2016)
Report on training of trainers for MIS (March 2016)
Report on training roll out for MIS (April 2016)
Report on training roll out for NWI (April 2016)
Beta acceptance report (July 2016)
Report on modifications made to improve HR strategy and guidelines for each WaSH ministry (August 2016)
Report of stakeholder evaluation (Sep 2016)
Updated guidelines for reporting using WaSH M&E MIS (September 2016)
Report on further operationalisation recommendations linked to alternate MIS (September 2016)
Improved reporting formats for major programmes at all levels (Sep 2016)
UAT and contract acceptance report (Oct 2016)
Report reviewing implementation and lessons learned of NWI2 (October 2016)
Report on revision of training curricula (November 2016)

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[8] There is a risk that contracting, sub-contracting and mobilisation will require the start date of the implementation phase to be delayed. The workplan is to be reviewed once contracts or a contracting timetable are in place.

Ethiopia WaSH Atlas (by March 2017)
Report on use and impact of the OWNP report (by May 2017)
Report on use and impact of the Ethiopia WASH Atlas by January 2018
Report on use and impact of outreach materials (January 2018)
Report on WaSH data use at local levels to improve service delivery (May 2018)
Report on sharing and use of WaSH data from OWNP MIS systems (July 2018)
Report on the efficiency and impact of the combined WaSH MIS reporting system (November 2018)

Since the activities of the OWNP M&E support team are focused on technical and managerial support, there is considerable emphasis in the plan on the outcomes that are sought through the support activities. The achievement of these outcomes depends on activity by the sector ministries and other partners as well as the OWNP M&E support team.

Each of the work packages includes linked and coordinated activities in parallel across the 40-month project period. The OWNP systems enhancement work package seeks to improve WaSH M&E through each of the sectors and puts in place the necessary processes and systems including improved and new ICT software. Closely related sub-plans which link to this work package are those with a specific focus on procurement of ICT solutions (section 4.4), renewal of the National WaSH inventory (section 4.6), and data quality assurance (section 4.7)

The capacity development work package activities (section 4.3) are intended to ensure that the necessary capacity is in place for various actors to effectively undertake their functions in monitoring and evaluation of WaSH services. The data dissemination and use work package activities (section 4.8) aim to facilitate the sharing and use of data for evidence-based decision-making in the OWNP. The overall objective of the intervention package on synergy and complementarity (section 4.5) is to ensure that the MIS systems of the implementing ministries are used by the OWNP to create synergies, avoid duplication of efforts, and avoid conflicting results that are contested. A related sub-plan is the sustainability (exit plan) sub-plan (section 4.9) which aims to ensure that improved WaSH M&E is sustained in the long-term.

4.2 OWNP systems enhancement sub-plan

The overall objective of the OWNP systems enhancement workplan and operationalisation sub-plan is to put in place a functional and user-friendly system that provides regular and reliable information on water, sanitation and hygiene. The sub-plan is informed by a review and assessment of the piloted WASH M&E MIS (PUT) system, the use of mobile data collection tools within the NWI and the piloting and scaling up of other ICT and IT-based monitoring efforts in the WaSH sectors.

Box 1 Timeline and key milestones for systems enhancement plan

Proposed key milestones:

- Updated list of WaSH health indicators with status and definitions (by Dec each year)
- Updated list of WaSH education indicators with status and definitions (by Dec each year)
- Annual report of total WaSH expenditure (by September each year)
- Tender documents for alternate MIS software (December 2015)
- Alpha acceptance report (February 2016)
- Beta acceptance report (July 2016)
- UAT and contract acceptance report (Oct 2016)
- Report reviewing implementation and lessons learned of NWI2 (October 2016)
- Tender documents for mobile data collection software (December 2015)
- Report on piloting of mobile data collection (February 2016)
- Updated guidelines for reporting using WaSH M&E MIS (September 2016)

- Tender documents for modifications to existing WaSH M&E MIS software (December 2015)
- Report on further operationalisation recommendations linked to alternate MIS (September 2016)

4.2.1   Key findings: introduction of ICT-enabled systems for WaSH

The OWNP needs to be able to demonstrate and communicate its results, with sound evidence and analysis being used to drive improved programme implementation and to ensure further programme investments. During the various reviews undertaken within this assignment we have assessed the National WASH Inventory 2011, the National WASH Inventory update in Somali Region 2014, and the WASH M&E MIS, in addition to other ministry systems holding WASH data. Amongst other tools, the application of a design-reality gap framework has provided the following insights:

Existing WaSH M&E processes: The existing WaSH landscape is fragmented and complex with numerous programmes, plans, financing channels and reports across the sectors. M&E responsibilities and efforts are typically fragmented due to complex financing arrangements in WaSH sectors and different Ministries, Departments, Offices, Processes, Sub- processes and Case Teams involved. Limited cooperation between the units managing information systems and IT across WaSH ministries and alignment of data from the different MIS systems across the WaSH sectors prevents effective WaSH sector wide reporting.

Existing IT-enabled systems: Existing systems are in place providing WaSH information to the sector at both national and local levels: HMIS has 3 household sanitation indicators and 2 health institution indicators, and EMIS has 3 school WaSH indicators. The national IBEX system is in place to manage public expenditure. These systems have gaps with respect to WaSH indicators and the quality of data collected but are functioning national scale data collection and reporting systems within OWNP implementing ministries. There is not a comparable national system in use in the water supply sector. IT-enabled systems in water supply exist at regional and local levels but are not utilised to their full potential.

The National WaSH Inventory: The National WaSH Inventory has resulted in an improved national estimate of access to improved water supplies, and the results were accepted and used by both the parliament and later the Joint Monitoring Programme in determining that Ethiopia had successfully met the MDG water target. The Somali region 2014 update deployed new mobile data collection technologies which greatly improved the speed and quality of data collection. The NWI however lacks ownership in other WaSH sectors and the WaSH M&E MIS which currently holds NWI data does not yet link to the established data collection processes and management information systems in finance, education and health.

WaSH M&E MIS: The WaSH M&E MIS is functional but does not meet the minimum requirements considered necessary for operationalisation. There are significant technical and operational challenges with the system. Testing processes were insufficient to ensure the system met user requirements and capabilities. The software is not user friendly and has limited flexibility without recourse to reprogramming work by the developers. Despite a large-scale roll out of training there has not been any significant use of the system. The database contains only 2011 NWI data and new data is not being entered. The hardware and training roll-out has not yet led to use of the system.

Introduction of ICT: The Health and Education reporting systems are largely paper based; there is no use at scale of internet or mobile communications technologies. IBEX is a series of standalone databases at regional level and is not networked. The water sector has not yet linked its routine reporting systems to an operational MIS system. The 2014 Somali region NWI update successfully used mobile technology to collect all water infrastructure data, where data was be collected faster and more reliable than using paper based systems. There is considerable ICT-related innovation in monitoring within bilateral programmes, projects and NGOs.

Quality assurance: There is little practice of validating data or triangulating data derived from different sources in the OWNP sectors. Data quality management is not implemented effectively and there are not systematic processes in place to verify data. There are concerns about the quality of National WaSH Inventory data and the validation processes; however data quality is thought to have improved through deployment of mobile data collection technology in the Somali region.

Demand and use: There is high demand for data but existing data is significantly under-utilised. Data is either not accessible or insufficient resources are allocated to data analysis, dissemination and use. There is little knowledge about the data available within the OWNP partner ministries, the CSA or the NWI, or sharing of relevant information between ministries which has led to considerable duplication in WaSH data collected across the sector. Recent

WaSH M&E efforts have failed to make a clear link between the decisions that need to be taken and the data required. There is a tendency to collect excessive data, to inadequately use existing data, to have an absence or lack of capacity and systems to analyse, interpret and respond to data collected at the appropriate levels, in particular at the woreda level, and to have weak standard processes, forms and procedures for using data.

4.2.2 Approach to systems enhancement

Based on the findings of our assessment we provide an overview of the strategic directions that are recommended and proposed for the implementation phase:

Streamline WaSH targets, indicators and definitions: An updated set of WaSH indicators aligning with GTP2, OWNP and CWA and other sector priorities are proposed. Sanitation and hygiene indicators are based on the updated indicators in HMIS. Indicators are prioritised as; updated set of possible KPIs, supplementary indicators, and other indicators. An annual review process will be established to ensure relevance of data collected for use in decision making and tracking progress.

Integrated reporting: Reporting will be integrated across ministries by using existing sectoral MIS systems to collect data from local levels and operationalising a WaSH MIS to both support water supply data management and to provide access to WaSH data at all levels to support production of integrated OWNP reports. Health, education and finance sector data is imported at federal level and made available at all levels. A long term vision is to have woreda level entry into the WaSH MIS from sectoral MIS systems. In addition to regular reporting, a National WaSH Inventory will provide 5 yearly data for a wide range of indicators on critical assets.

Integrated reporting is undertaken at each level; at federal level a reporting team led by NWCO works with data drawn from the integrated WaSH M&E MIS database and staff from the sectors to produce a comprehensive flagship OWNP annual report. Similar reporting processes are envisaged at regional and woreda levels in line with demand and capacities at these levels. Well-functioning WaSH institutions are required to lead production of integrated reports at federal and other levels. Apart from integrated reports, data use is to be promoted through an intervention package on dissemination and use that focuses on ensuring the use of data at local levels to improve service delivery as well as promoting use within each of the OWNP sub-sectors.

Operationalise the WaSH M&E MIS: Operationalisation will involve three major aspects; improvements to the existing WASH M&E MIS, procurement of mobile data collection application and an alternative MIS with greater database and analytical capabilities. The existing WaSH M&E MIS will be further developed to make it operational with a reduced scope. Steps include improving the existing WaSH M&E MIS with a focus on operationalising the database and reporting functionality, which will need a new contract with the developers, purchase of the source code subject to cost and audit to assess the options for long term use of the software and the potential for maintenance and modifications by the MoWIE IT department. Meanwhile, the development of separate but compatible mobile data collection capabilities, through the procurement and customisation of 'off the shelf' software to support NWI2 data collection. In parallel will be the procurement and customisation, or development, of an alternative MIS with great database and analytical software capacities.

Ensuring regular reporting: The OWNP M&E system includes combining strengthened regular reporting together within periodic inventory of infrastructure assets. Reporting and inventory processes are in place and will be strengthened through improvement of indicators and enhancement of capacities as well as through supporting ICTs. Current water supply paper-based reporting will be gradually migrated through additional forms using mobile application and phones, with care given to ensuring a paper-based backup trail and/or sufficient approvals to ensure that WasH M&E governance is enhanced and not undermined. A phased process of development and rollout will facilitate regular kebele-level reporting where capacities are lower, enabling all regions to adopt infrastructure level monitoring systems by the end of 2018.

4.2.3 Work plan

The work plan sets out the planned activities as part of the systems enhancement work-package/ operationalisation work plan. Table 9 provides a summary of the work plan describing proposed outcomes, outputs and activities (as developed during the inception phase and proposed in this report). Annex 4 contains further detail on the timing of activities.

The timescale is ambitious but grounded within the overall project context and timeframe. The intention is to use the effort and enthusiasm of NWI2 data collection to begin embedding the regular M&E in those regions and woredas with the greatest capacity. An example is Tigray, where a lot has been done in WASH data collection,

there are well established processes and familiarity with technologies. Lessons from these areas will influence the planning of second and third phase rollout to medium and lower capacity areas, which will be preceded by filling staffing gaps and improving aspects of relevant capacity development.

Table 9 WaSH M&E system enhancement work plan summary

Output No.	Output	Links to other sub-plans	Activity No	Activities
Outcome 1.1 Improved WaSH (sanitation and hygiene in household and extra-household settings including health institution WaSH) data collected through the health sector monitoring systems				
1.1.1	Annually updated indicator frameworks and guidelines (WaSH component) for HEH program and HMIS		1.1.1.1	Technical support to review and consult on standardisation of HEH program indicators
			1.1.1.2	Technical support to updating of HMIS indicators and definitions (including water component for HEWs) with alignment improved between targets, indicators, and definitions
Outcome 1.2 Improved school WASH data collected through the education sector monitoring systems				
1.2.1	Annually updated indicator frameworks and guidelines (WaSH component) on monitoring school WaSH within EMIS		1.2.1.1	Technical support to review, consult and update on improvement of EMIS indicators and definitions
Outcome 1.3 Improved WaSH expenditure data collected through national systems (IBEX) and supporting studies				
1.3.1	OWNP M&E implementation reports track developments in reporting of WaSH expenditure through the IBEX system		1.3.1.1	Technical support to promote wider use of IBEX system for WaSH expenditure
1.3.2	Budget tracking and Value for Money studies regularly promoted, and uptake reported through OWNP M&E reports, website etc.		1.3.2.1	Promotion of budget tracking and VFM studies through the development and sharing of standardised methodologies (e.g. methodologies to disaggregate water supply data by technology type etc.), sharing examples of budget tracking and VFM studies and follow-up.
1.3.3	Reported annual survey of total WaSH expenditure		1.3.3.1	Technical support to develop a standardised methodology to enable estimation of total WaSH expenditure (off-budget, multilateral, bilateral, NGO including emergency expenditure using standardised methodology)
			1.3.3.2	Technical support so annual survey undertaken, analysed and reported

Outcome 1. 4 IT-enabled Water MIS system used to facilitate effective processing (sharing, distributing, analysing, storing) and dissemination

1.4.1	Vendor procured and passed contract and regulation acceptance testing	Procureme nt	1.4.1. 1	Production of tender documentation and sign off by ministry
			1.4.1. 2	Technical support to tender processes and contract and regulation acceptance testing for potential vendors
1.4.2	Vendor status log reviewed (fortnightly)		1.4.2. 1	Manage vendor to customise and further develop and deliver MIS to include technical and functional design specifications
1.4.3	Alpha acceptance report		1.4.3. 1	Representative user feedback from federal, regional and woreda level acquired on basis of wireframes and/or prototype
1.4.4	Operational manuals developed for the OWNP MIS		1.4.4. 1	Quality assure/review full operational and technical manuals prepared by vendor for different users levels
1.4.5	Beta acceptance report based on piloting OWNP MIS in selected regions (beta user testing)		1.4.5. 1	Full plan prepared for the MIS pilot in selected regions (beta user testing)
			1.4.5. 2	Prepare and deliver training for pilot of MIS
			1.4.5. 3	Coordinate the MIS pilot and feedback process in selected regions (beta user testing)
1.4.6	UAT and contract acceptance report for OWNP MIS ready for national roll-out		1.4.6. 1	Refine MIS and documentation based on Beta Acceptance Report and piloting experiences
1.4.7	Plans for OWNP MIS software launch		1.4.7. 1	Preparations for software launch
1.4.8	OWNP MIS is kept operational		1.4.8. 1	Monitor vendor to ensure helpdesk support, regular bug fixing, upgrading, customisation according to contract

Outcome 1.5 Improved NWI water data collected at periodic intervals, and NWI2 completed

1.5.1	Effective national process in place to collect and process NWI data at periodic intervals, and support to NWI2 reported		1.5.1. 1	Technical support to development NWI2 plan and mobilisation of funds
			1.5.1. 2	NWI1 methodology revised and manuals & guidelines updated

			1.5.1.3	Technical support to detailed logistics planning and preparation	
			1.5.1.4	Technical support to collection, processing and analysis	
			1.5.1.5	Review and lessons learned report drafted	
1.5.2	Commercial Off-the-shelf (COTS) ICT solution for NWI mobile data collection procured and tested by end February 2016		1.5.2.1	Production of tender documentation	
			1.5.2.2	Support tender processes, roadshow, regulation testing and award contract to vendor	
			1.5.2.3	Technical support to customisation of COTS solution by vendor	
			1.5.2.4	Review and approval of documentation for system	
			1.5.2.5	Piloting and refining during 1st region where data collected before other regions start	
Outcome 1.6 All regions reporting regularly on at least kebele level by end 2016 and on infrastructure level by end 2018					
1.6.1	All regions have effective process in place to regularly (short intervals quarterly-annual) collect, process and disseminate data		1.6.1.1	Technical support to develop policies and procedures for ongoing reporting using MIS	
			1.6.1.2	Planning the roll out of MIS to all regions	
			1.6.1.3	Roll out of MIS to all regions	
			1.6.1.4	Review to learn lessons	
Outcome 1.7 High level of confidence of sector stakeholders in the validity of WaSH data					
1.7.1	Section in OWNP annual report on the quality of WaSH data and with recommendations for improvements	DQA	1.7.1.1	Technical support to implement and upgrade existing data quality assurance mechanisms in each WaSH sector, assess data by triangulation with other data sources and undertake validation surveys where required	

1.7.2	OWNP M&E implementation quarterly report includes section on implementation of measures to address WaSH data quality issues	DQA	1.7.2.1	Technical support to identify and follow up recommendations for improvements to enhance data quality
Outcome 1.8 WASH M&E MIS on PUT platform upgraded				
1.8.1	Source code recommendations	Procurement	1.8.1.1	Audit source code with PUT
1.8.2	PUT contracted to upgrade existing WASH M&E MIS	Procurement	1.8.2.1	Support tender process and contractual arrangements
1.8.3	Vendor status log (fortnightly)		1.8.3.1	Manage PUT to customise and further develop and deliver PUT system to include technical and functional design specifications
1.8.4	Alpha acceptance report		1.8.4.1	Representative user feedback at federal, regional and woreda level acquired on basis of wireframes and/or prototype
1.8.5	Manuals updated		1.8.5.1	Prepare full operational and technical manuals for different users levels
1.8.6	Beta acceptance report		1.8.6.1	Prepare pilot in selected regions and deliver training. Coordinate feedback. Aligned with 1.4.5.
1.8.7	UAT report		1.8.7.1	Refine WaSH M&E MIS (PUT) documentation based on Beta Acceptance Report and piloting experiences
1.8.8	Existing WASH M&E MIS is kept operational		1.8.8.1	Monitor vendor to ensure helpdesk support, regular bug fixing, upgrading, customisation according to contract

4.3 Capacity development sub-plan

The overall objective of the Capacity Development Sub-Plan is to ensure that the necessary capacity is in place for various actors to effectively undertake their functions in monitoring and evaluation of WaSH services. The Capacity Development Sub-plan is informed by an assessment of (a) current WaSH M&E capacity constraints (IRC, 2015a); (b) the necessary capacity to implement the preferred M&E options and (c) existing WaSH M&E-related training and capacity building initiatives (supply side).

Box 2 Timeline and key milestones for capacity development

Proposed key milestones:

- Report on modifications made to improve HR strategy and guidelines for each WaSH ministry (August 2016)

- Report on training of trainers for NWI (March 2016) and Report on training roll out for NWI (April 2016)

- Report on training of trainers for MIS (March 2016);

- Report on training roll out for MIS (April 2016);

- Report of stakeholder evaluation (Sep 2016)

- Training completion reports (for each training workshop) (2016, 2017, and 2018)

- Report on revision of training curricula (November 2016)

4.3.1   Key findings: capacity issues in OWNP M&E

From a review of WaSH sector capacity analyses produced over the last five years (Jones, 2015; NWCO 2014; Birhane et al., 2013 and Evidence on Demand, 2013), together with the findings of federal and regional consultations comprising at least sixty (60) key informant interviews, the main capacity gaps and constraints with direct relevance to WaSH M&E are summarised as follows:

Inter-sectoral collaboration and coordination: Limited integration, coordination and harmonisation between water, health, finance and education sectors at all levels especially sub-federal; collaborative structures such as WaSH steering committees and WaSH Coordination offices are not yet established in most regions and woredas; RWCOs have limited convening power and mandate except through the MoU which currently has little traction below federal level; and very limited support from NWCO which has its own capacity constraints.

Human Resources Development (HRD): M&E staffing and training not prioritised; high staff turnover; numerous vacant positions (managerial, technical, expert and support); limited or no financial resources and opportunities to build staff M&E capacity; low levels of skills in M&E and in IT. There is greater capacity in health and education M&E, but WaSH is not a focus or core competence in these sectors; there is a lack of systematic induction for M&E personnel in regional, zonal and woreda WaSH sector offices. The most critical HRD gaps are in water M&E.

Policy knowledge: Limited understanding of national policies, strategies and targets and their local relevance at sub-federal levels, including about the OWNP, the MoU and the division of mandates, roles and functions of different stakeholders, plus a lack of system(s) for handing over and sharing knowledge, guidelines and other materials with colleagues at all levels.

Physical capacity: Although ICT equipment is available at regional level, its use is hindered by a shortage of skills to manage and use it effectively. A lack of ICT facilities and equipment is notable from woreda level downwards. There are clear IT skills and systems constraints at all levels. Lack of vehicles further hinders both M&E and collaborative efforts.

Process and system constraints: Poor budget utilisation is linked to delays in transfer of funds; slow procurement procedures; inefficient management and operational systems; weak reporting systems. There is limited reporting of reliable data from woreda to zone, from zone to region, and from region to federal. Reports are prepared manually by calculator which is time consuming and lends itself to error. Systematic monitoring for improved planning and reporting is not yet a routine. There appears to be a lack of standardised time schedules, reporting formats and regular meetings to analyse data and to take data-based decisions (IRC/ Coffey, 2015). Most M&E efforts have failed to make a clear link between the decisions that need to be taken and the data needed. There is a tendency to over-collect data; existing data are not being used; the capacity and the systems to analyse, interpret and respond to data collected at the appropriate levels are not in place in particular not at the woreda level; standard processes, forms and procedures for using data are weak (IRC/ Coffey, 2015).

Priority skills gaps: Understanding, verifying and analysing WaSH data (including WaSH in schools) at all levels and across sectors; identifying corrective actions to address problems, and IT skills such as the use and management of Excel. Limited knowledge of sanitation and hygiene significantly impacts on health official's ability to gather and analyse monitoring data and to compile accurate reports. Education departments are primarily concerned with education-related targets, and the positive correlation between improved WaSH and achieving education targets is not well known.

Training supply gaps: Training on WaSH M&E seems to be sparse to non-existent, and where training exists it's on M&E generally and theoretically, plus there is a general bias towards water over sanitation and hygiene monitoring; there is not a system in place to update training when M&E systems are updated in keeping with sector changes, and training materials are usually not available in local languages and are either not provided or not commensurate with the level of trainee groups. TVETCs and HSCs lack awareness of WaSH policies and strategies and there is no link between M&E and WaSH content; inadequate or non-existent linkages within TVETC departments with the wider WaSH sector; weak curriculum development and pedagogical skills amongst teaching staff and few mechanisms for feedback on training or on trainee's performance or satisfaction.

4.3.2   Approach to capacity development

Based on the findings of our assessment, the key elements in our proposed approach to capacity development are:

Keep it practical: Adopt a practical, learning-by-doing approach where mentorship and supportive supervision, and stronger links between actors are employed as key capacity building strategies.

Training materials: Training and materials are relevant to people's M&E roles and that they are able to apply the training (i.e. the necessary resources and opportunities are in place) afterwards. Practical training guidance materials (handouts) are to be developed in local languages and made available to current and future trainees.

Build on what works and on what exists: Review M&E components of existing training initiatives and update them continuously in keeping with improved OWNP M&E system and sector changes (also refer to the synergy sub-plan for this principle in action).

Beyond training: Training is only one way to build capacity. Tools, harmonised systems and reporting formats, reference materials, joint problem analysis, knowledge exchanges, mentorship, supportive supervision, joint learning are all capacity strengthening mechanisms. Training is often necessary to equip people to perform tasks and fulfil roles and mandates, but it is seldom (possibly never) sufficient as a measure to address capacity constraints.

HRD Strategies: Unless the right people are in the right places with the right incentives, motivation and performance measures, the absorptive capacity for training and skills development will be limited. Proper Human Resources Development (HRD) strategies are needed, and are a critical component of institutional capacity. However, the intention is not to write new long strategy documents but to focus on applying improvements in practice based on existing strategies and incremental improvements. Training is therefore not a panacea and will not resolve deeper institutional or HRD strategy related constraints and issues. Incentives may also include awards or prizes for 'best-performing' woredas in data collection and use.

Targeted: Capacity support should be targeted in order to address the gaps in systems, resources, skills, information, knowledge and procedures that constrain the fulfilment of roles and functions. Clear definitions of capacity gaps enable the identification of capacity development outcomes and indicators against which the efficacy of capacity development activities can be measured and monitored.

Linked to phasing: The project activities are phased so that the M&E system is rolled out in higher capacity regions first, while intensive capacity development efforts are targeted at lower capacity regions, with the ultimate aim of bringing all regions to the level of functional M&E by the end of the project.

The strategy proposed focuses on both the demand and supply sides of capacity development. On the demand side, it aims to put the necessary human and physical resources in place for effective M&E within each sector, and to strengthen the ability of all sector actors to collect, analyse, use and disseminate WaSH data. On the supply side, the strategy aims to enhance the WaSH content of M&E training currently offered by TVETs and HSCs in order to improve the knowledge of education, health and water sector professionals with respect to the positive impacts of integrated WaSH on progress within their own sectors.

Existing training related to M&E in all TVETs and HSCs has been reviewed (IRC, 2015a). From this analysis, it is clear that the M&E training currently does not integrate sector content (in health, water or education) with broad and general M&E training. The strategy will therefore integrate a WaSH module into the EMIS, HMIS and water training curricula of TVETCs and HSCs, and include an M&E module in the water training curricula, which will address methods and means to collect, process, update, edit and use M&E data.

The training Modules and training of trainers course developed and conducted in keeping with this strategy will also be integrated into M&E-related capacity building processes and initiatives in place or envisaged within MoWIE, MoH, MoE, MoFED, supported by AfDB, World Bank, and CBPF.

There are opportunities to learn from other countries and a learning exchange with Uganda is proposed focused on dissemination of WaSH M&E data through a WaSH atlas and other means and constraints to use of that data. Other countries such as Uganda, Kenya, Ghana and others have rich experience with respect to introduction of ICT and mobile technologies and these may be accessed through development of links with the Rural Water Supply Network mapping group and its electronic platforms, the GMSA and others.

4.3.3 Work plan

The work plan sets out the planned activities as part of the capacity development intervention package/ sub-plan. Table 10 provides a summary of the work plan describing proposed outcomes, outputs and activities (as developed during the inception phase and proposed in this report). Annex 4 contains further detail on the timing of activities.

Table 10: Capacity development work plan summary

Output No.	Output	Links to other sub-plans	Activity No	Activities
Outcome 2.1 Physical, organisational and human resources policies and procedures are in place across all sectors to implement OWNP M&E				
2.1.1	Benchmarks established and used to track the human, physical and financial resources required to implement the selected M&E system		2.1.1.1	Technical support to develop and use a simple benchmarking approach for OWNP M&E (with supporting guideline) to identify and track capacity gaps and assets
2.1.2	WaSH M&E focused Human Resources Development strategy developed for each sector (water, health, education and finance) and updated on an annual basis		2.1.2.1	Technical support to strengthen HRD strategies for M&E staff in each sector including recruitment procedures and criteria, career paths, job descriptions, performance criteria and incentives, staff retention strategies, staff induction and handover procedures, and staff training guidelines.
			2.1.2.2	Technical support to develop or update WaSH M&E components of HR manuals and guidelines
			2.1.2.3	Training for HRD officers and leadership to roll out
2.1.3	Sector plans include budgeted components to implement WaSH M&E HRD strategies		2.1.3.1	Technical support to sectors and regions to develop a plan to put the processes, people and systems in place to implement enhanced WaSH M&E
2.1.4	Reports tracking progress in filling vacant M&E posts and procuring the necessary equipment, ICT, furniture and vehicles	Procurement	2.1.4.1	Follow up support to promote filling vacant posts and to procure the necessary equipment, ICT, furniture and vehicles
Outcome 2.2 Sector capacity with skills and knowledge to collect and process M&E data is in place				
2.2.1	Health sector processes, skills and knowledge strengthened in data gathering, reporting and verification in sanitation and hygiene		2.2.1.1	Technical support to develop standardized national guidelines on HEH monitoring
			2.2.1.2	Technical support to disseminate guidelines with appropriate orientation, training and supervision
			2.2.1.3	Promote allocation of appropriate human and financial resources to support and implement HEH program monitoring

Output No.	Output	Links to other sub-plans	Activity No	Activities
				activities
			2.2.1.4	Technical support to develop standard methodology for conducting hygiene and environmental health behaviour change studies
2.2.2	Education sector processes, skills and knowledge strengthened in data gathering, reporting and verification in sanitation and hygiene		2.2.2.1	Technical support to develop/ update guidelines and materials to support monitoring WaSH in schools
			2.2.2.2	Technical support to disseminate guidelines with appropriate orientation, training and supervision
2.2.3	Water-sector staff and institutions which have the mandates, capacities and resources to collect, process and disseminate NWI data		2.2.3.1	Tracking of Permanent and temporary staff and institutions mobilised by MoWIE at national and regional levels
			2.2.3.2	Manuals and guidelines made available to staff and institutions
			2.2.3.3	Training of trainers programme to collect, process and disseminate NWI data
			2.2.3.4	Training roll out to all regions on how to collect, process and disseminate NWI data
			2.2.3.5	Backstopping support in place for regions and RWCOs
2.2.4	Water-sector staff and institutions which have the mandates, capacities and resources to collect, process and disseminate regular data		2.2.4.1	Roles and responsibilities agreed and specified in relevant procedures
			2.2.4.2	Mobilise resources
			2.2.4.3	Technical support to adapt job descriptions including the establishment of technical support staff for all MIS users and including user rights administration
			2.2.4.4	Manuals and guidelines made available
			2.2.4.5	Training of trainers programme to collect, process and disseminate regular data
			2.2.4.6	Training rolled out on how to collect, process and disseminate of regular data and repeat training provided (zonal, woreda, town, kebele)

Output No.	Output	Links to other sub-plans	Activity No	Activities
			2.2.4.7	Backstopping support in place
			2.2.4.8	Stakeholder evaluation of MIS performance in reporting
Outcome 2.3 Impact evaluations more widely used to inform WaSH planning and decision-making				
2.3.1	NWCO are able to scope, procure, manage and utilise impact evaluations.		2.3.1.1	Technical support to develop guidance materials for WaSH impact evaluations
			2.3.1.2	Orientation workshop and follow up to use guidelines
Outcome 2.4 Sector capacity to interpret, use and disseminate data and data products is in place				
2.4.1	Capacities built to analyse, interpret and use WaSH data in operational response		2.4.1.1	Training of WWTs in using the data from the Management Information Systems for operational responses in the woreda
			2.4.1.2	Series of workshops to promote use and sharing of data by managers
2.4.2	Capacities built at woreda, zonal, regional and federal levels to generate and use data reports for reporting and planning		2.4.2.1	Training in the use of reporting tools and functions
2.4.3	Capacities in handling data requests built		2.4.3.1	Training and technical support to RWCO and NWCO to handle data requests
2.4.4	Capacities built in all aspects of producing the federal OWNP report		2.4.4.1	Tailored training and mentorship to the NWCO on data collection, collation, harmonisation, analysis and report writing
2.4.5	Capacities of the Atlas team built to manage the production of the Atlas		2.4.5.1	Tailored training and mentorship[9] to the NWCO to scope the production of the Atlas, and to procure and provide oversight and quality control to a communications consultant to produce the Atlas. Mentorship and training to include a learning exchange with Government of Uganda
2.4.6	Capacities built for outreach strategy and for development of outreach products (briefing papers, news, website etc.)		2.4.6.1	Internal training and coaching of the outreach team
			2.4.6.2	External tailored training of the outreach team

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[9] The terms mentorship, coaching and supportive supervision are used interchangeably to denote a continuum of hands-on support. These kinds of capacity development activities usually incorporate tailored training

Output No.	Output	Links to other sub-plans	Activity No	Activities
Outcome 2.5 WaSH M&E training and capacity development supply is in place				
2.5.1	WaSH modules are included in EMIS and HMIS training curricula, and in Water training curricula.		2.5.1.1	Develop WaSH modules (training guide, learner materials, learning evaluation tools) (duration 2 days maximum)
			2.5.1.2	Workshop with TVETCs and HSCs regarding how to integrate WaSH Module into EMIS, HMIS and Water curricula
			2.5.1.3	Train TVETC and HSC Trainers to offer the WaSH Modules
2.5.2	M&E module included in Water training curricula, addressing methods and means to collect, process, update, edit and use M&E data.		2.5.2.1	Develop M&E Module (training guide, learner materials, learning evaluation tools)
			2.5.2.2	Workshop with TVETCs and HSCs regarding how to integrate WaSH Module into EMIS, HMIS and Water curricula
			2.5.2.3	Train TVETC and HSC Trainer to offer M&E Module

Table 11 summarises indicative capacity development sub-plan outcomes and is included here to assist with mobilizing prospective donors to support these activities. Note that terms such as mentorship, coaching and supportive supervision are used to denote a continuum of hands-on support. These kinds of capacity development activities incorporate tailored training.

Table 11: Capacity Development: Indicative areas and learning outcomes

Learning outcomes	Methodology	Trainee groups
Improved knowledge and skills to gather, verify and report sanitation and hygiene data	Tailored training linked to guideline and or tools development, technical support and supportive supervision	NWCO and team; Education and Health staff at national and regional levels
Improved knowledge and skills to gather, verify and disseminate NWI data	Training trainers at federal level followed by regional roll out	Water sector staff and institutions
Improved knowledge and skills to gather, verify and disseminate regular data	Training trainers at federal level followed by regional roll out	Water sector staff and institutions
Replicable ability to scope, procure, manage and use WaSH impact evaluations	Tailored training linked to guideline and or tools development, and mentorship	NWCO and team

Improved ability to apply MIS data to operational responses	Tailored training linked to guideline and or tools development, technical support and supportive supervision	WWTs
Ability to generate and use data for reporting and planning	Training in the use of reporting tools and functions linked to technical support and supportive supervision	Woreda, zonal, regional and federal levels
Improved ability to handle data requests – knowing where and how to locate and share WaSH monitoring information with researchers and other requests	Tailored training linked to guideline and or tools development, and mentorship	NWCO and RWCO
Skills and knowledge to gather, collate, harmonise, analyse and report on intersectoral WaSH data – annual OWNP report	Tailored training linked to guideline and or tools development, technical support and supportive supervision Insight into how WaSH progress and information is relevant to health, education and water sectors is an example of a tailored training topic	NWCO and team
Replicable ability to scope, procure, manage production of the WaSH Atlas tool	Tailored training linked to guideline and or tools development, and mentorship (includes a learning exchange with Government of Uganda)	NWCO
Ability to develop an outreach strategy and products (e.g. briefing papers, news items, website development etc.)	Tailored training linked to guideline and or tools development, coaching and supportive supervision Examples of topics include communication strategy development, journalistic training, website development, writing workshops, design and layout, etc.	MoWIE communications team
Education, Health and Water M&E staff have a working knowledge of how WaSH data is relevant to their respective sectors' performance Education, Health and Water M&E staff have a working knowledge of the integrated socioeconomic impact of WaSH	WaSH modules are included in EMIS and HMIS training curricula, and in Water training curricula Overall goal: To strengthen intersectoral WaSH content knowledge of M&E staff Training guide, learner materials, learning evaluation tools and training of trainers for TVETC and HSC trainers	M&E staff in Education, Health and Water departments and ministries TVETC and HSC trainers and curricula developers
Water sector professionals have a working knowledge of M&E	M&E module included in Water Training curricula Overall goal: To strengthen M&E knowledge and skills of water sector staff Training guide, learner materials,	Water sector staff TVETC and HSC trainers and curricula developers

	learning evaluation tools and training of trainers for TVETC and HSC trainers	

4.4 Procurement sub-plan

The procurement sub-plan focuses on the procurement of ICT to support the WaSH M&E system. The envisaged procurement activities include:

1. Procurement of improvements to existing WaSH M&E MIS with a focus on its redefined scope to support operationalisation.
2. Procurement of an ICT solution using commercial off-the-shelf software (COTS) and associated services to support mobile data collection based on technical and functional requirements set out in section 4, including the management of devices and data, with both online and offline functionality.
3. Procurement of alternative WaSH M&E MIS software using commercial off-the-shelf software (COTS), which will provide an alternative option to store, analyse and report on WaSH data.
4. Procurement of related ICT hardware and associated maintenance services including servers, computers, mobile phones or alternative field data collection devices, and field based support for the hardware, based on the requirements of MIS and mobile data collection ICT solutions selected.

Box 3 Key milestones related to procurement

Proposed key milestones related to procurement are:

- Tender documents for alternate MIS software (December 2015)

- Tender documents for mobile data collection software (December 2015)

- Tender documents for modifications to existing WaSH M&E MIS software (December 2015)

It is recommended that procurement of improvements to the existing WaSH M&E MIS will be through a restricted tender as only the existing supplier will be able to undertake these improvements at limited cost.

Our recommendation is to combine the procurement for the alternative MIS software (3) and mobile data collection (2) solutions. After the selection of the alternative MIS solution, there will be server and client device specifications outlined and procurement started for additionally required computers and/or servers. However, wherever possible hardware that has already been procured for the WaSH M&E MIS will be utilised. After the selection of the mobile data collection solution, there will be mobile data collection device specifications outlined and procurement started for additional required hardware.

It is recommended that procurement of software is undertaken in line with World Bank ICT procurement guidelines. These are well proven and considered the most appropriate for software procurement for government systems.

4.4.1 Procurement Capacity Assessment

4.4.1.1 Procurement capacity and risks

The MoWIE has a procurement specialist within the Water and Sanitation Directorate who is experienced in procurement in line with Ethiopian government procurement regulations. The MoWIE has recent experience in procurement of ICT from Ethiopian suppliers (PUT) and international suppliers (Akvo), and senior staff has been exposed to the challenges of handling such procurement processes. It is suggested to incorporate the capacity within the IT team to support procurement and aid in the assessment of the effort and risks involved in supporting and maintaining any potential solution. This is to ensure that in-house (MoWIE) capacity is used to largest extent possible and taking into account current rates of turn over. There is also the potential for NWCO to draw upon capacity from MIS staff within other ministries as links are strengthened.

There is additional procurement capacity available within the DFID supported OWNP M&E support team. This includes experience in procuring ICT solutions on the international market for WaSH applications and in the development of ICT solutions for WaSH applications. Further capacity is available within development partners – such as the World Bank, the African Development Bank and UNICEF - and this will be applicable where such

partners support certain aspects of WaSH M&E requirements in line with their own procurement regulations. This will depend upon decisions made with respect to sources of financing.

The most recent experience of ICT procurement for the WaSH M&E MIS, which began in 2008, has not yet rolled out an MIS solution which is used at regional and woreda levels. Repeating this experience is considered avoidable and challenges can be minimised during the procurement process by applying the ICT principles outlined in this inception report. In addition, an experienced ICT project manager with the mandate to report to the project stakeholders is an important risk mitigation measure. This ICT and WaSH project manager should be responsible for both the MIS and mobile data collection tool development and should be consulted at all steps during the procurement.

Table 12 identifies procurement risks and suggests mitigation measures. Some highlighted risk mitigation measures that will need to be addressed prior to procurement include:

- Setting out clear terms and conditions for the suppliers and setting out clear roles and responsibilities for the solution development, configuration and post-implementation support. This should also include a role for MoWIE staff that can be easily maintained.

- Configuring, developing and user testing of the solutions under the supervision of an experienced (including WaSH sector expertise) ICT project manager who can translate the expressed needs of stakeholders and the problems faced by users into remedial actions within the scope of the project and within the expected timeframe. The project manager should be able to work with all stakeholders to ensure the project is on track and that the scope, roles and responsibilities are clear and any changes are clearly communicated. They will need to be able to report directly to MoWIE and a stakeholder group where decisions can be discussed.

- Defining a minimum service level agreement (SLA) which must be in place, to reduce the risk of early failure after implementation. The SLA will include clear and easily accessible technical support channels for both administrators and users.

- Identifying and agreeing on required support from OWNP M&E support team and other stakeholders with technical support capacity, for example development partners. The ICT project manager will be provided as part of this team from IRC (under task 1).

- Agreeing the scope of the software will be respected by all parties until the software development is finished. The effort required for software development can be highly dependent on minor changes to the scope and may put the project at risk.

- Ensuring that user testing is part of the procurement requirements and that each round of successful testing is also a requirement for payment for that phase, for example alpha, beta and release user acceptance testing, will reduce the risk that users cannot adopt the tool after it is implemented.

The procurement process should clearly identify the roles of potential bidders, MoWIE and OWNP M&E support team in the technical project management and should ensure that the bidders will work together with all stakeholders to ensure that the development and user testing is completed at a high standard and without delay. It is recommended to form a stakeholder group with the project owner (MoWIE), the project technical manager (potentially OWNP M&E support team), and providers as well as any other key stakeholders, such as donors.

Table 12: Procurement risks (and recommended mitigation measures)

Risk	Explanation	Mitigation measures
Unclear requirements	Often unclear requirements lead to disagreements about agreed functionality and cause delays and cost over runs.	It is important to provide unambiguous minimum requirements and accept to remove less important requirements that add to the application complexity. Ensure these requirements also include the SLA for annual maintenance and upgrades.
Incompatibility in integration between separate solutions	Having separate solutions for the database and mobile data collection means that there is a risk of dependency	Define the minimum import/export functionalities that must be present using standard technologies (CSV) and

Risk	Explanation	Mitigation measures
	between versions of each product and that problems result due to updates or missing features.	potentially require a persistent API. Include changes for compatibility in the ongoing service level agreement. This functionality will also be important if integrating between different implementing partner data systems.
Loss of solution supplier	The solution supplier is particularly important when a proprietary (closed source) product is used as opposed to when there are several potential suppliers familiar with the technology.	Place preference on open source solutions that have a pool of potential suppliers that can continue to maintain the tool and/or service if the solution supplier is no longer available. Place preference on out of the box solutions with many users.
ICT project management failure	ICT project management is highly specialised and requires both an understanding of the technologies being used and the stakeholder and user requirements. With poor ICT project management, projects can quickly fail to achieve deadlines and cost envelopes and may subsequently fail to provide a sufficiently user-tested product.	Identify an experienced ICT project manager who will be able to report directly to decision makers in MoWIE and to major stakeholders, e.g. the OWNP support team and key development partners, in order to ensure efficient decision making during the development process and to keep development on track. Ensure that the scope of the project is understood and respected at an early stage.
Lack of user adoption after roll out	ICT tools and enterprise systems often fail to achieve their documented objectives because the requirements did not necessarily meet the needs of the actual tool users.	Engage in an early process of user testing and participation during the development of the tool wireframes and even during the development of the procurement documentation. Build on the finding of the OWNP M&E regional visits and diagnostic. Choose a supplier, which provides a friendly user interface, with translation and offers easy customisation when it is required to adjust the user interaction or simplify data collection. Ensure the solution use is required for decision making, performance reviews and budgeting.
Lowest cost solution may not be best value for money	The lowest price tender may not have the best technical specifications. Lower initial costs may be followed by high usage fees.	To have balanced selection criteria where cost is a component (initial and long-term), and to ensure adequate sector experience of ICT experts.

4.4.1.2 Availability of suppliers and market for database solutions

This section provides an overview of the type of systems that might be considered during the procurement phases. The suppliers mentioned here are not exhaustive and rather are used as a way to illustrate the various options. The international market is rapidly growing and providing an increasing number of appropriate solutions. The procurement process should allow MoWIE to select a provider for the data collection tool and alternative MIS software with the right balance of cost, ease of use and functionality to ensure the long term use and sustainability of the solution.

Currently, there are a large number of suppliers available who can produce a management information system based on a number of platforms. This includes suppliers with extensive experience working in international

development providing understanding of the contextual factors that affect these technologies. Some of these companies are based in countries that can provide lower cost software development.

These providers would be able to provide alternative WaSH M&E MIS solutions. An advantage is that these providers will provide a high level of customisation and can introduce complex data flows and data checks. However, most often configuration and subsequent changes to the database and software upgrades will involve additional (hidden) costs and complexity.

There are also a few cloud-based products that can provide similar functionality and can be configured through the user interface to build a relational database like the WaSH M&E MIS. These do not offer the same level of control but often provide some flexibility. For example, solutions available include the ability to create relationships between datasets that are collected. An example might be an enumerator adding a new water point to the database while in the field and being able to select the water service provider from a list of previously submitted service providers. The list of service providers is in fact just another survey. It should be noted that this field technology depends on synchronising with a database online. Other data collection tools enable users to define relationships between indicators and to publish pivot tables on an online dashboard or to export results to various digital and print formats. These systems have the advantage of being configurable by the administrators but depend on the competency of these individuals after the initial software development is completed.

Some of the mobile data collection tools on the market can also be configured to generate visual results that combine data similarly to how a relational database would, for example dashboards where data from different data collection forms can be visualised together in a loose way. These visualisations do not have the same enforcement of relationships and may require additional data cleaning steps. However, they also reduce the complexity of the software as data collection forms change over time or indicators and visualisations have to change without the overhead related to managing how each change affects the relationships in the database. There are also opportunities to seek strategic partnerships with foundations supporting open-source, mobile and other ICT initiatives.

4.4.1.3   Availability of suppliers and market for mobile data collection solutions

There are a large number of mobile data collection solutions available at this moment. The range is narrowed when only considering solutions that work offline. There are several solutions frequently used in developing countries including both single vendor solutions and open source platforms with related suppliers. The latter provides the advantage of being more widely supported should the particular supplier go bankrupt or otherwise stop providing the required services. The advantage of choosing a single vender multi-tenant solution comes when there are many tenants (users) who are purchasing that software and it is likely to continue to be supported and features are more rapidly updated and tested. Some of the single vendor solutions are also open source and at some cost could be replicated by a new vendor.

It should be noted, most of the mentioned mobile and MIS solutions also feature an online database and dashboard. Most of the online dashboard for viewing the data and doing analysis can only be used online. More unique but available is functionality to synchronise the database into an offline copy in the user's browser. Any locally hosted databases or servers will depend on the availability of the local servers and the local internet connections. In most cases, cloud-based services will have a higher level of availability and lower cost than managed servers based in a local data centre. All of the above systems provide ways to back up the entire data store on a regular basis in local servers if required. There are options for the data collection tool to be fully hosted in Ethiopia if desired and it could be supported by international or local suppliers.

4.4.2   'Build or Buy' Procurement Analysis

The 'Build-or-buy' analysis of the enhanced WaSH M&E system is meant to advise DFID and Ethiopian OWNP stakeholders on the most appropriate approach for procurement of goods and services for the enhanced M&E system. During procurement, there is a range of possibilities between systems that will require a large amount of custom build software development hours and others that only require some user interface configuration of an "off the shelf" tool. In order to present the relative value of building vs. buying, the tables below provide the main pros and cons. While most solutions will fall in between these extremes, it is recommended that MoWIE consider configuration of an alternative commercial-off-the-shelf (COTS) software over the building of completely custom software in order to have more predictable costs over time and reduce the complexity of the software. This applies to both the mobile data collection solution and alternative MIS software. An off the shelf solution is more likely to be configurable within the competency of the MoWIE staff and will provide standard support for their software. While

there is some risk of change in the software features over time and this requiring either some reconfiguration and/or additional training, we do not feel these changes will come at a faster rate than the necessary retraining due to normal staff turnover. It is important that off the shelf solutions by a single vendor and custom built solutions by a single vendor are also evaluated in terms of the long-term viability vendor and the sustainability of the support contract.

Table 13: Analysis of pros and cons of building customised or buying software solutions for the WaSH M&E system

	Analysis of pros and cons of building customised software solutions for the WaSH M&E system		Analysis of pros and cons of buying (and customising) software solutions for the WaSH M&E system	
Solution aspects	**Pros**	**Cons**	**Pros**	**Cons**
Database	Ability to implement complex data flows within the software such as several levels of approval for a new water point. User roles and access can be defined specifically with respect to the local institutional requirements. The database relationships can be strictly enforced when necessary. For example, one can make it impossible to add a water point without first selecting a valid service provider found in the database.	Complex data flows change over time as institutions change and it is questionable whether these should be 'hard coded' into a system. Relationships and requirements in data often change over time. Hard coding these into a database may cause incompatibilities with the future user requirements and changing policies. The more code that is built from scratch, the more requirements there are for unit and user testing when upgrading the system.	Customisations of these out of the box platforms are increasingly powerful over time. The features of the software if bought as a service improve over time at a predictable cost because there are many different paying users. Most additional complex workflows and approvals that cannot be configured into the solution can often be implemented in human processes (print out results and get them signed off on paper) instead of in the software.	There will typically be fewer options for branding the dashboards and user interface. The ability to create complex data flows for approvals and management tasks is reduced to a set of features that were deemed "good enough" for 90% of the users and as a result some customisations are not possible. There is a risk that a particular solution is deprecated and no longer supported after a certain period of time.
Data collection	If a data collection tool is built from scratch it can be completely integrated into an MIS and user roles can be "remembered" between these applications. Some open platforms could be modified instead of building completely from scratch. It can be completely branded in terms of the look and feel.	There are many mature data collection tools on the market that are constantly being upgraded while mobile phone technology is constantly changing and requires changes to the software. Building from scratch and/or building using an open source platform can cause incompatibilities over time.	There are proven mature technologies that are readily available and can be quickly configured within the capacity in MoWIE and the OWNP M&E support team. These tools are increasingly powerful and most are receiving new features over time for the asset management of data collection devices, updating of surveys, and the cleaning of data. Most include at least a read-only RESTful API for linking to any MIS with minimal configuration. They are extensively field	Not all user roles and permissions in the tools can be synchronised with a separate MIS solution and as a result user management is separated between both tools. The API could change and potentially require changes to the MIS to address this. There could be limitations in the configuration of the interface in terms of language, script and/or icons but this is highly dependent on the tool selected.

Analysis of pros and cons of building customised software solutions for the WaSH M&E system		Analysis of pros and cons of buying (and customising) software solutions for the WaSH M&E system	
Solution aspects	**Pros**	**Cons**	**Pros**	**Cons**
			tested and reduce the risk of needing to troubleshoot devices in the field without internet access.	

Further details of the implementation of procurement related activities are provided in Annex 4 and specifically outputs 1.4.1, 1.5.2, 1.8.1 and 1.8.2.

4.5 Synergy and Complementarity Strategy and Sub-Plan

The overall objective of the intervention package (and sub-plan) on synergy and complementarity is to ensure that the MIS systems of the implementing ministries are used by the OWNP across all stakeholder groups to create synergies, avoid duplication of efforts, and avoid conflicting results that are contested. Ultimately the OWNP aims to realise 'one plan, one budget, one report'. The sub-plan will be successful if the structures, platforms and other capacities are in place, and operational, to promote collaboration in OWNP M&E.

Box 4 Timeline and key milestones for synergy and complementarity

Proposed key deliverables/milestones for capacity development are:

- OWNP implementation report (annual and quarterly). The annual report is proposed for the end February each year.

4.5.1 Key findings: cross-sectoral efforts in WaSH M&E

As already summarised in section 1.2 the implementing partners (water, health, education, finance) do have their own M&E and MIS capacities, processes, and systems. These all include collecting and reporting data on WaSH indicators. These sectoral capacities need to be well linked in WaSH data collection such as the NWI to avoid duplicating some data collection (e.g. in sanitation and institutional WaSH). OWNP-led M&E enhancement aims to minimise any duplication of efforts and to maximise the use of these capacities, processes and systems.

All of the sectoral systems require their WaSH components to be strengthened (there are gaps in indicators, capacity gaps to collect quality WaSH data and capacity gaps to analyse and use WaSH data). Improvements will support harmonisation so that data held in the WaSH M&E MIS is based upon common indicators and agreed definitions (see section 2.3.1).

There is little integrated reporting at present, but synergy will be promoted through integrated reporting processes and joint use of data as well as bringing data together within integrated MIS systems.

As discussed in section 1.2 OWNP coordination mechanisms are new and work in progress. While relatively young at all levels these institutions could themselves be strengthened through collaboration in M&E and integrated reporting processes.

Inter-sectoral collaboration takes time and money. Regional and woreda level WaSH coordination structures are multi sectoral/ sector-wide collaboration forums. Based on experience in South Africa, Uganda and Ghana, success depends on the allocation of specific and sufficient resources and efforts to inter-sectoral collaboration and coordination itself. Leadership is vital and needs strengthening e.g. from Ministerial and regional cabinet levels.

Development partners and civil society have strong capacities and interests to support OWNP M&E and significant funding is likely to be available to support implementation of OWNP M&E. Table 14 summarises some of the major budgets committed to OWNP M&E. Overall the committed investments exceed US 13 million, or roughly USD 3 million per year. This support is considerable but needs to be harmonised and aligned within an overall plan to avoid duplication of efforts and potential waste of resources.

Table 14: Some major WaSH M&E budgets

Budget component	M&E related budget (USD)	Remarks
MoWIE Capacity Building Pool Fund (WSWG, 2015)	767,400	Includes training in M&E, upgrading MoWIE's website and NWI updating activities.
Rural Water Supply and Sanitation Initiative Trust Fund (AfDB) (FDRE, 2015c)	7,500,000	The total budget exceeds 10 m USD but is for multiple activities and allocations are not yet set. Figure used based on MoWIE estimate.
WaSH Ministries Capacity Building Plan (OWNP-CWA) (OWNP, 2015)	673,600	Focus on international training for 4 WaSH Ministries (includes training in project management, M&E, mobile data collection etc.)
Further development of existing WaSH M&E MIS (PBS)	200,000	Intended for further software development
NWI Critical Gaps Fund (DfID)	1,500,000	To support NWI2 related costs
OWNP M&E Support (DfID)	4,050,000	Includes support to task 1) strengthening OWNP M&E, 2) impact evaluation and 3) data dissemination and use

There is considerable innovation in monitoring within NGOs but innovation could be more collaborative and engaged to increase the prospects of uptake of innovations within national systems.

The Central Statistical Agency is the custodian of the National Statistical System and there is potential to increase collaboration to support monitoring within the WaSH sectors. Implementation of OWNP M&E can also benefit from learning about best practices globally in national WaSH monitoring. The Joint Monitoring Programme is increasingly supportive and engaged with sector monitoring systems as a complement to utilisation of household survey data.

4.5.2   Approach to creating synergy and complementarity

The approach proposed to ensuring synergy and complementarity includes:

- To strengthen and use sectoral M&E systems in water, health, education and finance as far as possible to avoid duplication of data collection and to avoid reporting conflicting results.

- To use cooperation in WaSH M&E across OWNP partners, with an initial focus on integrated reporting, as a tool to promote improved collaboration in the OWNP.

- To bring together WaSH data in an integrated WaSH M&E MIS to support integrated reporting.

- To coordinate different efforts, including the various budget commitments made to improving OWNP M&E.

- To strengthen collaboration with NGOs in reporting, use of OWNP M&E systems (e.g. standard indicators) and testing innovations in monitoring.

- To strengthen collaboration with universities and research institutes as a critical data user and a source of capacity to strengthen M&E systems.

- To strengthen collaboration with the CSA nationally, and the JMP internationally.

- Where possible use WaSH M&E to support engagement on emerging critical issues such as climate change and groundwater overexploitation that push the traditional boundaries of WaSH practice.

- Learning and practice alliances established and maintained at regional level to promote coordination and learning around a structured and locally relevant learning agenda

To promote coordinated implementation of the OWNP M&E plan, to facilitate strengthening of the WaSH components of MIS systems across the MoU signatories/ implementing partners, to encourage the sharing of experiences and lessons in M&E best practice between the partners and to promote sharing of data and

collaboration in integrated OWNP reporting, regular updates and reports on OWNP M&E progress will be provided by the NWCO through available existing channels. These include the NWSC and RWSC (as they become active), joint sector reviews, the WaSH multi-stakeholder forum etc. Regular quarterly meetings in each partner ministry and annually at regional level will also ensure OWNP M&E is maintained high on agendas and progress is tracked. Requests for support on OWNP M&E to the NWCO will be received, logged and responses provided where possible within plans and resources available.

To help coordinate the financing provided by development partners in the WaSH sectors to support implementation of the OWNP M&E plan, regular updates and reports on OWNP M&E progress and (and especially financing) gaps will be provided to government and its development partners through existing channels (including CWA partner meetings, Joint Technical Reviews, Water Sector Working Group, Sanitation &Hygiene Working Group etc.) with technical support provided by the NWCO to develop the plans required by additional OWNP M&E financing partners and to provide follow-up on plans and their implementation to ensure harmonisation.

To strengthen collaboration between civil society and implementing partners in supporting OWNP M&E and to promote uptake of innovations in monitoring, the NWCO will provide regular updates and reports on OWNP M&E to civil society partners through existing channels including the CCRDA-WSF, WaSH Ethiopia Movement, Millennium Water Alliance, Ethiopia WaSH Alliance etc. Requests for support and collaboration by NGOs will be received, logged and responses provided where possible within plans and resources available.

Learning and practice alliances will also be established and maintained at regional level to promote coordination and learning around a structured and locally relevant learning agenda.

A rolling research agenda on WaSH M&E will be maintained at federal level and used to promote research by NGOs, the academic community and others. This will ensure that critical urgent issues are addressed and longer-term opportunities investigated. For example, there is potential to 'crowdsource' additional data on water-points and their functionality from the public, to integrate NGO datasets and reporting, big data may be utilised to provide better data on populations in the vicinity of water points and may also be used to characterise users (e.g. by gender), and areas related to water resources management/ source protection and Self-supply need improved M&E solutions.

The final component of the strategy and complementarity intervention package is focused on ensuring the sustainability of OWNP M&E. This is specified in a specific sub-plan (see section 4.9).

4.5.3   Work plan

The work plan sets out the planned activities as part of the Synergy and Complementarity strategy intervention package/ sub-plan. Table 15 provides a summary of the work plan describing outcomes, outputs, and activities. Annex 4 contains further detail on the timing of activities.

Table 15: Synergy and complementarity work plan summary

Output No.	Output	Links to other sub-plans	Activity No.	Activities
Outcome 4.1 Coordinated implementation of the OWNP M&E plan involving all WaSH sectors, frequent sharing of experiences and lessons in M&E best practice and sharing of data and collaboration in integrated OWNP reporting				
4.1.1	OWNP M&E implementation quarterly report sections and meeting reports of WaSH platforms, with regular updates on OWNP M&E (including a tracker of requests and responses by the OWNP M&E team across all WaSH sectors)		4.1.1.1	Regular updates and reports on OWNP M&E progress provided to implementing partners through existing channels (including NWSC, RWSC, annual sector review, WaSH multi-stakeholder forum etc.) and regular quarterly meetings in each partner ministry and annually at regional level to ensure OWNP M&E is maintained high on agendas
			4.1.1.2	Requests for support received, logged and responses provided where possible within plans and resources available

	Outcome 4.2 Coordinated financing provided by development partners in the WaSH sectors to support implementation of the OWNP M&E plan			
4.2.1	OWNP M&E implementation quarterly report sections on tracking OWNP M&E financing and the harmonisation of development partner support, and plans submitted to financing partners		4.2.1.1	Regular updates and reports on OWNP M&E progress, plans and (especially financing) gaps provided to development partners through existing channels (including CWA partner meetings, Joint Technical Reviews, MSF, WSWG, S&HWG etc.)
			4.2.1.2	Technical support provided to plans required by additional OWNP M&E financing partners
			4.2.1.3	Technical support provided to follow-up on plans and implementation to ensure harmonisation
	Outcome 4.3 Strengthened information sharing between civil society and implementing partners in supporting M&E and innovations in monitoring			
4.3.1	Regular reporting on NGO monitoring activities included in OWNP M&E implementation quarterly reports		4.3.1.1	Regular updates and reports on OWNP M&E progress provided to civil society partners through existing channels (including CCRDA-WSF, WaSH Ethiopia Movement, Millennium Water Alliance, Ethiopia WaSH Alliance etc.)
			4.3.1.2	Requests for support and collaboration received, logged and responses provided where possible within plans and resources available
			4.3.1.3	Learning and practice alliances established and maintained at regional level
	Outcome 4.4 Following the M&E support phase, WaSH institutions have the people, skills, systems and finances required to sustain monitoring and reporting on WaSH service delivery and to use information in evidence-based decision-making			
4.4.1	Annual OWNP M&E implementation report (by February each year) including an assessment of the strength of MIS enhancement, capacity development, dissemination and use and synergy reported, with new requirements in WaSH M&E and gaps identified and appropriate mitigation measures and modifications identified	Exit	4.4.1.1	Risk management strategy in place
			4.4.1.2	Systems in place to track OWNP M&E progress (activities, inputs, outputs, risks) across all M&E workpackages
			4.4.1.3	Annual review
4.4.2	Alternative sources of financing identified (and reported in section in OWNP M&E implementation quarterly report) for part of OWNP M&E requirement, including commitments from Ministries and commitment of development partners to continue support (in modified forms) to fill gaps	Exit	4.4.2.1	Technical support to explore alternative options for financing ongoing M&E and development of financing strategy
			4.4.2.2	Engagement and relationship-building with stakeholders who may provide continued external technical and financial support
4.4.3	Regular monitoring, evaluation and reporting of	Exit/ Data dissemination	4.4.3.1	Systems in place to track to OWNP M&E outcomes/ impacts

	project impact	and use	4.4.3.2	Communication of project progress and results

4.6 National WaSH Inventory Renewal Strategy and Sub-Plan

The overall objective of the sub-plan for the National WaSH Inventory (NWI) is to ensure the continuation, improvement and utilisation of the NWI as an integral data collection mechanism and part of the OWNP M&E system.

> **Box 5 Timeline and key milestones for National WaSH Inventory Renewal**
>
> The sub-plan for the NWI aims to quickly put in place processes supported by mobile data collection tools to collect data nationwide through the NWI2 by the end of the 2015/16 fiscal year (in July 2016).
>
> Proposed key deliverables/milestones are:
>
> - Tender documents for mobile data collection software (December 2015; also part of procurement plan)
>
> - Report on piloting of mobile data collection (February 2016; also part of procurement plan))
>
> - Report reviewing implementation and lessons learned of NWI2 (October 2016)
>
> - and linked to the data dissemination and use work package, the Ethiopia WaSH Atlas (by March 2017)

4.6.1 Key findings: learning from the first NWI (2010/11) and the 2014 mobile-enabled Somali data collection

Prior to the first NWI, which involved data collection in 2010 and 2011; key national water supply coverage figures were compiled from regional inventories, reports and updates. Driving forces for the inventory were differences between reported national and international figures, and federal concerns about data derived from updating regional inventories held at different times using diverse methods.

The 2010/11 NWI provided the first relatively consistent WaSH data for the whole country (excluding Somali Region). It covered over 92,000 rural water supply systems, over 1,600 small town systems and 50,000 schools and health institutions. Through a household census 12 million households were also interviewed about their water and sanitation facilities and hygiene practices. The completion of the NWI was a major achievement. The data was unique in covering both user (through household data) and provider data (from WaSHCOs, utilities and institutions).

The NWI (2010/11) collected data for a relatively focused set of key performance indicators through ten forms. Its national roll-out was a major and high cost exercise costing approximately USD 12 million. There were challenges associated with such a large scale exercise. Results were not reported until two years after data collection due to the use of paper forms and the large burden of data entry.

As discussed in section 4.8, from the perspective of data use, the results have been used in critical ways:

- NWI data from 2010/11 was used by the MoWIE to update its estimates on access to improved water supplies with new more accurate figures reported to Parliament in 2013. Estimates were revised downwards significantly with total water supply coverage determined to be 54% compared to the 68.5% reported for 2010 on the basis of earlier data.

- NWI data has been accepted and used by the JMP to update its assessments for Ethiopia in determining that Ethiopia had met the water MDG in 2015 (57% coverage with improved water supplies).

However, despite these notable successes, it is our assessment that data from the NWI (2010/11 and 2014) has still not been utilised as widely as it could have been and there is further potential for use. It has also not been updated. The original intention had been to annually update the NWI.

After initial trials by NGOs of new mobile data collection tools for WaSH, MoWIE decided to extend the NWI to Somali Region in 2014 (as it had not been included earlier) using a mobile data collection tool (Akvo FLOW). Importantly this did not include the household surveys reducing the scope of the exercise considerably. The 2014

mobile based survey demonstrated improvements in quality of data (especially to coordinate data through the integrated GPS functions) and drastically reduced the time to collect and report data.

Various ICT tools have been used over time to enter, store and analyse NWI data. A MS Access database was used to enter the data collected on paper forms (and use of this database is still in use in some UNICEF/SNV supported woredas). Excel has been most commonly used for providing access to the raw data and analyse. Akvo FLOW was used in 2014 as the mobile data collection tool and to store and visualize NWI data online. The WaSH M&E MIS PUT system has imported the NWI data from 2010/11 (manually, the data entry forms are currently not consistent with the NWI) and can generate some basic key performance indicator analysis from that data. Akvo has also demonstrated a working prototype of a web dashboard that generates key performance indicators on a map for all parts of the country after significant cleaning of the geographical coordinates of the 2010/11 dataset for this purpose.

Although other ministries, including providing staff as enumerators, were involved in NWI data collection our interviews suggest that there is relatively little knowledge about the NWI data within the OWNP partner ministries and at the Central Statistical Agency. Going forwards there is also the potential for duplication with data that is reported through health and education monitoring systems so effective coordination and harmonisation will be required.

The NWI has been a very collaborative process involving significant support by development partners such as UNICEF and NGOs who have been strongly involved in the regions and woredas to support data collection and contributing to the significant logistical costs.

Staffing and skills are a critical issue. Where the NWI (2010/11) used kebele level staff from other sectors in data collection (health extension workers and teachers) to allow faster data collection this was at the expense of woreda water officers having the opportunity to visit water schemes (which may have supported more local use of the data). There was significant technical assistance for the NWI and it was also necessary to outsource the development of software for data entry, quality control and quality assurance. Software development was outsourced in a piecemeal fashion and as a result the systems used are not interoperable.

Data management, analysis, and the generation of reports were very process heavy and required manual interventions. The dissemination of the 2010/11 results occurred three years after the data collection. A comprehensive report has not as yet been published.

Data quality is reported to be a concern including the low quality of geographic coordinate data due to data entry errors and use of different reference systems.

The NWI did not include the establishment of unique reference codes for water points and this presents a challenge to updating and linking datasets (especially where coordinate data is not accurate).

There has been uptake of NWI related data collection modalities. M&E under the Community Managed Project (CMP) for example has been aligned to the NWI indicators and is carried out with support of the Community Led Accelerated Water, Sanitation and Hygiene Project (COWASH). Some NGOs are also using the NWI data collection formats in their local work.

4.6.2   Approach to NWI renewal

Informed by previous experiences, the approach recommended to renewal of the NWI includes:

- To undertake the NWI2 as a priority national exercise during fiscal year 2015/16 to provide a baseline for the GTP2. This will involve repetition rather than update of the NWI1 due in particular to the low quality of geographic coordinate data.

- Water supply components to combine repeat one-time inventory data collection based upon field visits to water points with updates to add newly constructed, expanded or rehabilitated facilities and regular reporting on key indicators such as functionality. Such a multi-phase approach means that the high cost inventory may be undertaken ever 5 years rather than annually (e.g. NWI3 might be scheduled in 2020/21 at the end of GTP2).

- Institutional WaSH components of the inventory to be a source of data to triangulate with the data collected through health and education systems, with consideration to discontinuing or scaling back this component after NWI2 (e.g. sampling) if data are being or are likely to be effectively reported through HMIS and EMIS.

- To build upon the Somali exercise to use mobile data collection tools nationwide for NWI2. NWI2 will use existing and proven software to support data collection to avoid delays and improve quality. It will also build capacity and use the phones and software solution procured to provide facilities for woredas/ towns to add new schemes to the database and over-time to support regular reporting (replacing paper-based reporting).

- Household sanitation/ hygiene: discontinue the household survey (forms 4 and 5) as done in Somali region in 2014, and use health sector and CSA household survey data to report on this component.

- Introduce additional carefully selected indicators to the NWI2 where this this is required e.g. for GTP2 requirements. In NWI3 to consider further additions and making the inventory more comprehensive to fill gaps in other data that are reported.

- Consider introducing sampling approaches over time to reduce costs, or discontinuing campaign type inventories as regular monitoring systems are improved (i.e. NWI3 may not be required).

- Develop (through upgrading existing WaSH M&E MIS and alternative software) WaSH M&E MIS so that it stores NWI2 data and supports its use and updating.

- Careful design of quality control processes including approvals at key levels such a woreda and region, and validation through independent checks.

- To strongly promote use of the data through a WaSH atlas reporting the NWI results and following up a systematic process to share data and track its use (see section 4.8.2.3).

Activities to be implemented as part of the NWI renewal strategy are linked to the wider processes of WaSH M&E such as the establishment of an operational WaSH M&E MIS and the use of regular reporting to update data collected through occasional inventory of assets.

Within this wider plan the necessary outputs focused on the NWI renewal are identified as:

- Putting in place the national process to collect, quality control, process and validate data for the second NWI (NWI2).

- Procurement, testing and roll-out of an ICT solution to support NWI2 as a fully mobile-enabled data collection exercise.

- Procurement of improvements to the existing WaSH M&E MIS to store and report NWI2 data, and to develop additional WaSH M&E MIS capabilities.

- Water-sector staff and institutions with the mandates, capacities and resources to collect, process and disseminate NWI data (part of the capacity building sub-plan).

- Publication, dissemination and evaluation of an Ethiopia WaSH Atlas (part of the data dissemination and use sub-plan).

The national data collection for the NWI2 is recommended as a priority exercise with data collection starting early in 2016 and completed during the 2015/16 fiscal year. The NWI indicators will need to be revised in line with GTP2 implications and the building upon the indicator recommendations made in section 2.3.1. It is expected that the scope of data collected will be similar to NWI1 with the exception of household water and sanitation data:

- Form 1 – Safe Water Supply Inventory for Rural and Small Towns.

- Form 2 – Health Institutions WaSH Facilities Inventory.

- Form 3 – School WaSH Facilities Inventory.

- Form 6 – Urban Water Supply Utilities Water Supply Scheme Inventory – Water Source Data.

- Form 7 – Existing Urban Water Supply Connection Types and Number by Town.

- Form 8 – Urban Water Supply Annual Production and Sale Amount Inventory.

- Form 9 – Urban Water Supply Utilities Staff Capacity Inventory.

- Form 10 – Urban Water Supply Utilities Tariff Rate and Financial Status.

It is suggested that forms 4 and 5 for household sanitation and water are excluded in the NWI2. Household sanitation will be monitored through the existing HMIS/HEH systems and CSA household surveys periodically capture data on household use of water supplies.

Mobile data collection tools will be used to speed up and improve the quality of data collected through the NWI2. The required software will be procured balancing functionality with cost and risk (see section 4.4). A key requirement will be that the tool can be used for the periodic inventory, ongoing updates and regular reporting.

Capacities will be built to add new schemes to the inventory on an ongoing basis, together with the capacities required to report on a regular basis (see outcome 1.6).

4.6.3   Work plan

The work plan operationalises the implementation of the NWI renewal strategy. Annex 4 contains further detail with a detailed work plan of activities and Gantt chart. Table 19 provides a summary of the work plan describing outcomes, outputs, and activities.

A critical step in the planning is to complete procurement of mobile data collection ICT by February 2016, so that data collection can be largely undertaken before the onset of the rainy season (e.g. February-June) and enabling reporting on the 2008 Ethiopia year ending in early July 2016. Missing this deadline could delay implementation and reporting by around a year and reducing the value of the baseline due to the delay.

Table 16: NWI renewal work plan summary

Output No.	Output	Links to other sub-plans	Activity No.	Activities
Outcome 1.5 Improved NWI water data collected at periodic intervals, and NWI2 completed				
1.5.1	Effective national process in place to collect and process NWI data at periodic intervals, and support to NWI2 reported by October 2016		1.5.1.1	Technical support to development of NWI2 plan and mobilisation of funds
			1.5.1.2	NWI1 methodology revised and manuals & guidelines updated
			1.5.1.3	Technical support to detailed logistics planning and preparation
			1.5.1.4	Technical support to collection, processing and analysis
			1.5.1.5	Review and lessons learned report drafted
1.5.2	Commercial Off-the-shelf (COTS) ICT solution for NWI mobile data collection procured and tested by end February 2016		1.5.2.1	Production of tender documentation
			1.5.2.2	Support tender processes, roadshow, regulation testing and award contract to vendor
			1.5.2.3	Customisation by vendor
			1.5.2.4	Develop documentation for system
			1.5.2.5	Piloting and refining during 1st region where data collected before other regions start

	Outcome also depends on output 2.2.3 under capacity building	Capacity building	
	Outcome also links to outputs 3.5.1-3.5.5 under dissemination and use	Data dissemination and use	

4.7 Data Quality Assurance Strategy and Sub-Plan

The overall objective of the sub-plan on data quality assurance is that all stakeholders have a high level of confidence in the validity of OWNP M&E data so they are confident to use that data in their reporting and decision-making. Ultimately greater confidence should reduce the risk that agencies prefer to collect their own data because they question the validity of data from other sources.

The sub-plan addresses both quality assurance i.e. procedures put in place *ex-ante* to reduce the risk of obtaining compromised data, and quality control referring to the activities taken during and after data collection to verify the quality of collected data.

Box 6 Key milestones for data quality assurance

Sections on data quality assurance will form part of the OWNP annual report and the OWNP quarterly implementation reports.

4.7.1   Key findings: data quality assurance and quality control challenges

Data quality control mechanisms receive relatively little attention and there is limited practice to date in the WaSH sectors of validating data, or triangulating using data derived from different sources (e.g. comparing results on access derived from service provider and household survey data). In the health sector for example the HMIS includes data quality management mechanisms (Lotus Quality Survey & Data Quality Survey) but these are not implemented effectively and there is no systematic process in place to verify Hygiene & Environmental Health data (Jones, 2015). The National WaSH Inventory (2010/11) data, while providing a hugely useful check on water supply coverage calculations that up to that time had been calculated through an addition approach that had led over time to inflated figures, was not validated and there are concerns about its low quality in some respects (for example with many errors in geographic coordinates). NWI data quality is understood to have improved considerably through deployment of mobile data collection technology in Somali in 2014 (helping to avoid data entry errors and facilitating real-time checking of data by supervisors) but that also has not been validated.

There has been to date relatively little systematic practice of use of nationally representative household surveys undertaken by the Central Statistical Agency, or comparison with results of impact evaluation or other special studies and research. Such sources can provide alternative data for triangulation or to fill gaps. Quality of the overall WaSH M&E system could be improved and money saved by making use of a range of different data sources especially those that are better geared to critical issues such as tracking equity and gender impacts of the OWNP.

4.7.2   Approach to data quality assurance

The approach proposed to data quality assurance includes:

- To strengthen the data quality assurance mechanisms in each sector and their implementation.
- To improve the design and implementation of quality control procedures.
- To promote the institutionalisation of quality assurance and quality control procedures.

- To promote triangulation with other data sources such as CSA household survey data and other studies to identify potential problems associations with indicator definitions, understanding and quality of data collection.

- To use the National WaSH Inventory as an additional data source for the (infrequent but comprehensive) validation of sectoral datasets.

- To promote the use of carefully designed and targeted data validation surveys with a focus on new areas of data collection, and areas where triangulation reveals major differences in datasets.

- To promote a culture of more openly questioning data and its quality, documentation and sharing of gaps and problems and solution finding to improve data reliability.

- Peer review of M&E findings through the annual Multi-Stakeholder Forum (MSF).

The OWNP M&E support team will assist each sector to review their existing data quality assurance and quality control mechanisms and their application with respect to WaSH indicators, identifying gaps, shortcomings and possible improvements with follow up to upgrade these mechanisms and enhance their implementation. The review will include triangulation across datasets and promoting on-going practice of triangulation and identifying and planning validation surveys where required.

4.7.3   Work plan

The work plan operationalises the implementation of data quality assurance approach. Annex 4 contains further detail with a detailed work plan of activities and Gantt chart. Table 17 provides a summary of the work plan describing outcomes, outputs, and activities.

Table 17   Data quality assurance work plan summary

Output No.	Output	Links to other sub-plans	Activity No.	Activities
Outcome 1.7 High level of confidence of sector stakeholders in the validity of WaSH data				
1.7.1	Section in OWNP annual report on the quality of WaSH data and with recommendations for improvements	Data quality assurance	1.7.1.1	Technical support to implement and upgrade existing data quality assurance and quality control mechanisms in the water sector, assess data by triangulation with other data sources and undertake validation surveys where required
			1.7.1.2	Technical support to implement and upgrade existing data quality assurance and quality control mechanisms in the health sector, assess data by triangulation with other data sources and undertake validation surveys where required
			1.7.1.3	Technical support to implement and upgrade existing data quality assurance and quality control mechanisms in the education sector, assess data by triangulation with other data sources and undertake validation surveys where required
			1.7.1.4	Technical support to implement and upgrade existing data quality assurance and quality control mechanisms in finance, assess data by triangulation with other data sources and undertake validation surveys where required

1.7.2	OWNP M&E implementation quarterly report includes section on implementation of measures to address WaSH data quality issues	Data quality assurance	1.7.2.1	Technical support to identify and follow up recommendations for improvements to enhance data quality

4.8 Data Dissemination and Use Strategy and Sub-Plan

The overall objective of the task and intervention package on data dissemination and use is to facilitate the sharing and use of data for evidence-based decision-making in the OWNP. The activities will establish the linkages required to encourage use of data, which is vital for M&E itself to be a value for money investment. Related objectives are: to inform responses to operational challenges in WaSH service delivery, to enable reporting and planning, to support policy analysis and policy adaptation, to increase accountability of WaSH service providers and authorities, and to provide data and analysis for in-depth research, advocacy and wider information sharing.

The data dissemination and use strategy will be successful if the use of data results in more efficient planning and financing of WaSH services; adaptation of policies and regulation; greater accountability of WaSH service providers and authorities and; more sustainable WaSH services. The primary users of the data are the stakeholders of the OWNP; secondary users are research organisations, civil society and international WaSH sector experts. Audiences are discussed further in section 4.8.2.1.

Data dissemination and use activities sit in relation to the triangular linkages between i) data, information and knowledge and their use in ii) planning and decision making and iii) budgeting and financing. These relations are at each level in a federal state such as Ethiopia, and complex due to the multiple channels of funding. Better service delivery is expected through operational use of data at local (woreda and sub-woreda especially) levels. More effective planning and decision-making informed by better evidence is expected to lead to improvements through more effective interventions, with more and better targeted financing at all levels and accurate budgeting leading to more effective activities and, ultimately over time, better value for money.

Figure 2 Relationships between data, planning and budgeting

The dissemination strategy will enable sharing of sub-sector data on water supply, sanitation and hygiene and the integrated analysis of the data for effective and sustainable WaSH service delivery. As discussed in section 3.3.2 primary data sources are WaSH M&E MIS which will hold data from water supply reporting as well as the Health MIS and Hygiene and Environmental Health programme monitoring systems, the Education MIS, and IBEX while data from other sources will contribute to analysis such as data from NGOs, from household surveys undertaken by the CSA etc.

Box 7 Key milestones for Data Dissemination and Use

Proposed key deliverables/milestones are:

- Inter-agency data sharing agreement (by December 2015)

- Improved reporting formats for major programmes at all levels (Sep 2016)

- OWNP annual report (by October in 2016, 2017, and 2018)

- Report on use and impact of the OWNP report (by May 2017)

- Ethiopia WaSH Atlas (by March 2017)

- Report on use and impact of the Ethiopia WASH Atlas by January 2018

- Report on WaSH data use at local levels to improve service delivery (May 2018)

- Report on the efficiency and impact of the combined WaSH MIS reporting system (November 2018)

- Report on sharing and use of WaSH data from OWNP MIS systems (July 2018)

- At least 4 briefing papers per year, 12 news articles per year, 6 blogs per year, and 12 presentations per year (summary report included in implementation report and published to website)

- Report on use and impact of outreach materials (January 2018)

4.8.1   Key findings: existing data dissemination, use and challenges

Most of the findings discussed in section 1.2 are relevant to data dissemination and use. The already existing wealth of data is not known to many sector stakeholders and not used as widely as it could be. Rather than accessing existing data sources, due to fragmentation and limited coordination, there is a tendency towards duplication of data collection rather than using data collected by other agencies. Most programmes and NGOs have their own project monitoring systems and tools that they rely upon, and their data do not always feed into government data systems. The use of data is also generally given lesser priority than data collection and suffers even greater capacity constraints (skills but also other resources and infrastructure) than the collection of data.

The WaSH sector, despite some previous attempts, has not been able to develop the capacity to sustain integrated WaSH reporting. A critical failure has also been the failure to report on sanitation at the end of the IDA/DFID water and sanitation programme (which has been superseded by the CWA).

There have been some notable data use successes too. NWI data from 2010/11 was used by the MoWIE to update its estimates on access to improved water supplies with new more accurate figures reported to Parliament in 2013, and by the JMP to update its assessments for Ethiopia in determining that Ethiopia had met the water MDG in 2015. This 'use of data' was an outcome in both these cases of considerable efforts to facilitate, understand, compare, re-analyse and ultimately use data, illustrating the kind of activities and persistence needed to put data to use.

4.8.2   Approach to data dissemination and use

The approach proposed for data dissemination and use (see also Figure 3) is as follows:

- To strengthen cooperation between the constituting MISs: WaSH M&E MIS, Health MIS, Education MIS, and IBEX and to strengthen processes for access and exchange of data, and strengthen roles and responsibilities for processing, analysing data and using data for reporting.

- To incorporate and promote the use of M&E data from all stakeholders in the OWNP: the MISs of the Government of Ethiopia, the Development Partners participating in the CWA, and Development Partners (bilateral, multilateral and NGOs) funding WaSH through channels 2 (bilateral) and 3 (NGO funds).

- To focus on the local level of the woreda for making data available for operational responses, planning and reporting and build on the motivation of woreda level staff to collect and use data, notwithstanding the need for use of data at higher levels of governance and the need for disseminating project findings to national and international level stakeholders such as the findings from the impact evaluation under Task 2. Addressing the needs of the woredas starts with ensuring that their data needs are met through adequate consultation and design.

- To develop different dissemination products and channels for different audiences in particular WWTs, RWCOs and NWCO.

- To channel data and reports as far as possible using existing reporting formats, events and platforms.

- To build the necessary staff capacities and enabling systems at all levels to use data for operational responses, planning, reporting and policy making (so this intervention package is linked to the capacity development intervention package discussed in section 4.3).

- To produce two flagship products: the annual, federal OWNP report and the OWNP atlas which will be produced every five years based on the findings of the NWI.

- To produce accompanying manuals and guidelines for access to and use of data for different M&E purposes and audiences.

- To put in place procedures for requesting access to data by others than direct stakeholders of the OWNP such as research institutions and civil society organisations.

- To ensure the data dissemination and use strategy will be updated continually identifying stakeholder groups, their information needs, and the communication strategy to meet these needs.

Figure 3 Illustration of data use for OWNP operational responses, reporting and planning
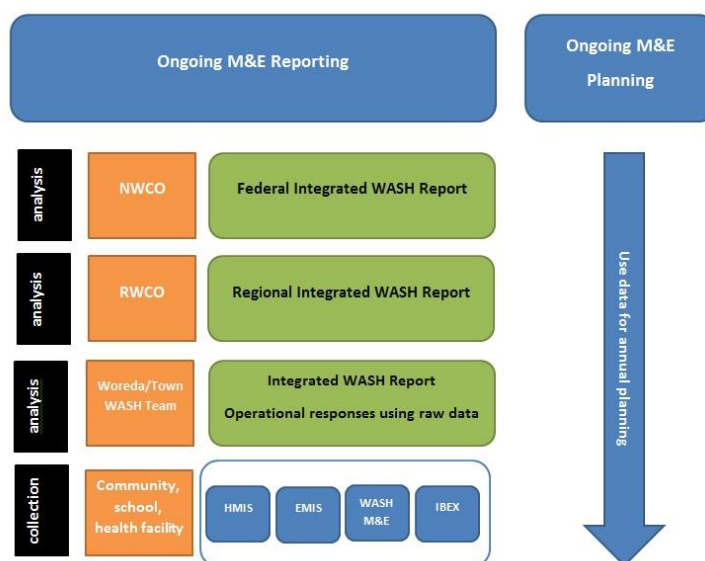
4.8.2.1   Audiences

The primary audiences of the data dissemination and use strategy, their data needs and how these will be addressed by the strategy to maximise evidence-based decision-making are set out in Table 18.

Table 18: Stakeholder groups, their data needs and how these needs will be addressed

Stakeholder group	Data needs	Approach
The public/ WaSH consumers	The public need data made available in accessible forms so that service providers can be held to account.	Publication of simple water point mapping data online.

Stakeholder group	Data needs	Approach
Woreda WaSH Teams	Woreda WaSH Teams need data for immediate responses to operational challenges in the woreda, to facilitate reporting to the Zones and the Regions and to inform planning of OWNP woreda interventions and budgets.	Data collected through the component MIS are available and usable for the Woreda WaSH Teams to process and analyse for immediate operational responses; for reporting, planning and budgeting.
NWCO and RWCO	WaSH MoU signatories need data to report progress, to plan and prioritise interventions, to adapt policy and regulation and to allocate funds.	Data collection through the Health MIS, the Education MIS, the Water MIS and the IBEX; data analysed and reported at Regional and Federal level for one OWNP report to inform planning.
Development Partners directly funding the OWNP	Bilateral, multilateral donors and international banks directly funding OWNP will need data to monitor progress of the OWNP and Value for Money in order to report to constituent stakeholders.	Raw data from the Health MIS, the Education MIS, the Water MIS and the IBEX as well as processed and analysed data from Regional and Federal OWNP reports will enable monitoring progress and reporting to home constituencies.
Other Development Partners	Donors and NGOs not directly funding the OWNP through the CWA need data to jointly with Government decide on areas and types of interventions and; need to provide data for the OWNP reporting.	Data will facilitate project reporting by Development Partners and will enable joint planning of interventions by Development Partners and Government.
Research organisations	Research organisations need to analyse the data from the M&E to trigger debate and inform decisions.	A procedure to request raw data for research will be put in place.

4.8.2.2   Data use and data value addition

The strategy will promote and enable the use of data in various stages of processing: from raw data to analysed and interpreted data. Each data category serves different types of data uses as shown in Figure 4.

Figure 4 Adding value to data
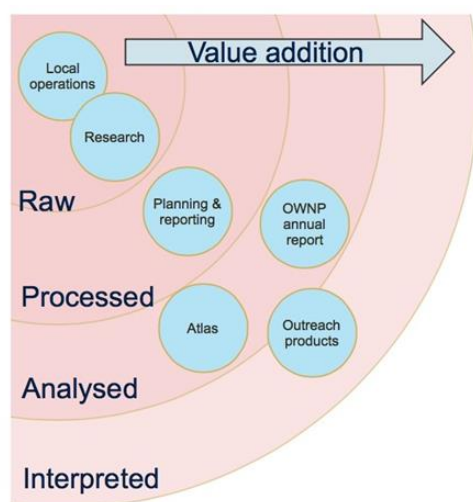
The categories in the data value addition chain are:

1. **Raw data:** from the component management information systems is mainly used for direct operational responses in particular at the level of the woreda. Access to raw data should also be facilitated for other stakeholders than government e.g. for research, for NGOs and CBOs and other stakeholders. A data request procedure will be put in place following the procedures of the MIS systems for data access which will need to be clear, transparent and promote data use.

2. **Processed data:** data that have been ordered and categorised for specific purposes of different target audiences e.g. data processed at woreda level to inform the reporting requirements to the zones and regions and; analysed data to be presented in the annual OWNP report and the 5 yearly WaSH Atlas.

3. **Analysed data:** data analysed to draw conclusions and provide recommendations for planning and action and for improvements of policy and regulation. There is a lot of potential for data visualisation and the use of dashboards to present data in accessible forms. This will be exploited through the Atlas and promoting open access to water point mapping data.

4. **Interpreted data** which includes data for advocacy and data for use in outreach products, research and impact evaluation reports, newsletters, publications, briefs e.g. on good cases of data use, the national MSF, international conferences etc.

4.8.2.3 Data products

The envisaged data products along the value addition chain are:

1. **Data for local operations**: local operations (e.g. decisions related to repairs to a water point, emptying of a latrine pit at a school etc.) will be facilitated through the rapid provision of data, generally raw data, to the local actors with relevant service provision responsibilities (typically at woreda levels although zones and regions may also be involved). Standard formats may not always be required, but the processes and behaviours to share such data need to be promoted.

2. **Data reports for planning and reporting**: data reports from the component MIS systems are expected to provide data in easy to use formats that support the required planning and reporting processes in each sector. Plans and reports will be more 'evidence-based' where they maximise use of data from component MIS systems (e.g. WMIS, HMIS, EMIS, IBEX etc.). Duplication of effort will be avoided where systems provide the data that is required to prepare plans and reports. First attempts will be made to synthesise data across sectors on the OWNP KPIs reports for all woredas and regions in light reporting formats.

3. **Data for research**: data will be provided to the research community (an important target audience to promote evidence-based decision making) based upon a transparent process for making data requests with relevant metadata provided. Such requests are expected to be processed at regional and national levels, according to the rules of implementing partners (MoWIE, MoH, MoE, MoFED etc.).

4. **OWNP report**: this is a flagship annual integrated national report on the progress and achievements of all WaSH activities within the country including rural WaSH, urban WaSH, institutional WaSH and the enabling environment. Data is interpreted to highlight key trends, achievements and gaps and recommendations seek to influence high-level decision making. The report will be prepared by September each year and will be a key input to the Joint Sector Review and Multi-Stakeholder Forum.

5. **OWNP atlas**: produced every 5 years the OWNP atlas will provide access to national scale data in attractive map formats (both in hard-copy and online through the website)

6. **Outreach products**: other products will include:

   - **Briefing papers**: short papers will share examples of use of WaSH data, share impact evaluation findings, summarise advocacy focused on improving WaSH monitoring etc.

   - **News**: regular news articles on the development of M&E within the OWNP will be shared through multiple channels including the OWNP website, sector newsletters. For a long and complex programme with stakeholders across Ethiopian government, donors, civil society and the wider community, it will be essential to plan how to communicate the activities undertaken in Task 1 (M&E enhancement) and Task 2 (Impact evaluation) in order to explain their rationale and benefits. Lessons learnt during the implementation phase will need to be recorded and disseminated and good practice highlighted so that institutional learning can take place over time.

- **Presentations** and other inputs to events (national and international) highlighting developments, use etc.
- **OWNP website**: parts of the OWNP website will be developed to be data-rich providing access to key data generated by the component MIS systems, news, briefs and task 2 evaluation findings.

Accompanying products – all major outputs will be accompanied by products to facilitate the production and use of the outputs such as manuals, guidelines, training programmes, formats and templates. These will include:

- Guidelines for using the raw data from the MISs for operational responses by the Woreda WaSH Teams and offices.
- Template for Woreda WaSH Teams to report to the RWCO.
- Template for the Regional One WaSH report.
- Template for the National One WaSH report.
- Template for the Ethiopia WaSH Atlas.
- Materials to promote the use and dissemination of the data.
- Data exchange agreement between the MOH, MOE, MOFED and MOWIE.

4.8.3 Work plan

The work plan operationalises the implementation of the proposed data products. Annex 4 contains further detail with a detailed workplan of activities and Gantt chart. Table 19 provides a summary of the work plan describing outcomes, outputs, and activities.

Table 19 Data dissemination and use workplan summary

Output No.	Output	Links to other sub-plans	Activity No.	Activities
Outcome 3.1 Service providers and service authorities use data to inform their operational responses, leading to improved effectiveness and better services				
3.1.1	Policy and procedures in place to promote and track the use of data by service providers and service authorities in their operational responses		3.1.1.1	Workshop for regional bureaus/ RWCOs to confirm arrangements and promote horizontal data sharing at local levels
			3.1.1.2	Technical support to document standard procedures and process maps for service providers and service authorities in particular at woreda level to use data for operational responses
3.1.2	Guidelines developed to guide use of local WaSH data for operational responses		3.1.2.1	Simple guidelines developed on use of WaSH data for improved local operations
			3.1.2.2	Guidelines promoted through existing training for, channels etc.
	Outcome also depends on output 2.4.1 under capacity building	Capacity building		
3.1.3	Survey reported on data use at local levels to improve operations		3.1.3.1	Survey designed and data collection planned
			3.1.3.2	Data collection
			3.1.3.3	Data analysis
			3.1.3.4	Draft report prepared and feedback
			3.1.3.5	Report published and disseminated
Outcome 3.2 Data reports from sector MIS systems are used as the primary sources in key WaSH planning and reporting processes				
3.2.1	Procedures and tools in place to generate data reports in the required formats for reporting and planning		3.2.1.1	Development of customised tools to generate reports as required for CWA, OWNP and where possible other programmes
			3.2.1.2	Development of simple format e.g. factsheet on integrated WaSH at woreda level
3.2.2	Roles and responsibilities clarified in production of data reports		3.2.2.1	Workshop to discuss roles of staff at woreda, regional and federal levels and generation of data reports
	Outcome also depends on output 2.4.2 under capacity building	Capacity building		
3.2.3	Reports generated and used		3.2.3.1	Technical support to woredas, regions and staff at the federal level to generate reports

Output No.	Output	Links to other sub-plans	Activity No.	Activities
3.2.4	Greater use of hygiene and sanitation, and institutional WaSH data promoted		3.2.4.1	Technical support to promote more local use of health and education data through clarification of processes and responsibilities, demand creation through sector channels, and demonstrated examples (two way information flows), and analysis with a focus on assessing disparities/ inequities and using information to better target investments
3.2.5	Survey reported on the efficiency and impact of the combined MIS reporting system		3.2.6.1	Survey designed and data collection planned
			3.2.6.2	Data collection
			3.2.6.3	Data analysis
			3.2.6.4	Draft report prepared and feedback
			3.2.6.5	Report published and disseminated
Outcome 3.3 Researchers and other third parties make extensive use of data within WaSH MIS systems increasing the evidence base				
3.3.1	Policies and procedures in place to share data from IP WaSH MIS systems		3.3.1.1	workshop to draft procedures to share WASH data from sector MIS systems
			3.3.1.2	Technical support to finalise procedures
3.3.2	Data requests sought and fulfilled		3.3.2.1	Data catalogues developed summarising available data
			3.3.2.2	Data request processes published (e.g. on OWNP website), availability of data promoted and data requests honoured
	Outcome also depends on output 2.4.3 under capacity building	Capacity building		
3.3.3	Archive maintained of publications		3.3.3.1	Follow-up to collate copies of reports, papers and other products generated using data from WaSH MIS systems
			3.3.3.2	Online archive maintained to facilitate access to publications developed using WaSH MIS data
3.3.4	Survey to document and evaluate the number and purpose of data requests		3.3.4.1	Survey designed and data collection planned
			3.3.4.2	Data collection
			3.3.4.3	Data analysis
			3.3.4.4	Draft report prepared and feedback
			3.3.4.5	Report published and disseminated

Output No.	Output	Links to other sub-plans	Activity No.	Activities
Outcome 3.4 OWNP Integrated Annual WaSH Report published every year in October is key reference publication across WaSH sectors				
3.4.1	Data exchange agreement between the Ministries		3.4.1.1	Workshop to bring together decision-makers from MOH, MOH, MOFED & MOWIE to define the process for data exchange between WaSH Ministries
			3.4.1.2	Draft agreement, share and feedback incorporated
			3.4.1.3	Finalise and communicate agreement
3.4.2	Responsibility assigned for production of the report		3.4.2.1	Combined team identified and agreed between Ministries
	Outcome also depends on output 2.4.4 under capacity building	Capacity building		
3.4.3	OWNP annual report		3.4.3.1	Agreement of report format and content
			3.4.3.2	Additional data collection from regions
			3.4.3.3	Data analysis
			3.4.3.4	Component sections drafted
			3.4.3.5	Combined draft report produced and shared
			3.4.3.6	Workshop feedback on draft report
			3.4.3.7	Final report edited and approved
3.4.4	The OWNP report published and disseminated		3.4.4.1	Report published and disseminated (printed)
3.4.5	Survey to document and evaluate the use and impact of the OWNP report		3.4.5.1	Survey designed and data collection planned
			3.4.5.2	Data collection
			3.4.5.3	Data analysis
			3.4.5.4	Draft report prepared and feedback
			3.4.5.5	Report published and disseminated
Outcome 3.5 Ethiopia WaSH Atlas produced every 5 years provides most comprehensive resource for WaSH policy-making and planning				
	Data exchange agreement between the Ministries			Same as above under 4.1
3.5.1	Roles and responsibilities assigned for pulling the data sets together		3.5.1.1	Combined team identified and agreed between Ministries

Output No.	Output	Links to other sub-plans	Activity No.	Activities
	Outcome also depends on output 2.4.5 under capacity building	Capacity building		
3.5.2	The Ethiopia WaSH Atlas written		3.5.2.1	Agreement on format and content of the atlas
			3.5.2.2	Additional data collected and data verified from regions
			3.5.2.3	Data analysis
			3.5.2.4	Component sections (regions) of the atlas drafted
			3.5.2.5	Atlas produced and shared for final feedback
			3.5.2.6	Feedback on draft atlas
			3.5.2.7	Final atlas edited and approved
3.5.3	The Ethiopia WaSH Atlas published and disseminated (online and off line)		3.5.3.1	Atlas published and disseminated (printed)
			3.5.3.2	Flyers and promotion materials for atlas
3.5.4	Survey to document and evaluate the use and impact of the Ethiopia WaSH Atlas		3.5.4.1	Survey designed and data collection planned
			3.5.4.2	Data collection
			3.5.4.3	Data analysis
			3.5.4.4	Draft report prepared and feedback
			3.5.4.5	Report published and disseminated
Outcome 3.6 Outreach materials are widely utilised including OWNP website developed with data rich content and series of briefing papers, news, blogs, news on events and reports .				
3.6.1	Processes and procedures in place to produce and commission briefing papers, news, presentations and website etc.		3.6.1.1	Planning outreach materials for the duration of the project (including writing, review, design, print, distribution)
			3.6.1.2	Planning inputs to OWNP website and management of the website including technical support
			3.6.1.3	Technical support to website setup (M&E related components)
			3.6.1.4	Design and branding advice
3.6.2	Roles and responsibilities assigned		3.6.2.1	Outreach team identified (project, Ministries) and agreed between Ministries
			3.6.2.2	Workshop to define roles for management of outreach, writing outreach materials, review etc. identified
	Outcome also depends on	Capacity		Internal training and coaching of the outreach team

Output No.	Output	Links to other sub-plans	Activity No.	Activities
	output 2.4.6 under capacity building	building		External tailored training of the outreach team
3.6.3	Outreach materials produced (at least 4 briefing papers per year, 12 news articles per year, 6 blogs per year , 12 presentations per year)		3.6.3.1	Website maintained
			3.6.3.2	Briefing papers produced
			3.6.3.3	Blogs produced
			3.6.3.4	News items produced
			3.6.3.5	Presentations produced
			3.6.3.6	Conferences attended
			3.6.3.7	Articles produced (based on impact evaluation)
			3.6.3.8	Other outreach materials produced (film, radio and TV items)
			3.6.3.9	Management of the outreach materials
3.6.4	Outreach materials published and disseminated		3.6.4.1	Outreach materials published on the website and printed in hard copy
			3.6.4.2	General promotion materials produced (flyers, business cards, T-shirts etc.)
3.6.5	Survey to document and evaluate the use and impact of the outreach materials		3.6.5.1	Survey designed and data collection planned
			3.6.5.2	Data collection
			3.6.5.3	Data analysis
			3.6.5.4	Draft report prepared and feedback
			3.6.5.5	Report published and disseminated

4.9 Exit Sub-plan

The objective of the exit or sustainability plan is to put in place the capacities to sustain the benefits of WaSH M&E and the related data dissemination and use beyond the life of the OWNP M&E support project (February 2019). Ensuring that people have the necessary skills and tools to report on WaSH service delivery, and act upon that knowledge for decision-making after the end of the project. This will include reporting towards the end of the GTP2 (in 2020) and ensuring that data are used for evidence based decision making as part of the planning for the next programme.

Box 8 Key milestones for exit sub-plan

Sections on exit planning will form part of the OWNP implementation report (annual and quarterly) with annual report proposed by end February.

4.9.1   Key findings: risks to continuous OWNP M&E

Critical risks to continuation of OWNP M&E processes are identified in Table 20.

Table 20: Key risks to continuous OWNP M&E

Risk	Mitigation
M&E requirements will continue to change as the OWNP evolves and develops	Systems developed will build in flexibility and capacities will be developed to make modifications to processes and systems while ensuring that critical indicators are retained to enable changes to be tracked over time as is required.
The implementing ministries continue to work on WaSH M&E in isolation (with insufficient ownership of an integrated programme) and do not manage to implement agreements for data sharing, jointly analyse data and use data for improved WaSH service delivery	The M&E enhancement plan includes activities to promote synergy and collaboration. Strong leadership will be encouraged targeting the steering committee and the political top of the MoU Ministries, as well as strengthened collaboration between NWCO and planning departments (with MIS responsibility) as well as focal persons. OWNP stakeholders to support increased cooperation between the implementing ministries and between NWCO and implementing ministries.
The "one budget" vision for WASH investment is not realized, and ministries can only meet their diverse reporting requirements by resorting to individual data-collection efforts.	Promotion of benefits derived from coordination and harmonisation including the role of M&E.
Project management units (PMUs) hinder development of longer term capacities relevant to M&E at regional and national level	This issue will be tracked and reported.
Critical activities within the OWNP M&E enhancement plan are not fully funded or implemented	Ensure funding through synergy and complementarity activities to mobilise support, and ensure strong coordination of activities.
OWNP implementing partners do not allocate sufficient funding for sectoral M&E and/or the programme does not allocate sufficient funding for sustained integrated M&E and reporting	Ensure the benefits of M&E are clearly documented and communication through activities within the data dissemination and use strategy. Alternative sources of finance for M&E and government commitments identified through exit plan activities.
Technical assistance does not lead to development of adequate capacity within NWCO and OWNP implementing ministries	Put in place continuous capacity development processes such as re-training and the availability of good documentation.
Low capacity hinders operationalisation of the WaSH M&E system	To strengthen HRD in M&E within the relevant sectors. Not to develop an M&E system that is too high tech, e.g. GIS mapping, with software is designed for the upper end of existing capacity without demanding too complex and rare technical skills.
High turnover of staff at all levels limits the effectiveness of capacity development activities.	Put in place continuous capacity development processes such as re-training and the availability of good documentation.
Capacity development activities are not sufficient to increase the incentives to collect and use data (and to reduce the disincentives)	Careful attention to incentives and disincentives as part of capacity development activities.

Providing high quality training opportunities carries the risk of increasing a trainee's competitiveness in the job market and increased staff turnover.	Staff retention mechanisms considered and promoted.
Infrastructural weaknesses such as low electricity and internet connectivity, and (changes in) policy restrictions such as data storage regulations restrict options for ICT introduction.	Limited infrastructure considered from outset in design, together with developing collaboration with national IT and regulatory agencies and including the national data centre.
The timetable for roll-out of ICT solutions is too ambitious.	Rather than cutting corners and sacrificing quality, mitigation to focus on renegotiating the roll out timetable.

4.9.2   Approach: planning for sustainability

In order to effectively operationalise the concept of sustainability, our exit and sustainability strategy begins with planning. OWNP M&E enhancement efforts will be focused upon lasting change. However we recognise the task of establishing a national, cross-sectoral monitoring and evaluation system is a process larger and longer than the project lifespan. Our aim is to establish and use key principles of sustainability from the beginning, ensuring our work is focused towards sustained collection, processing and use of data to inform resource allocation and planning decisions.

Guiding elements in our approach will be:

- Appropriate design and planning.
- Alignment with existing people, processes and systems as far as possible.
- Working to strengthen people, processes and systems.
- Embedding and institutionalising processes and systems.
- Making sure external support is available (bringing along donors, bilaterals & CSOs).
- Operation and maintenance costs of the entire M&E system are realistic for government ownership.
- Ensuring commitment to ongoing financial and technical support from government.
- Building in resilience and flexibility of processes and system to adapt to changes and evolve in time.
- Establishing and ensuring strong relationships between stakeholders.
- Involve potential funders from the beginning.
- Monitoring and evaluation of project outcomes (especially use of data) and impact to demonstrate results.
- Communication of project progress and results.
- Implementation of a risk management strategy.

Many activities geared towards sustainability are included in:

- The capacity development sub-plan with its focus on a broad range of capacity development demand and supply-side activities.
- The data dissemination and use plan: use of data is expected to drive demand for M&E to continue and increase the willingness of agencies to invest in sustaining M&E, and;
- The synergy and complementarity plan with its focus on strengthening institutional linkages and cross-sectoral engagement, putting and keeping M&E high on the sectoral agendas.

In addition, the overall approach to MIS enhancement and integrated reporting has involved taking sustainability issues into account from the outset.

In addition, three additional specific outputs are identified in this exit sub-plan. These are:

- An annual OWNP M&E implementation report (not to be confused with the OWNP annual report with results across the sectors) to be prepared by February each year. This report will, based upon review by team members, NWCO, ministries and core stakeholders, bring together an assessment of progress in activities under each of the intervention packages i.e. 1) MIS enhancement, 2) capacity development, 3) data dissemination and use and 4) synergy and complementarity. It will also identify new requirements in WaSH M&E (e.g. as new policies and strategies are developed), identify gaps towards achieving the intended outcomes of WaSH M&E, and propose mitigation measures and modifications to project implementation.

- The identification of alternative sources of financing which will be reported in a section in OWNP M&E implementation quarterly reports. Alternative financing beyond the initial donor funding will be sought to cover part of OWNP M&E cost requirement, including commitments from Ministries and commitment of development partners to continue support (in modified forms) to fill gaps.

- Regular monitoring, evaluation and reporting of project outcomes and impact. Linked to the data dissemination and use intervention package which includes several activities to track and survey the use of OWNP M&E data products, this activity will ensure that the wider outcomes and impacts of WaSH M&E are tracked, documented and reported. Being able to demonstrate outcomes and impacts is expected to support efforts to sustain OWNP M&E.

4.9.3 Work plan

Outcome 4.4 relating to the exit sub-plan is part of the synergy and complementarity work package (see section 4.5 and Table 15).

5 COST ESTIMATES

This section provides an indicative budget as a basis for further discussion. Figure 5 below outlines our approach to financing the implementation phase for operationalizing an enhanced M&E framework for OWNP. This report assumes three sources of funds for a **proposed budget of £16.1 million**:

    a. **DFID Task 1, 3 Budget**: this is the budget of **£1.1 million** for Tasks 1 and 3 under the existing contract issued by DFID to the Coffey-IRC consulting team for OWNP technical and managerial support (marked as "DFID Task 1, 3 Budget"),

    b. **DFID Critical Gaps Fund**: this is the budget of up to **£1 million** allocated by DFID for update of the National WaSH Inventory (marked as "DFID Critical Gaps Fund"). In the implementation phase, DFID requires Coffey to act as fund manager for the CGF and monitor its expenditure.

    c. **Other Sources:** this is a proposed budget of **£14.2 million** for a nation-wide rollout of the National WasH Inventory II, the water sector MIS and for on-going monitoring of the OWNP from sources including other OWNP donors and partners (marked as "Other Sources"). The final budget under this category has to be discussed and agreed between NWCO, DFID and other programme donors and partners.

Figure 5: Proposed budget structure for implementation phase
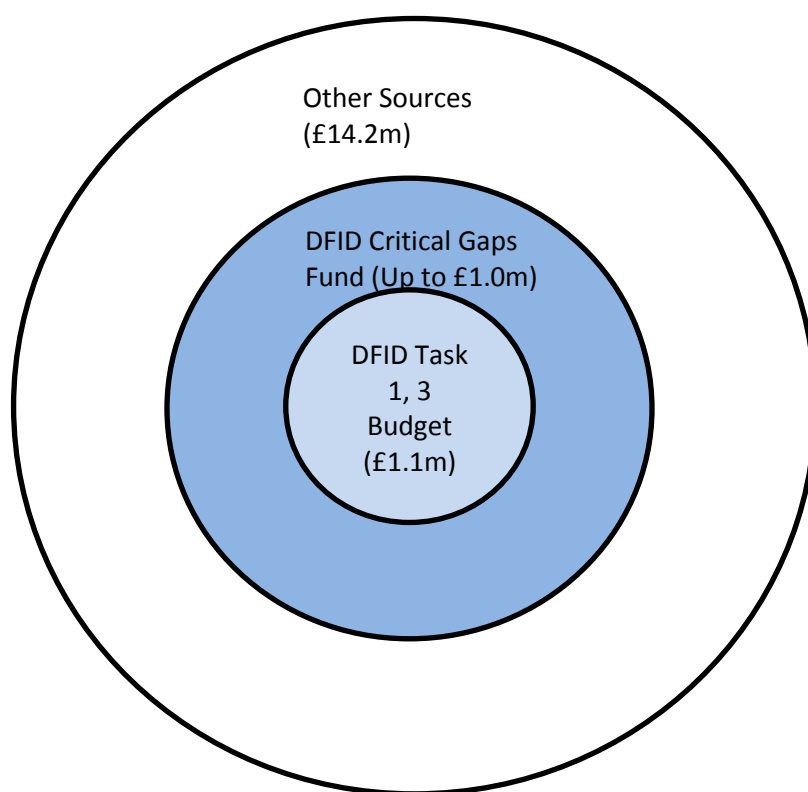
While the Coffey-IRC consulting team will continue to deliver technical and managerial support, such a budget design means the scale at which operationalization of the enhanced OWNP M&E framework can be rolled-out across the country will depend on the amount of funding and quality of alignment of funding that is agreed between NWCO, OWNP partners and donors. The proposed budget has the following key features:

- The total budget of £16.1 million is *not* for the Coffey-IRC consulting team engaged by DFID. This team will continue to deliver technical and managerial support under tasks 1 and 3 to the OWNP within the budget of £1.1 million at which DFID originally procured these services. This budget will be used by the team to deliver the four year operational plan and its constituent sub-plans detailed in chapter 4 of this report. This

amount does not include task 2 activities (for the independent impact evaluation of OWNP) or project management activities.

- As directed by DFID, the Critical Gaps Fund (CGF) has been planned around activities related to update of the National WaSH Inventory only. This includes the costs of procuring software solutions for NWI data collection, data storage and analysis. The amount also includes expenses related to training on data dissemination and use with respect to NWI2 data, and expenses related to production of a WaSH 'atlas' based on NWI2 data.

- The Coffey-IRC consulting team will *not* receive additional fees for technical and managerial support services from this fund. Fees marked to the CGF assume that OWNP may require consulting services from other service providers (excluding Coffey-IRC) in producing the WaSH atlas.

- Expenses marked to CGF are towards procurement and data collection costs for other service providers that may be need to be engaged such as external training vendors.

- It is anticipated that in addition to the DFID funds, other OWNP development partners will fund sector agencies to work towards the operationalization of an enhanced M&E framework for OWNP. This funding is *not* intended to be provided to the Coffey-IRC team but to other agencies who will implement certain tasks using their own funds or funds from other donors. These other agencies will be encouraged to implement and align relevant activities to the OWNP M&E framework. Some agencies that are already known to be implementing such activities include WSP and UNICEF. Please refer to the Synergy and Complementarity sub-plan in section 4.5.3 for an outline of these complementary activities.

- The largest proportion of the £14.2 m proposed budget marked to Other Sources is allocated to activities around nation-wide training and data collection related to the NWI update and roll-out and use of the enhanced MIS software in OWNP M&E as part of a system of routine government monitoring, including critical government staffing costs. This includes £3.9 m relating to activities around NWI2 data collection that have been included in a MoWIE proposal to AfDB dated 29 September 2015, a copy of which was provided to the Coffey-ORC team. For details of these activities, please refer to the Capacity Development sub-plan in section 4.3.3 of this report. This part of the budget does not yet have confirmed sources of finance. It is assumed that the NWCO and OWNP partners will jointly discuss and commit to funding various parts of this budget needed to roll-out and sustain the enhanced M&E framework at a national level. The Coffey-IRC team will support these discussions.

The proposed budget for the operationalization of the enhanced OWNP M&E framework is presented in terms of the use and source of the budget.

The "**Use of Budget**" table is a proposed *demand* for funds for spending on fee and expense heads given in the table below.

Use of Budget	2015	2016	2017	2018	2019	Total
Fees						
International Resource Days	8	710	341.5	151	20	*1,231*
National Resource Days	8	1201	764	406	5	*2,384*
International Resource Fees	£ 6,441.19	£ 571,655.29	£ 274,958.14	£ 121,577.39	£ 16,102.97	£ *990,734.98*
National Resource Fees	£ 1,370.56	£ 205,754.67	£ 130,888.07	£ 69,555.70	£ 856.60	£ *408,425.59*
Sub Total Fees (F)	**£ 7,811.74**	**£ 777,409.96**	**£ 405,846.21**	**£ 191,133.09**	**£ 16,959.56**	**£ 1,399,160.56**
Expenses						
International travel	£ 3,474.00	£ 40,530.00	£ 17,370.00	£ 10,422.00	£ 3,474.00	£ *75,270.00*
National/local travel	£ 454.00	£ 20,000.00	£ 9,000.00	£ 6,000.00	£ 1,000.00	£ *36,454.00*
Accommodation/ subsistence	£ 1,184.00	£ 51,322.50	£ 21,771.00	£ 11,056.50	£ 1,710.00	£ *87,044.00*
Workshops	£ 2,250.00	£ 31,750.00	£ 19,750.00	£ 13,750.00	£ -	£ *67,500.00*
Training events	£ -	£ 1,969,624.12	£ 933,311.00	£ 483,811.00	£ -	£ *3,386,746.12*

	2015	2016	2017	2018	2019	Total
Publications	£ -	£ 17,000.00	£ 28,500.00	£ 16,000.00	£ -	£ 61,500.00
IT	£ -	£ 2,080,186.00	£ 1,087,139.00	£ 1,087,139.00	£ -	£ 4,254,464.00
Other	£ 6,300.00	£ 2,994,346.00	£ 1,853,648.00	£ 1,862,148.00	£ 1,300.00	£ 6,717,742.00
Sub Total Expenses (E)	£ 13,662.00	£ 7,204,758.62	£ 3,970,489.00	£ 3,490,326.50	£ 7,484.00	£ 14,686,720.12
Total Cost (F+E)	£ 21,473.74	£ 7,982,168.58	£ 4,376,335.21	£ 3,681,459.59	£ 24,443.56	£ 16,085,880.68

The "**Source of Budget**" table is a proposed *supply* of funds to meet the required budget, subject to negotiations between OWNP donors and partners.

Source of Budget	2015	2016	2017	2018	2019	Total
Fees						
International Resource Fees	£ 6,441.19	£ 571,655.29	£ 274,958.14	£ 121,577.39	£ 16,102.97	£ 990,734.98
DFID Task 1, 3 Budget	£ 6,441.19	£ 398,548.41	£ 162,639.96	£ 82,930.27	£ 16,102.97	£ 666,662.79
DFID Critical Gaps Fund	£ -	£ 13,687.52	£ 19,323.56	£ 4,025.74	£ -	£ 37,036.82
Other Sources	£ -	£ 159,419.36	£ 92,994.63	£ 34,621.38	£ -	£ 287,035.37
National Resource Fees	£ 1,370.56	£ 205,754.67	£ 130,888.07	£ 69,555.70	£ 856.60	£ 408,425.59
DFID Task 1, 3 Budget	£ 1,370.56	£ 134,828.41	£ 64,587.44	£ 31,351.46	£ 856.60	£ 232,994.46
DFID Critical Gaps Fund	£ -	£ 7,709.38	£ 9,422.57	£ 2,569.79	£ -	£ 19,701.74
Other Sources	£ -	£ 63,216.88	£ 56,878.06	£ 35,634.45	£ -	£ 155,729.39
Sub Total Fees (F)	£ 7,811.74	£ 777,409.96	£ 405,846.21	£ 191,133.09	£ 16,959.56	£ 1,399,160.56
Expenses						
International Travel	£ 3,474.00	£ 40,530.00	£ 17,370.00	£ 10,422.00	£ 3,474.00	£ 75,270.00
DFID Task 1, 3 Budget	£ 3,474.00	£ 40,530.00	£ 17,370.00	£ 10,422.00	£ 3,474.00	£ 75,270.00
DFID Critical Gaps Fund	£ -	£ -	£ -	£ -	£ -	£ -
Other Sources	£ -	£ -	£ -	£ -	£ -	£ -
National travel	£ 454.00	£ 20,000.00	£ 9,000.00	£ 6,000.00	£ 1,000.00	£ 36,454.00
DFID Task 1, 3 Budget	£ 454.00	£ 20,000.00	£ 9,000.00	£ 6,000.00	£ 1,000.00	£ 36,454.00
DFID Critical Gaps Fund	£ -	£ -	£ -	£ -	£ -	£ -
Other Sources	£ -	£ -	£ -	£ -	£ -	£ -
Accommodation/ subsistence	£ 1,184.00	£ 51,322.50	£ 21,771.00	£ 11,056.50	£ 1,710.00	£ 87,044.00
DFID Task 1, 3 Budget	£ 1,184.00	£ 51,322.50	£ 21,771.00	£ 11,056.50	£ 1,710.00	£ 87,044.00
DFID Critical Gaps Fund	£ -	£ -	£ -	£ -	£ -	£ -
Other Sources	£ -	£ -	£ -	£ -	£ -	£ -
Workshops	£ 2,250.00	£ 31,750.00	£ 19,750.00	£ 13,750.00	£ -	£ 67,500.00
DFID Task 1, 3 Budget	£ -	£ 1,000.00	£ 1,000.00	£ -	£ -	£ 2,000.00
DFID Critical Gaps Fund	£ -	£ -	£ -	£ -	£ -	£ -
Other Sources	£ 2,250.00	£ 30,750.00	£ 18,750.00	£ 13,750.00	£ -	£ 65,500.00
Training events	£ -	£ 1,969,624.12	£ 933,311.00	£ 483,811.00	£ -	£ 3,386,746.12
DFID Task 1, 3 Budget	£ -	£ 6,000.00	£ -	£ -	£ -	£ 6,000.00
DFID Critical Gaps Fund	£ -	£ 5,600.00	£ 1,500.00	£ -	£ -	£ 7,100.00
Other Sources	£ -	£ 1,958,024.12	£ 931,811.00	£ 483,811.00	£ -	£ 3,373,646.12
Publications	£ -	£ 17,000.00	£ 28,500.00	£ 16,000.00	£ -	£ 61,500.00
DFID Task 1, 3 Budget	£ -	£ 3,000.00	£ 3,000.00	£ -	£ -	£ 6,000.00
DFID Critical Gaps Fund	£ -	£ -	£ 12,500.00	£ 1,000.00	£ -	£ 13,500.00
Other Sources	£ -	£ 14,000.00	£ 13,000.00	£ 15,000.00	£ -	£ 42,000.00

IT	£ -	£ 2,080,186.00	£ 1,087,139.00	£ 1,087,139.00	£ -	£ 4,254,464.00
DFID Task 1, 3 Budget	£ -	£ -	£ -	£ -	£ -	£ -
DFID Critical Gaps Fund	£ -	£ 415,000.00	£ 90,000.00	£ 90,000.00	£ -	£ 595,000.00
Other Sources	£ -	£ 1,665,186.00	£ 997,139.00	£ 997,139.00	£ -	£ 3,659,464.00
Other	£ 6,300.00	£ 2,994,346.00	£ 1,853,648.00	£ 1,862,148.00	£ 1,300.00	£ 6,717,742.00
DFID Task 1, 3 Budget	£ 1,300.00	£ 11,000.00	£ 8,000.00	£ 8,000.00	£ 1,300.00	£ 29,600.00
DFID Critical Gaps Fund	£ -	£ 8,000.00	£ -	£ 4,000.00	£ -	£ 12,000.00
Other Sources	£ 5,000.00	£ 2,975,346.00	£ 1,845,648.00	£ 1,850,148.00	£ -	£ 6,676,142.00
Sub Total Expenses (E)	**£ 13,662.00**	**£ 7,204,758.62**	**£ 3,970,489.00**	**£ 3,490,326.50**	**£ 7,484.00**	**£ 14,686,720.12**
Total Cost (F +E)	**£ 21,473.74**	**£ 7,982,168.58**	**£ 4,376,335.21**	**£ 3,681,459.59**	**£ 24,443.56**	**£ 16,085,880.68**
Share of Budget Source						
DFID Task 1, 3 Budget	£ 14,223.74	£ 666,229.32	£ 287,368.39	£ 149,760.24	£ 24,443.56	£ 1,142,025.25
DFID Critical Gaps Fund	£ -	£ 449,996.90	£ 132,746.13	£ 101,595.53	£ -	£ 684,338.56
Other Sources	£ 7,250.00	£ 6,865,942.36	£ 3,956,220.69	£ 3,430,103.82	£ -	£ 14,259,516.88
Total	£ 21,473.74	£ 7,982,168.58	£ 4,376,335.21	£ 3,681,459.59	£ 24,443.56	£ 16,085,880.68
% Share of Budget Source						
DFID Task 1, 3 Budget	66%	8%	7%	4%	100%	7%
DFID Critical Gaps Fund	0%	6%	3%	3%	0%	4%
Other Sources	34%	86%	90%	93%	0%	89%
Breakdown of cost estimates and budget						
DFID Task 1, 3 Budget	£ 14,223.74	£ 666,229.32	£ 287,368.39	£ 149,760.24	£ 24,443.56	£ 1,142,025.25
Total fees	£ 7,811.74	£ 533,376.82	£ 227,227.39	£ 114,281.74	£ 16,959.56	£ 899,657.25
Total expenses	£ 6,412.00	£ 132,852.50	£ 60,141.00	£ 35,478.50	£ 7,484.00	£ 242,368.00
DFID Critical Gaps Fund	£ -	£ 449,996.90	£ 132,746.13	£ 101,595.53	£ -	£ 684,338.56
Total fees	£ -	£ 21,396.90	£ 28,746.13	£ 6,595.53	£ -	£ 56,738.56
Total expenses	£ -	£ 428,600.00	£ 104,000.00	£ 95,000.00	£ -	£ 627,600.00
Other Sources	£ 7,250.00	£ 6,865,942.36	£ 3,956,220.69	£ 3,430,103.82	£ -	£ 14,259,516.88
Total fees	£ -	£ 222,636.24	£ 149,872.69	£ 70,255.82	£ -	£ 442,764.75
Total expenses	£ 7,250.00	£ 6,643,306.12	£ 3,806,348.00	£ 3,359,848.00	£ -	£ 13,816,752.12
Total	£ 21,473.74	£ 7,982,168.58	£ 4,376,335.21	£ 3,681,459.59	£ 24,443.56	£ 16,085,880.68

It is recommended that a structured budget review process be initiated on completion of the inception phase between DFID, other CWA group donors and OWN development partners to determine the total quantum of financing and contribution of each party to the total budget.

Annex 1: References

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Annex 2: Organisations Consulted

During the inception period, the following organisations and offices were consulted:

- Ministry of Water, Irrigation and Energy (including State Minister, Water Supply and Sanitation Directorate, Planning Directorate and Geo-information and Information Technology Directorate)

- National WaSH Coordination Office

- Ministry of Health (including Hygiene and Environmental Health Directorate, and Planning and Policy Directorate staff)

- Ministry of Education (including Planning, Resource Mobilization Education Directorate and Education Management Information Systems Directorate)

- Ministry of Finance and Economic Development (including Channel one programs coordination office and IBEX/IFMIS project office staff)

- Central Statistical Agency

- UK Department for International Development (DFID)

- World Bank

- Water and Sanitation Program (WSP)

- African Development Bank

- UNICEF

- COWASH

- Water Aid Ethiopia

- CCRDA

- SNV

- USAID

- ICRC

- Professionals United Together (PUT)

- Akvo

- Oxford Policy Management

SNNPR-Region

- Bureau of Water Resource ((including RWCO, Water PMU and other departments)

- Bureau of Finance and Economic Development

- Bureau of Health

- Bureau Education

- Hawassa Water technology TVETC

- Dilla Health Science College

- Sidama zone Water Mine and Energy Department

- Guraghe zone Water, Mine and Energy Department

- Gedeo zone Water, Mine and Energy Department

- Halaba special Woreda Water, Mine and Energy office

- Halaba Special Woreda Finance and Economic Development Office

- People In Need (NGO)
- Wondo Genet Woreda Water, Mine and Energy Office
- Wondo Genet Woreda Health Office
- Wondo Genet Woreda Education Office
- Dara Woreda Water, Mine and Energy Office
- Yirgacheffe Woreda Water, Mine and Energy Office

Benishangul Gumuz-Region

- Bureau of Water Resource (including RWCO, Water PUM and other departments)
- Bureau of Health
- Bureau of Education
- COWASH CMP project
- Regional UNICEF Office
- Bambasi woreda Administration Office
- Bambasi woreda Water, Mine and Energy Office
- Sherkole woreda Water, Mine and Energy Office
- Kurmuk woreda Water, Mine and Energy Office

Tigray-Region

- Bureau of Water Resource (including RWCO, Water PUM and other department staffs)
- Bureau of Education
- Bureau of Health
- REST
- Charity: Water
- Regional SNV Office
- Regional UNICEF Office
- COWASH CMP Project
- ICRC Office
- Kilite Awlalo woreda Water, Mine and Energy Office
- Wukro woreda Health Office
- Wukro woreda Education Office
- Wukro Town Municipality
- Wukro Town Water Supply Utility Office
- Hadish Town Water Supply Utility office
- Alaje woreda Water, Mine and Energy Office
- Alaje woreda Education Office
- Alaje woreda Health Office
- Adigirat Woreda Water, Mine and Energy Office

Amhara-Region

- East Gojam zone Enarjina Enawega woreda Water, Mine and Energy Office

- Oromia Special zone Bati woreda Water, Mine and Energy Office
- South Gonder zone Tach Gayint woreda Water, Mine and Energy Office

Oromia-Region

- Bureau of Water Resource (including RWCO, Water PUM and other departments)
- Illu ababora zone, Metu woreda Water, Mine and Energy Office
- South West Showa zone, Akaki woreda Water, Mine and Energy Office
- West Wellega zone, Mene sibu woreda Water, Mine and Energy Office
- West Shewa zone, Suten Soddo woreda Water, Mine and Energy Office
- West Shewa zone, Adea Berga woreda Water, Mine and Energy Office

Somali-Region

- Bureau of Water Resource (including RWCO, Water PMU and other departments)
- Shebelle zone Water, Mine and Energy Department
- Afder zone Water, Mine and Energy Department
- Siti zone Water, Mine and Energy Department

Annex 3: Proposed OWNP M&E Indicators

Please read section 2.3.1 of the main report in conjunction with the indicators elaborated below.

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
Introductory notes					
No.	Proposed indicators are listed within 3 proposed groups: 1) a selected number of KPIs 2) supplementary indicators and 3) other indicators. See section 3.3.1 of main report for further discussion.	An unambiguous explanation of the indicator with all sub-components defined.	Discussion on data sources which include: Regular sector monitoring and reporting • Regular water supply reporting (with WaSH M&E MIS system under development) • Health Management Information System (HMIS) • Hygiene and Environmental Health (HEH) Programme Monitoring • National Education Management Information System (EMIS) • MoFED (IBEX) National WaSH inventory Additional sector monitoring studies • OWNP impact evaluation surveys • Sustainability checks • Behaviour change studies • National Drinking Water Quality Monitoring and Surveillance Strategy (to be established) • Rapid Assessment on Drinking-water Quality (RADWQ) Nationally-representative household surveys undertaken by the Central Statistical Agency • DHS, WMS, HCES, Census etc.	Explains the levels at which data are disaggregated	Identifies targets where known, issues, areas for further discussion to reach agreement, further indicator development etc.

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
Water supply: Proposed Core KPIs					
KPI1	Water supply access coverage as per service level standard for GTP1.	Percentage of population with access to improved (as per JMP definition) drinking water services. In rural areas, percentage of rural population with access to improved drinking water services as per GTP-1 service level standard (15 l/c/day within 1.5 km). In urban areas, percentage of population with access to improved drinking water services as per GTP-1 service level standard (20 l/c/day within 0.5 km).	Data will be sourced from the National WaSH Inventory and its updates, with population data provided by CSA (total population, number of households, population by gender, and population by age for each administrative area). *Rural water supply:* The number of people with access to an improved source is estimated using standard norms per source type, and WASHCOs can provide additional data on the known number of user households within 1.5 km using the source. Where the actual number of users fetching water within 1.5 km distance is less than the maximum number of users set for each type of improved water supply scheme as per the GTP-1 standard service level, the actual number of users is used. Where the actual number of users fetching water within 1.5 km distance is more than the maximum number of users set for each type of improved water supply schemes as per the GTP-1 standard service level, only the maximum number of users assigned to each type of water supply scheme is used. In case of piped schemes (from boreholes or springs), the maximum number of users that could access the scheme as per GTP-1 standard service level is estimated based on the actual water source yield, daily working hour of the scheme and the per-capita daily demand, i.e. 15 l/c/day. The number of users at scheme level is aggregated at Kebele, Woreda, Zone, Region and National Levels to estimate the water supply access coverage. *Urban water supply:* The maximum number of urban population that can be served by a scheme is estimated based	Rural, urban, total; town, kebele, woreda, zone, region, national; Source/system type; implementation modality (WMP, CMP, SS, NGO)	Supersedes OWNP KPI No. 1. This indicator is developed to track GTP2 goal 1.1 that all citizens have (minimum) access to safe and sustainable drinking water. Safety and sustainability of the water supply are not directly measured. Safe water is assumed to be provided by improved water sources. Whether improved sources provide safe water can be tracked through surveys such as RADWQ and the National Drinking Water Quality Monitoring and Surveillance System) and research studies. Results are strongly affected by the assumed numbers of users per source type so the accuracy of these norms needs to be continually assessed. The accuracy of the standard norms needs to be assessed as many report a lack of confidence in validity. Results can be triangulated with the use of improved sources from household survey data sources.

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
			on the daily water abstraction potential of the scheme, estimated losses (Unaccounted for Water) and the average per-capita demand service level as per GTP-1 standard, i.e. 20 l/c/day.		Access coverage may not be strongly related to use.
			Where the actual number of users fetching water within 0.5 km distance, as reported by utilities, is less than the maximum number of users estimated above, the actual numbers of users are used in the coverage calculation.		Quantity is also assumed and there are concerns that actual use may be much lower.
			Where the actual number of users reported to be fetching water within 0.5 km distance is more than the maximum number of users estimated as discussed above, only the estimated maximum number of users is included in the coverage calculation.		Woredas don't always accept CSA population figures. Projected figures may especially be inaccurate where villagisation takes place.
			Population data: The number of rural and urban population accessing water supply as discussed above are aggregated at each level (Kebele, Woreda, Zone, Region and National) to get total (rural + urban) water supply access coverage at each level.		Household survey data provide additional possibilities to disaggregate across wealth groups and other factors.
			The population which serves as denominator in the formula for estimating the coverage at each level is adopted from CSA data and its projection for the given year.		Results are affected by double-counting where families use multiple sources.
					Further work is required to specify how Self-supply will be monitored as part of this indicator. This requires agreement on the definition of the standard of Self-supply facilities to count as improved.
KPI2	Water supply access coverage as per service level standard for GTP2.	Percentage of population with access to improved (as per JMP definition) drinking water services. In rural areas, percentage of rural population with access to improved drinking water services as per GTP-2 service level standard (25 l/c/day within 1.0	Calculated in same way as above, with additional data provided by WASHCOs and utilities through NWI and updates on numbers of users within specified distance. Service level standard and number of maximum users is set as per GTP2 standards.	Rural, urban, total; town, kebele, woreda, zone, region, national; Source/system type implementation modality (WMP, CMP, SS, NGO);	This indicator is developed to track the provision of improved service to rural and urban populations under GTPII goals 1.2 and 1.3. The target in rural areas is 85% and in urban areas 75% of the population. In practice, the actual use of current water supplies is reported

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
		km). In urban areas, percentage of population with access to improved drinking water services as per GTP-2service level standard (100,80, 60, and 50 l/c/day for category 1,2,3 and 4 respectively on premises, and 40 l/c/day within 250 m for category 5 towns .			well below norms in many research studies, and such studies may be promoted and data collated and assessment made through systematic review to better track this quantity component. Household survey data can be compared to provide additional data on use of improved services (where 30 minutes is typically the target time for round trip water collection) although these will not provide data on quantity. Time-distance approximations will need to be made to compare these data sources.
KPI3	Rural water supply access coverage with piped system as per service level standard for GTP2	Percentage of rural population with access to piped water supplies as per GTP2 service level standard (25 l/c/day within 1.0 km distance)	Data will be sourced from the National WaSH Inventory and its ongoing updates for new systems. The number of users within 1 km of a supply can be estimated by WASHCOs or Rural Piped Systems' Management Board records. if the actual water yield of the sources is known, the maximum number of users that could access the scheme as per GTP-2 standard service level is estimated based on the actual water source yield, daily working hour of the scheme and the per-capita daily demand, i.e. 25 l/c/day.	Rural; town, kebele, woreda, zone, region, national; Source/system type; implementation modality	GTPII target (1.2) is 20% of rural population will be [provided with water supply with minimum service level through rural piped schemes.
KPI4	Urban water supply utilities providing reliable water supplies	Percentage of urban water schemes providing uninterrupted water supply at premises for at least 16 hours per day for all customers. Definition excludes delivery through public taps.	The data sources are regular (quarterly reports) by urban water supply utilities' based on operation records and checked with regulatory agency or water sector offices (region, zone and woreda) and independent survey reports.	Only applies to urban/ piped water supply schemes	Supports GTP2 goal 3.2: "Improve the urban water supply continuity to 16 hours per day excluding water supply delivery through public taps." Supersedes OWNP KPI 2: "Percentage of TWU supplying water for more than 6 hours a day for all costumers"

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
					The definition requires further work to specify how to detail with rotation of supply within urban areas.
KPI5	Rural water supply schemes' non-functionality rate	Percentage of improved rural water supply schemes that are not functional at the time of survey (excluding schemes that have been permanently abandoned)	Quarterly report by woredas based upon reports by Kebele Water Extension Workers (WEWs) or Kebele WaSH Teams (KWTs) as well periodical NWI.	Only applies to rural water schemes; Source/ system type; kebele, woreda, zone, region, national; implementation modality (WMP, CMP, SS, NGO)	GTPII target (goal 2.1) for non-functionality is 7%

Supersedes OWNP KPI No.2 (rural)

Definition requires further specification and work on this key KPI. This could include a specific workshop on this indicator.

Further data on time to repair non-functioning water supply schemes may be desirable and could also be collected in quarterly reports. |
| KPI6 | Equity: deviation from average in access to improved water supplies | Deviation in area (kebele, woreda or region) access to water services relative to average. | This is a derived indicator based upon other KPIs to highlight the areas where access is low or high (deviating more than 10%) compared to the national average. | Kebele, woreda, region | Supersedes OWNP KPI No.10. This indicator needs to be tested and improved as required. |
| KPI7 | Urban water supply utilities' with Non-Revenue Water (NRW) less than or equal to 20% | Percentage of urban water supply utilities with NRW less than or equal to 20%. | The data sources are regular (quarterly reports) by urban water supply utilities' based on operation records and checked with regulatory agency or water sector offices (region, zone and woreda) and independent survey reports.

NRW coverage is estimated based on the total water production and the total billed (collected and not collected) water consumption for a defined period of time, e.g. month, annual, etc. | Only applies to urban; town | Provision included as part of OWNP KPI No.2. GTP2 target is to reduce from 39 to 20% by 2020 (goal 3.1).

Percentage of non-revenue water by town would be a more specific indicator that may provide more actionable data.

To consider calibrating this indicator by utility service area size due to range of populations covered. |

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
Water supply: Supplementary indicators					
Rural water supply/ water quality					
S1	Percentage of rural water supply schemes with regular disinfection and water quality monitoring	Percentage of rural water supply schemes disinfecting water supplies and taking water quality test at least once in 3 months.	Quarterly woreda report based on status report from Kebele Water Extension Workers (WEWs) or Kebele WaSH Teams (KWTs), and periodical NWI	Only rural; kebele, woreda, zone, region, national; source type	Need to define water quality test parameters. Improved indicator would report test results. Additional data will be collected through the National Drinking Water Quality Monitoring and Surveillance Strategy (which includes plans to establish a water quality monitoring and surveillance database). RADWQ provides an existing and complementary data source. Includes proportion of water sources where (source) water quality tests meet water quality standards.
S2	Percentage of rural water supply schemes with a water safety plan under implementation	Percentage of rural water supply schemes with a written water safety plan document that specifies mitigation measures to protect drinking water quality, and which is implemented.	Quarterly woreda report based on status report from Kebele Water Extension Workers (WEWs) or Kebele WaSH Teams (KWTs) and periodical NWI.	Only rural; kebele, woreda, zone, region, national; source type	GTPII target is 100% (2.6 and 3.4) Criteria by which it will be determined whether the safety plan is implemented to be agreed and specified
S3	Percentage of rural water supply schemes with source and catchment protection	Percentage of rural water supply schemes with source and catchment protection measures implemented.	Quarterly woreda report based on status report from Kebele Water Extension Workers (WEWs) or Kebele WaSH Teams (KWTs) and periodical NWI.	Only rural; kebele, woreda, zone, region, national; source type	Requires detailed guidance to generate useful actionable data. Should be linked to implementation of climate resilience strategies.
Rural water supply/ management					
S4	Rural water supply	Percentage of rural water supply	Quarterly woreda report based on status report from Kebele	Only rural; kebele,	OWNP KPI 8: "Proportion of

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
	schemes with functional/active management institution	schemes with a functional/active WASHCO (as per management guideline) or rural water supply water board.	Water Extension Workers (WEWs) or Kebele WaSH Teams (KWTs) and periodical NWI.	woreda, zone, region, national; source type	active WASHCOs and Water Boards". Need to define "active" e.g. could be defined as one that meets at least quarterly. Could include minimum number of WaSHCO members. Could specify minutes to be signed by participants.
S5	Percentage of rural water supply schemes with WaSHCOs/ Rural water supply water boards that are legally registered.	Percentage of WASHCOs/ Rural water supply water boards that are legally registered with the relevant authorities in line with the proclamation and guidelines.	Quarterly woreda report based on status report from Kebele Water Extension Workers (WEWs) or Kebele WaSH Teams (KWTs) and periodical NWI or central records.	Only rural; kebele, woreda, zone, region, national; source type	GTPII target is 100% (goal 2.2)
S6	Percentage of rural water supply schemes with WaSHCOs/ Rural water supply water boards with adequate representation of women.	Percentage of WaSHCOs/ Rural water supply water boards with at least 50% committee positions filled by women.	Quarterly woreda report based on status report from Kebele Water Extension Workers (WEWs) or Kebele WaSH Teams (KWTs) and periodical NWI or central records.	Only rural; kebele, woreda, zone, region, national; source type	Relates to GTP2 goal 2.3
S7	Percentage of rural water supply schemes with WaSHCOs/ Rural water supply water boards with women at decision-making positions	Percentage of rural water supply schemes with WaSHCOs/ Rural Water Supply Water Boards with women as chair or vice-chair person.	Quarterly woreda report based on status report from Kebele Water Extension Workers (WEWs) or Kebele WaSH Teams (KWTs) and periodical NWI or central records at regional levels.	Only rural; kebele, woreda, zone, region, national; source type	Based on OWNP KPI 9.
S8	Percentage of WASHCOs with revenues sufficient to cover O&M costs	Percentage of WASHCOs with fee collection systems in place and evidence of revenues in bank or at hand sufficient to cover O&M costs.	Quarterly woreda report based on status report from Kebele Water Extension Workers (WEWs) or Kebele WaSH Teams (KWTs) and periodical NWI or central records at regional levels.	Only rural; kebele, woreda, zone, region, national; source type	Replaces OWNP KPI 12 "Percentage of WASHCOs covering O&M costs, percentage of water utilities covering O&M and replacement costs". To define sufficient further and test. A simpler indicator may be 'money in WASHCO's account

ANNEX 3: PROPOSED OWNP M&E INDICATORS / ONEWASH INCEPTION REPORT VOL.1 (TASKS 1 AND 3)

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
					(or in cashiers hand)
Urban water supply/ water quality					
S9	Percentage of Urban water supply utilities with regular disinfection and water quality monitoring	Percentage of Urban water supply utilities disinfecting water supplies and taking water quality tests in line with Ethiopian water quality standard.	Quarterly report from urban water supply utilities and periodical NWI.	Only urban; town, woreda, zone, region, national; source type	Need to define water quality test parameters. Improved indicator would report test results. Additional data will be collected through the National Drinking Water Quality Monitoring and Surveillance Strategy (which includes plans to establish a water quality monitoring and surveillance database). RADWQ provides an existing and complementary data source. Includes proportion of water sources where (source) water quality tests meet water quality standards. Regular to be defined.
S10	Percentage of urban water supply utilities with a water safety plan under implementation	Percentage of urban water supply utilities with a written water safety plan document that specifies mitigation measures to protect drinking water quality, and which are implemented.	Quarterly report from urban water supply utilities and periodical NWI.	Only urban; town, woreda, zone, region, national; source type	GTPII target is 100% (2.6 and 3.4). Criteria by which it will be determined whether the safety plan is implemented to be agreed and specified
S11	Percentage of urban water supply utilities with source and catchment protection	Percentage of urban water supply utilities with source and catchment protection measures implemented.	Quarterly report from urban water supply utilities and periodical NWI.	Only urban; town, woreda, zone, region, national; source type	Requires detailed guidance to generate useful actionable data. Should be linked to implementation of climate resilience strategies.
Urban water supply/ management					

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
S12	Percentage of urban water supply utilities that meet revenue targets to cover O&M costs and (depending on town category) part of the investment costs.	Percentage of urban water supply utilities where revenues exceed O&M costs in all towns, and in addition at least 30, 60 and 80% of investment costs in class 5, 4 and 1/2/3 towns respectively.	Quarterly report from urban water supply utilities, periodical NWI and independent survey reports.	Only urban; town, woreda, zone, region, national	Ultimately a regulatory agency may provide this data. This is a combination of OWNP KPI 12 "Percentage of WASHCOs covering O&M costs, percentage of water utilities covering O&M and replacement costs" and GTP goal 3.3 ("Enable category 1, 2, and 3 towns recover their investment cost at least by 80%, category 4 by 60%, category 5 by 30% and O&M cost by 100% for all town categories through their water tariff.) It may be easier to use revenue / expected O&M costs ratios to define whether or not revenues are sufficient to cover the O&M and where needed, the investment costs. This would require more work on this indicator and its definition.
S13	Percentage of urban water supply utilities using services of private sector in operation and maintenance.	Percentage of urban water supply utilities using services of private sector for at least one activity in operation and maintenance.	Quarterly report from urban water supply utilities, periodical INWI and independent survey reports.	Only urban; town, woreda, zone, region, national	GTPII goal 4.4: Increase the involvement of the private sector in the water supply activities particularly in O&M of urban water supply utilities. This goal is not very specific. An improved indicator may be the percentage of annual budget that is outsourced to private sector services providers. Requires testing and further development. To consider calibrating this indicator by utility service area

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
					size due to range of populations covered.' Sometimes, O&M can be made jointly by private sector and utility. Definition needs development.
S14	Percentage of urban water supply utilities with active customers' forum	Percentage of urban water supply utilities with established customers' forum and regular consultation meetings	Quarterly report from urban water supply utilities, periodical INWI and independent survey reports.	Only urban; town, woreda, zone, region, national	Need to define regular and active. Definition should mention which meetings should be counted or considered e.g. meetings held with quorum and with signed minutes.
S15	Percentage of urban water supply utilities with business plan under implementation	Percentage of urban water supply utilities with written business plan document being implemented	Quarterly report from urban water supply utilities, periodical INWI and independent survey reports.	Only urban; town, woreda, zone, region, national	
S16	Percentage of urban water supply utilities with performance agreement	Percentage of urban water supply utilities with performance agreement with the management board	Quarterly report from urban water supply utilities, periodical INWI and independent survey reports.	Only urban; town, woreda, zone, region, national	
S17	Percentage of urban water supply utilities with institutionalized urban wastewater management arrangements	Percentage of urban water supply utilities (category 1 to 4 cities and towns) with urban wastewater management institutionalized in the organizational set-up and with appropriate staffing.	Quarterly report from urban water supply utilities, periodical INWI and independent survey reports.	Only urban; town, woreda, zone, region, national	Linked to GTPII goal 4.3. To consider calibrating this indicator by utility service area size due to range of populations covered.
S18	Percentage of urban water supply utilities with urban wastewater management study and design	Percentage of urban water supply utilities (category 1 to 3) with urban wastewater management study and design documents completed and available for implementation.	Quarterly report from urban water supply utilities, periodical INWI and independent survey reports.	Only urban; town, woreda, zone, region, national	GTPII goal 1.4 with target to study and design urban wastewater management systems in 36 category 1,2,and 3 towns/cities

ANNEX 3: PROPOSED OWNP M&E INDICATORS / ONEWASH INCEPTION REPORT VOL.1 (TASKS 1 AND 3)

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
S19	Number of urban water supply utilities with conventional wastewater management systems	Percentage of urban water supply utilities (with population more than 200,000 people) with urban wastewater management facilities implemented.	Quarterly report from urban water supply utilities, periodical INWI and independent survey reports.	Only urban settlements over 200,000 population; Town	GTPII goal 1.4 ….to build wastewater management infrastructure for 6 towns/cities with population of 200,000 or over. An improved indicator may be Percentage of population covered by conventional (sewer) wastewater management systems that provide for collection and treatment of wastewater
Other					
S20	Percentage of water schemes with sustainability check completed	Percentage of water schemes with a completed and reported sustainability check which tracks relevant indicators to sustainability.	Proposed additional indicator to quarterly reports. Currently ad-hoc studies are available.	Rural, urban; kebele, woreda, zone, region, national; source type	Guidelines are required to standardise sustainability check indicators and data collection and reporting processes. To be further developed as operation and maintenance guidelines are finalised.
S21	Percentage of rural kebeles with water supply staffing	Percentage of rural kebeles with Kebele Water Extension Workers (KWEWs) in post to support WASHCOs and self-supply	Quarterly report from woreda water sector offices	Kebele, woreda, region, national	Relates to GTP2 goal 2.5
S22	Number of regions with established O&M support system	Number of regions with active post-construction support units providing O&M support services to rural WASHCOs	Quarterly report from regional water bureaux.	Woreda, region	Links to target in GTP2. Requires further discussion and definition.
S23	Number of outlets providing water supply technologies and spare	Number of outlets providing (specified) water supply technologies and spare parts	Quarterly report from woreda, zone and regional water sector offices	Woreda, Region	GTP2 goal 2.4. Requires further discussion and elaboration to define.

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
	parts				
S24	Number of manufacturers engaged in production of goods and equipment for sector	Number of manufacturers engaged in production of goods and equipment for sector	To be investigated with Ministry of Industry and Investment Agency.		`Needs further development to establish categories of products and services.
S25	No of people trained	Number of people trained at all levels including federal, regional, zonal, woreda, and community levels.	Requires reporting mechanisms to be established. Data sources to include Federal/regional/zonal/woreda/Kebele water sector offices, Ministry of Education, and governmental and private universities and colleges and other higher education institutions or training centres.	Professional category/level; men/women; Subject category/ package; national, regional, zonal, woreda, kebele, community	GTP2 goal 4.1: Train and engage into the sub-sector 4,374 higher and 13,000 medium level professionals and 510,000 artisans and caretakers and ensure that involvement of women in this regard is 25% and more. Consider improvement to measure by percentage of staff.
S26	No of institutions offering WaSH related training	No of institutions offering WaSH related training	Survey of TVETs/HSCs	Institutional type; Region	Indicator may be improved to capture number and type of courses offered, number of graduates etc.
S27	No of internship students affiliated to water sector institutions	No of internship students affiliated to water sector institutions	Quarterly report from woreda, zone and regional water sector offices	Region; men/women	
S28	No of research studies undertaken	No of research studies undertaken	MoWIE Research & Development Directorate.		Indicator requires further development. Could be strengthened by including research use.
S29	Water supply sector ICT-based management information system in use	Water supply sector ICT-based management information system in established, integrated with other WaSH sector MISs and functional	OWNP reports.	National, regional	

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
S30	Number of regions with regional WaSH coordination structures in place	Number of regions with regional WaSH coordination office established and operational	Quarterly report by region.	Region	
S31	Percentage of woredas with woreda WaSH teams in place	Percentage of woredas with woreda WaSH teams established and operational	Quarterly report by woreda.	Region, woreda	Established and operational require further definition. May include signed minutes.
S32	Percentage of towns with town WaSH teams in place	Percentage of towns with town WaSH teams established and operational	Quarterly report by urban water supply utilities.	Region, town	Established and operational require further definition. May include signed minutes.
S33	Percentage of kebeles with kebele WaSH teams in place	Percentage of kebeles with kebele WaSH teams established and operational	Quarterly report by woreda.	Only rural; Region, woreda, kebele	Established and operational require further definition. May include signed minutes.
Capital projects physical implementation status					
S34	Number and percentage of rural water supply schemes constructed	Number and percentage of new rural water supply schemes completed against plan	Quarterly report by woreda.	Only rural; kebele, woreda, zone, region, national; source type; implementation modality (WMP, CMP, SS, NGO)	Need further development e.g. to specify completed by stages.
S35	Number and percentage of rural water supply schemes rehabilitated or expanded	Number and percentage of rehabilitated or expanded rural water supply schemes against plan	Quarterly report by woreda.	Only rural; kebele, woreda, zone, region, national; source type, implementation modality (WMP, CMP, SS, NGO)	Need further development e.g. to define rehabilitation and expansion and exclude minor maintenance.
S36	Number and percentage of urban water supply projects designed	Number and percentage of urban water supply projects designed compared to plan	Quarterly report by region.	Only urban; town;, region, national; type	Types of projects to be categorised. Needs further development e.g. designed may

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
					be unclear.
S37	Number and percentage of new urban water supply projects completed	Number and percentage of new urban water supply projects with construction completed compared to plan	Quarterly report by region.	Only urban; town;, region, national; type	Types of projects to be categorised.
S38	Number and Percentage of urban water supply rehabilitation projects completed	Number and percentage of urban water supply rehabilitation projects with construction completed compared to plan	Quarterly report by region.	Only urban; town;, region, national; type	Types of projects to be categorised.
S39	Number and Percentage of urban wastewater projects designed	Number and percentage of urban wastewater projects designed compared to plan	Quarterly report by region.	Only urban; town;, region, national; type	Types of projects to be categorised.
S40	Number and Percentage of wastewater projects completed	Number and percentage of wastewater projects with construction completed compared to plan	Quarterly report by region.	Only urban; town;, region, national; type	Types of projects to be categorised.
Capital projects financial implementation status					
S41	Percentage of budget utilised	Percentage of budget utilised compared to plan	Quarterly financial reports by woredas.	Woreda, zone, region, national; government, donors, NGOs, utilities, communities.	
S42	Percentage of budget utilised in foreign currency	Percentage of budget utilised compared to plan	Quarterly financial reports by woredas.	Woreda, zone, region, national	Allows percentage in local currency to be calculated.
S43	Capital investment cost	Capital investment cost per capita for new and rehabilitated water schemes	IBEX provides some information on expenditure but its utility is limited by the limited disaggregation e.g. between scheme types. Specific expenditure surveys and OWNP Impact evaluation studies to collect additional information.	Urban, rural; Kebele, woreda, region; technology type; new/ rehabilitated; rural/urban	Links to OWNP KPI 11

ANNEX 3: PROPOSED OWNP M&E INDICATORS / ONEWASH INCEPTION REPORT VOL.1 (TASKS 1 AND 3)

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
Environment and Social					
S44	Percentage of schemes with completed environment and social screening process	Percentage of schemes with completed environment and social screening process as specified in the Environmental and Social Management Framework	Quarterly reports by woredas.	Initially: CWA-funded woredas	
S45	Percentage of schemes assigned to each environmental and social screening category	The categories are defined in Environmental and Social Management Framework (FDRE, 2013b) as: A: major adverse impacts, B1: potential adverse impacts requiring mitigation measures as specified in the Environmental and Social Management Framework, B2: further environmental and social impact assessment (ESIA) required and a specific Environmental and Social Management Plan, C: no significant issues	Quarterly reports by woredas.	Initially: CWA-funded woredas	
S46	Percentage of B1 schemes with public consultation completed and reported	Percentage of B1 schemes with public consultation completed and reported	Quarterly reports by woredas.	Initially: CWA-funded woredas	
S47	Percentage of B2 schemes with completed ESIA and ESMP and public consultation completed and reported	Percentage of B2 schemes with completed ESIA and ESMP and public consultation completed and reported	Quarterly reports by woredas.	Initially: CWA-funded woredas	
Resettlement					

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
S48	Percentage of schemes involving resettlement of people	Percentage of schemes involving resettlement of people	Quarterly reports by woredas.	Initially: CWA-funded woredas	
S49	Percentage of households and individuals relocated as a result of water and/or sanitation scheme activities	Percentage of households and individuals relocated as a result of water and/or sanitation scheme activities	Quarterly reports by woredas.	Initially: CWA-funded woredas	
S50	Percentage of schemes where compensation is paid relating to development of water and/or sanitation schemes	Percentage of schemes where compensation is paid relating to development of water and/or sanitation schemes	Quarterly reports by woredas.	Initially: CWA-funded woredas	
S51	Average amount of compensation paid relating to development of water and/or sanitation schemes	Average amount of compensation paid (per capita) relating to development of water and/or sanitation schemes	Quarterly reports by woredas.	Initially: CWA-funded woredas	
S52	Time taken to make compensation payments (defined as time between date when displacement occurred and date when compensation was actually delivered)	Average time taken to make compensation payments (defined as time between date when displacement occurred and date when compensation was actually delivered)	Quarterly reports by woredas.	Initially: CWA-funded woredas	
S53	Number of grievances registered	Number of grievances registered per 1000 people resettled	Quarterly reports by woredas.	Initially: CWA-funded woredas	
Water supply: other standard indicators					
	To be elaborated as required				

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
Institutional WaSH: Proposed KPIs					
KPI8	Percentage of schools with access to safe drinking water	Percentage of schools with access to safe drinking water (with appropriate tap/student ratio).	Data collected through the EMIS (annual questionnaire) includes the schools with water facilities by school type (including type of facility) and the numbers of enrolled students. NWI indicator (form 3) related to presence/absence of water supply only to be updated.	Urban, rural; Kebele, Woreda, Zone; Region; primary/ secondary	Inconsistency between OWNP document and POM: OWNP KPI No.6.: tap / student ratio = 1/100; POM: tap / student ration = 1/50. Further discussion is needed on appropriate tap/student ratio. Further discussion needed on provision for other public places e.g. prisons, market places, bus stops and other public institutions. The proposed Sustainable Development Goals (SDGs) are expressed in terms of people, e.g., "% of pupils enrolled in schools with basic water services". This and other indicators could be revised to put people at centre of service delivery. The new institutional WaSH manual from UNICEF will also be reviewed to ensure consistency with indicators.
KPI9	Percentage of schools with separate latrines for boys and girls.	Percentage of schools with separate latrines for boys and girls with appropriate stance/student ratio. Improved sanitation facilities: Connection to a public sewer; Connection to a septic system; Pour-flush latrine; pit latrine with	Data collected through the EMIS (annual questionnaire) includes the schools with latrines by school type (specifying the number of pits for girls, boys or combined) and the numbers of enrolled students. NWI and EMIS give information on separation boys/girls (yes/ no) but not disaggregated stance figures	Urban, rural; Kebele, Woreda, Zone; Region; primary/ secondary	Inconsistency in definition of "adequate sanitation facilities" between OWNP document and POM: OWNP KPI No. 6: stance/40 females or 75 male students (as ESDPiV); POM: seat/student ratio: 1/50 Privacy, cleanliness and safety of

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
		slab (slab can be made of cement or wood/Bamboo/logs plastered with mud or cow dung and has hand washing facility); Ventilated improved pit latrine Unimproved sanitation facilities: Public or shared latrine; pit latrine wit out slab; Bucket latrine			the latrine facilities and the treatment of the human waste is not included in this indicator. This could be included into the definition of adequate sanitation. Adequate being "private, safe, clean facilities with appropriate treatment of human waste")
KPI10	Percentage of health facilities with improved water supply	Percentage of health facilities with improved water supply	HMIS indicator CB1.3 provides data on 'Health institutions with functional infrastructure' which combines electricity, water supply and sanitation facilities. NWI included presence/absence only	Urban, rural; Kebele, Woreda, Zone; Region; institution type	OWNP KPI No.7
KPI11	Percentage of health facilities with sanitation facilities	Percentage of health facilities with functional sanitation facilities. Functional sanitation facilities are defined as placenta pit, incinerator, drainage, and latrine.	HMIS indicator CB1.3 provides data on 'Health institutions with functional infrastructure' which combines electricity, water supply and sanitation facilities.	Urban, rural; Kebele, Woreda, Zone; Region; institution type	OWNP KPI No.7. refers to improved human excreta removal" Improved sanitation facilities: Connection to a public sewer; Connection to a septic system; Pour-flush latrine; pit latrine with slab (slab can be made of cement or wood/Bamboo/logo plastered with mud or cow dung and has hand washing facility); Ventilated improved pit latrine Unimproved sanitation facilities: Public or shared latrine; pit latrine wit out slab; Bucket
Institutional WaSH: Supplementary indicators					
S54	Percentage of schools with functional improved	Percentage of schools with functional improved water	Data collected through existing EMIS (annual) questionnaire	Urban, rural; Kebele, Woreda,	

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
	water supplies	supplies		Zone; Region; primary/ secondary	
S55	Percentage of schools with continuous water supplies	Percentage of schools with continuous water supplies	Data collected through existing EMIS (annual) questionnaire	Urban, rural; Kebele, Woreda, Zone; Region; primary/ secondary	
S56	Percentage of schools with water facilities accessible to disabled students	Percentage of schools with water facilities accessible to disabled students	Data collected through existing EMIS (annual) questionnaire	Urban, rural; Kebele, Woreda, Zone; Region; primary/ secondary	
S57	Percentage of schools with functional sanitation facilities	Percentage of schools with functional sanitation facilities. Functional means the toilets are not broken and can be used by children. Not functional means that the toilet is broken, full, or damaged in such a way that it cannot be used.	Data collected through existing EMIS (annual) questionnaire	Urban, rural; Kebele, Woreda, Zone; Region; primary/ secondary	
S58	Percentage of schools where pit latrines are regularly and safely emptied	Percentage of schools where pit latrines are regularly and safely emptied	Data collected through existing EMIS (annual) questionnaire	Urban, rural; Kebele, Woreda, Zone; Region; primary/ secondary	
S59	Percentage of schools with sanitation facilities accessible to disabled students	Percentage of schools with sanitation facilities accessible to disabled students	Data collected through existing EMIS (annual) questionnaire	Urban, rural; Kebele, Woreda, Zone; Region; primary/ secondary	
S60	Percentage of schools with handwashing facilities	Percentage of schools with handwashing facilities	Data collected through existing EMIS (annual) questionnaire	Urban, rural; Kebele, Woreda, Zone; Region; primary/ secondary	
S61	Percentage of schools with functional	Percentage of schools with	Data collected through existing EMIS (annual) questionnaire	Urban, rural; Kebele, Woreda,	

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
	handwashing facilities	functional handwashing facilities		Zone; Region; primary/ secondary	
S62	Percentage of schools with handwashing facilities accessible to disabled students	Percentage of schools with handwashing facilities accessible to disabled students	Data collected through existing EMIS (annual) questionnaire	Urban, rural; Kebele, Woreda, Zone; Region; primary/ secondary	
S63	Percentage of schools with health clubs	Percentage of schools with health clubs	To be checked.	Urban, rural; Kebele, Woreda, Zone; Region; primary/ secondary	
Institutional WaSH: Other standard indicators					
	To be elaborated as required				
Sanitation and hygiene: Proposed Core KPIs					
KPI12	Proportion of households' access to latrine facilities	Proportion of households' access to any type of latrine facilities. Access to a latrine must be accompanied by appropriate utilization and availability of hand washing facilities in use. Improved Latrine = Hand washing facility + slab + Ventilation pipe (superstructure) Unimproved = simple pit latrine without ventilation	The HMIS (C1.3.1) provides data that is derived from the routine visits to each household by Health Extension Workers (HEWs) that are reported quarterly. Data is also available from CSA implemented household surveys.	Improved latrine, unimproved latrine; Urban, rural; Kebele, Woreda, Zone; Region	This replaces OWNP KPI No 4 (access to improved human excreta removal). Further discussion needed on how to deal with shared and public latrines.
KPI13	Proportion of households using Latrines	Proportion of households that use latrine for defecation purpose properly.	HMIS C1.3.2. Proxy evidence of use is described as "faeces in pit, visible access, absence of spider webs, and absence of faeces	Urban, rural; Kebele, Woreda, Zone; Region	Data is not disaggregated between improved and unimproved latrines. Also need further discussion on shared and

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
			around household or pit latrine, and well maintained superstructure."		public latrines. This is the most difficult indicator in S&H. HEWs cannot afford to visit every household and there is concern about reliability of figures.
KPI14	Kebele declared 'Open Defecation Free'	Proportion of Kebeles declared open defecation free. Open defecation free (OF) indicates the entire community (households, schools, religious institutions, etc.) stopped the practice of open defecation and continue to maintain this status for at least three months showing almost no indication of reverting to this practice. For this purpose, the rigorous verification and certification procedures are followed before Kebeles are declared ODF.	HMIS C1.3.3. Village coordination committee requests Kebele for verification of ODF status, proper practice of handwashing and household water handling at their respective villages. Similarly, Kebele CLTS Coordination Committee request Woredas for verification of ODF status, proper practice of hand washing and household water handling at home in their respective Kebele (HH and institution)	Urban, rural; Kebele, Woreda, Zone; Region	Jones (2015) noted lack of direct reference to CLTS-H Verification and Certification Protocol (2012). ODF has a number of problems. - The implementer and verifier is the government - The verification process is shallow - There may not be adequate latrines in market places, faith institutions (churches, mosques) and meeting places, etc. Could add other 'lower level indicators' capturing the ODF situation of these places and institutions (schools and health). ODF slippage needs to be tracked.
Sanitation and hygiene: Supplementary indicators					
S64	Percentage of communities with active Hygiene and Sanitation Community Groups	Active Hygiene and sanitation Community Group = Group that meets at least once a quarter.	Proposed indicator.	Urban, rural; Kebele, Woreda, Zone; Region	OWNP KPI 8. Gender balance could be a further consideration.
S65	Percentage of households practising household water treatment and safe	Household water treatment = chlorination, filtration, solar disinfestation, boiling.	HEH programme monitoring (proposed indicator)	Urban, rural; Kebele, Woreda, Zone; Region	

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
	storage	Safe storage = water stored in plastic, clay or metal pot with narrow mouth (< 10 cm), have a lid or secured cover and a tap (spigot).			
S66	Percentage of households with access to handwashing facilities	Access to handwashing facilities: presence of handwashing station within 3 metres of the latrine. With soap or substitute.	HEH programme monitoring (proposed indicator)	Urban, rural; Kebele, Woreda, Zone; Region	Supersedes OWNP KPI 5
S67	Percentage of households practising handwashing	Handwashing with soap or substitutes at 5 critical times: after latrine use, after cleaning child bottom, before preparing food, before feeding/breastfeeding.	HEH programme monitoring (proposed indicator)	Urban, rural; Kebele, Woreda, Zone; Region	Consider adding before collecting water. Indicated may be better suited to sampled household surveys rather than regular reporting.
S68	Number of active sanitation marketing enterprises	Number of active sanitation marketing enterprises	Not currently collected.	Kebele, woreda, regional	Requires further development e.g. definition of active.
S69	Percentage of public latrines, which provide adequate sanitation services	Adequate sanitation services provided by public latrines: Private, clean and safe facilities and handwashing facilities with soap or substitute within 3 metres.	Proposed additional indicator (requiring data from Municipal sanitation department)	Town, Region	Requires discussion.
S70	Percentage of public latrines which take into consideration the preferences of girls, women and people with a disability	public latrines which take into consideration the preferences of girls, women and people with a disability = separation of facilities for men and women, presence of menstrual hygiene materials disposal facilities; accessible to and usable by people with a disability	Proposed additional indicator (requiring data from Municipal sanitation department)	Town, Region	In line with POM indicator (p111)

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
S71	Number and percentage of towns with adequate desludging systems in place	Adequate desludging systems: systems are in place for safe collection, transport, treatment and disposal of human waste.	Proposed additional indicator (requiring data from Municipal sanitation department)	Town, Region	Requires discussion.
S72	Capital investment costs	Capital investment cost per capita of urban and rural sanitation	Will require specific additional survey.	Kebele, woreda, region; technology type; rural/urban	
Fiduciary risks: Supplementary indicators					
S73	Proportion of WaSH investments managed and reported through IBEX	Volume of WaSH investments managed and reported through IBEX divided by total annual WASH investment amount			
S74	Proportion of WASH implementation agencies with financial reports submitted on time	Proportion of WASH implementation agencies with financial reports submitted on time			
S75	Proportion of WaSH implementation agencies with institutions with annual audits completed	Proportion of WaSH implementation agencies with institutions with annual audits completed			To differentiate between program implementers and service providers (utilities).
S76	Proportion of WaSH institutions (utilities and WASHCOs) with up to date asset registers/ inventories	Proportion of WaSH institutions (utilities and WASHCOs) with up to date asset registers/ inventories (at least yearly).			
S77	Proportion of utilities making timely loan repayments	Proportion of utilities making timely loan repayments			Definition requires improvement.
Impact-level indicators					
I1	Mortality rate amongst	Under-5 child mortality divided by	OWNP Impact evaluation surveys	Rural, urban; wealth	OWNP KPI 13

No	Indicator	Definition	Data sources and measurability	Dis-aggregation	Discussion
	under-5 children	the number of under- 5 children in the kebele (woreda, region and national)		groups; gender	
I2	Diarrheal disease incidence amongst under-5 children	Number of under-5 children with diarrheal diseases in the 2 weeks prior to survey divided by the total number of under- 5 children in (kebele, woreda, region and national)	OWNP Impact evaluation surveys	Rural, urban; wealth groups; gender	OWNP KPI 14 In order to prevent recollection bias, it is suggested that the focus will be on occurrence of diarrheal diseases in the 2 weeks prior to survey
I3	Average time for water collection.	Average time taken for water collection	OWNP Impact evaluation surveys	Rural, urban; wealth groups; gender	OWNP KPI 15
I4	Female school enrolment in school	Female school enrolment in school facilities	OWNP Impact evaluation surveys	Rural, urban; wealth groups; gender	OWNP KPI 16
I5	Dropout rate among female students	Dropout rates among female students.	OWNP Impact evaluation surveys	Rural, urban; wealth groups; gender	OWNP KPI 17

The following indicators are illustrative of the kind of indicators that could be developed to support monitoring of the OWNP enabling environment and national level. There are currently no indicators at this level apart from suggested A31.

No	Indicator	Definition	Data sources and measurability	Disaggregation	Discussion
OWNP enabling environment: Additional indicators					
S78	Presence of independent water supply and wastewater service regulatory agency	This could be measured using progress markers, e.g. 0=no regulatory agency 1=studies done 2= set-up of regulatory agency under	MoWIE reports		GTP2 goal 4.2

		development			
		3= regulatory agency officially established			
		4= regulatory agency is partially operational.			
		5= regulatory agency is fully operational and ensures high service quality			
S79	Coordination between OWNP Ministries at National level	This could be measured using progress markers	OWNP reports		
S80	Coordination with Ministry of Urban Development and Construction and its affiliates at national level	This could be measured using progress markers	OWNP reports		GTP2 goal 4.5

Annex 4: Work Plan

Key to abbreviations used in work plan

Sub-plans:

- Op. = Operationalisation
- CB = Capacity Building
- DDU = Data Dissemination and Use
- PROC = Procurement
- NWI = National WaSH Inventory
- Syn. = Synergy
- Ex. = Exit
- Effort:
- Int. = International TA days
- Nat. = National TA days

Work-package 1. OWNP MIS systems enhancement

Outcome 1.1 Improved WaSH (sanitation and hygiene in household and extra-household settings including health institution WaSH) data collected through the health sector monitoring systems

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Effort Int.	Effort Nat.	Budget TA	Budget Expenses
1.1.1	Annually updated indicator frameworks and guidelines (WaSH component) for HEH program and HMIS	Updated list of WaSH health indicators with status and definitions (by Dec each year)	Op	1.1.1.1	Technical support to review and consult on standardisation of HEH program indicators	14	0	Other	Other
				1.1.1.2	Technical support to updating of HMIS indicators and definitions (including water component for HEWs) with alignment improved between targets, indicators, and definitions	9	0	Other	Other
	Outcome also depends on output 2.2.1 under capacity building		CB			0	0		
	Outcome also links to ouput 3.2.4 under dissemination and use		DDU			0	0		

Outcome 1.2 Improved school WASH data collected through the education sector monitoring systems

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Effort Int.	Effort Nat.	Budget TA	Budget Expenses
1.2.1	Annually updated indicator frameworks and guidelines (WaSH component) on monitoring school WaSH within EMIS	Updated list of WaSH education indicators with status and definitions (by Dec each year)	Op.	1.2.1.1	Technical support to review, consult and update on improvement of EMIS indicators and definitions	9	0	Other	Other
	Outcome also depends on output 2.2.2 under capacity building		CB			0	0		
	Outcome also links to output 3.2.5 under dissemination and use		DDU			0	0		

Outcome 1.3 Improved WaSH expenditure data collected through national systems (IBEX) and supporting studies

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Effort Int.	Effort Nat.	Budget TA	Budget Expenses
1.3.1	OWNP M&E implementation reports track developments in reporting of WaSH expenditure through the IBEX system	Annual report of total WaSH expenditure (by September each year)	Op.	1.3.1.1	Technical support to promote wider use of IBEX system for WaSH expenditure	2	12	Other	Other
1.3.2	Budget tracking and Value for Money studies regularly promoted, and uptake reported through OWNP M&E reports, website etc		Op.	1.3.2.1	Promotion of budget tracking and VFM studies through the development and sharing of standardised methodologies (e.g. methodologies to disaggregate water supply data by technology type etc), sharing examples of budget tracking and VFM studies and follow-up	4	45	Other	Other
1.3.3	Reported annual survey of total WaSH expenditure		Op.	1.3.3.1	Technical support to develop a standardised methodology to enable estimation of total WaSH expenditure (off-budget, multilateral, bilateral, NGO including emergency expenditure using standardised methodology)	2	35	Other	Other
				1.3.3.2	Technical support so annual survey undertaken, analysed and reported	3	60	Other	Other

Outcome 1. 4 IT-enabled Water MIS system used to facilitate effective processing (sharing, distributing, analysing, storing) and dissemination

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Effort Int.	Effort Nat.	Budget TA	Budget Expenses
1.4.1	Vendor procured and passed contract and regulation acceptance testing	Tender documents for alternate MIS software (December 2015)	PROC	1.4.1.1	Production of tender documentation and sign off by ministry	6	8	DFID M&E support	DFID M&E support
				1.4.1.2	Technical support to tender processes and contract and regulation acceptance testing for potential vendors	7	12	DFID M&E support	DFID M&E support
1.4.2	Vendor status log reviewed (fortnightly)		Op.	1.4.2.1	Manage vendor to customise and further develop and deliver MIS to include technical and functional design specifications	10	20	DFID M&E support	DFID CGF
1.4.3	Alpha acceptance report	Alpha acceptance report (February 2016)	Op.	1.4.3.1	Representative user feedback from federal, regional and woreda level acquired on basis of wireframes and/or prototype	5	20	DFID M&E support	DFID M&E support
1.4.4	Operational manuals developed for the OWNP MIS		Op.	1.4.4.1	Quality assure/review full operational and technical manuals prepared by vendor for different users levels	2	10	DFID M&E support	DFID M&E support
1.4.5	Beta acceptance report based on piloting OWNP MIS in selected regions (beta user testing)	Beta acceptance report (July 2016)	Op.	1.4.5.1	Full plan prepared for the MIS pilot in selected regions (beta user testing)	5	10	DFID M&E support	DFID M&E support
				1.4.5.2	Prepare and deliver training for pilot of MIS	10	15	DFID M&E support	DFID M&E support
				1.4.5.3	Coordinate the MIS pilot and feedback process in selected regions (beta user testing)	15	25	DFID M&E support	DFID M&E support
1.4.6	UAT and contract acceptance report for OWNP MIS ready for national roll-out	UAT and contract acceptance report (Oct 2016)	Op.	1.4.6.1	Refine MIS and documentation based on Beta Acceptance Report and piloting experiences	15	15	DFID M&E support	DFID M&E support
1.4.7	Plans for OWNP MIS software launch		Op.	1.4.7.1	Preparations for software launch	5	10	DFID M&E support	DFID M&E support
1.4.8	OWNP MIS is kept operational		Op.	1.4.8.1	Monitor vendor to ensure helpdesk support, regular bug fixing, upgrading, customisation according to contract	30	45	DFID M&E support	DFID M&E support

Outcome 1.5 Improved NWI water data collected at periodic intervals, and NWI2 completed

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Effort Int.	Effort Nat.	Budget TA	Budget Expenses
1.5.1	Effective national process in place to collect and process NWI data at periodic intervals, and support to NWI2 reported	Report reviewing implementation and lessons learned of NWI2 (October 2016)	NWI	1.5.1.1	Technical support to development NWI2 plan and mobilisation of funds	20	20	DFID M&E support	DFID M&E support
				1.5.1.2	NWI1 methodology revised and manuals & guidelines updated	10	15	DFID M&E support	DFID M&E support
				1.5.1.3	Technical support to detailed logistics planning and preparation	10	15	DFID M&E support	DFID M&E support
				1.5.1.4	Technical support to collection, processing and analysis	20	30	DFID M&E support	Other
				1.5.1.5	Review and lessons learned report drafted	5	10	DFID M&E support	DFID M&E support
1.5.2	Commercial Off-the-shelf (COTS) ICT solution for NWI mobile data collection procured and tested by end February 2016	Tender documents for mobile data collection software (December 2015)	NWI/ PROC	1.5.2.1	Production of tender documentation	5	5	DFID M&E support	DFID M&E support
				1.5.2.2	Support tender processes, roadshow, regulation testing and award contract to vendor	10	10	DFID M&E support	DFID M&E support
				1.5.2.3	Technical support to customisation of COTS solution by vendor	10	10	DFID M&E support	DFID CGF
				1.5.2.4	Review and approval of documentation for system	2	5	DFID M&E support	DFID M&E support
		Report on piloting of mobile data collection (February 2016)		1.5.2.5	Piloting and refining during 1st region where data collected before other regions start	8	15	DFID M&E support	DFID M&E support
	Outcome also depends on output 2.2.3 under capacity building		CB/ NWI			0	0		
	Outcome also links to outputs 3.5.1-3.5.5 under dissemination and use		DDU/ NWI			0	0		

Outcome 1.6 All regions reporting regularly on at least kebele level by end 2016 and on infrastucture level by end 2018

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Effort Int.	Effort Nat.	Budget TA	Budget Expenses
1.6.1	All regions have effective process in place to regularly (short intervals quarterly-annual) collect, process and disseminate data	Updated guidelines for reporting using WaSH M&E MIS (September 2016)	Op.	1.6.1.1	Technical support to develop policies and procedures for ongoing reporting using MIS	5	5	DFID M&E support	DFID M&E support
				1.6.1.2	Planning the roll out of MIS to all regions	10	10	DFID M&E support	DFID M&E support
				1.6.1.3	Roll out of MIS to all regions	35	65	DFID M&E support	Other
				1.6.1.4	Review to learn lessons	8	10	DFID M&E support	DFID M&E support

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Effort (days) Int.	Nat.	Budget TA	Budget Expenses
	Outcome also depends on output 2.2.4 under capacity building		CB			0	0		
Outcome 1.7 High level of confidence of sector stakeholders in the validity of WaSH data									
1.7.1	Section in OWNP annual report on the quality of WaSH data and with recommendations for improvements		DQA	1.7.1.1	Technical support to implement and upgrade existing data quality assurance mechanisms in each WaSH sector, assess data by triangulation with other data sources and undertake validation surveys where required	20	40	Other	Other
1.7.2	OWNP M&E implementation quarterly report includes section on implementation of meaures to address WaSH data quality issues		DQA	1.7.2.1	Technical support to identify and follow up recommendations for improvements to enhance data quality	13	15	DFID M&E support	DFID M&E support
Outcome 1.8 WASH M&E MIS on PUT platform upgraded									
1.8.1	Source code recommendations	Tender documents for modifcations to existing WaSH M&E MIS software (December 2015)	PROC	1.8.1.1	A\udit source code with PUT	2	4	DFID M&E support	Other
1.8.2	PUT contracted to upgrade existing WASH M&E MIS		PROC	1.8.2.1	Support tender process and contractual arrangements	2	4	DFID M&E support	Other
1.8.3	Vendor status log (fortnightly)		Op.	1.8.3.1	Manage PUT to customise and further develop and deliver PUT system to include technical and funcitonal design specifications	3	5	DFID M&E support	Other
1.8.4	Alpha acceptance report		Op.	1.8.4.1	Representative user feedback at federal, regional and woreda level acquired on basis of wireframes and/or prototype	3	5	DFID M&E support	Other
1.8.5	Manuals updated		Op.	1.8.5.1	Review full operational and technical manuals for different users levels	1	2	DFID M&E support	Other
1.8.6	Beta acceptance report		Op.	1.8.6.1	Prepare pilot in selected regions and deliver training. Coordinate feedback. Aligned with 1.4.5.	3	15	DFID M&E support	Other
1.8.7	UAT report	Report on further operationalisation recommendations linked to alternate MIS (September 2016)	Op.	1.8.7.1	Refine WaSH M&E MIS (PUT) documentation based on Beta Acceptance Report and piloting experiences	5	10	DFID M&E support	Other
1.8.8	Existing WASH M&E MIS is kept operational		Op.	1.8.8.1	Monitor vendor to ensure helpdesk support, regular bug fixing, upgrading, customisation according to contract	3	9	DFID M&E support	Other
Workpackage 2. Capacity development									
Outcome 2.1 Physical, organisational and human resources policies and procedures are in place across all sectors to implement OWNP M&E									
2.1.1	Benchmarks established and used to track the human, physical and financial resources required to implement the selected M&E system	Report on modifcations made to improve HR strategy and guidelines for each WaSH ministry (August 2016)	CB	2.1.1.1	Technical support to develop and use a simple benchmarking approach for OWNP M&E (with supporting guideline) to identify and track capacity gaps and assets	5	15	DFID M&E support	DFID M&E support
2.1.2	WaSH M&E focused Human Resources Development strategy developed for each sector (water, health, education and finance) and updated on an annual basis		CB	2.1.2.1	Technical support to strengthen HRD strategies for M&E staff in each sector including recruitment procedures and criteria, career paths, job descriptions, performance criteria and incentives, staff retention strategies, staff induction and handover procedures, and staff training guidelines	14	18	Other	Other
				2.1.2.2	Technical support to develop or update WaSH M&E components of HR manuals and guidelines	9	20	Other	Other
				2.1.2.3	Training for HRD officers and leadership to roll out	9	15	Other	Other
2.1.3	Sector plans include budgeted components to implement WaSH M&E HRD strategies		CB	2.1.3.1	Technical support to sectors and regions to develop a plan to put the processes, people and systems in place to implement enhanced WaSH M&E	9	19	DFID M&E support	DFID M&E support
2.1.4	Reports tracking progress in filling vacant M&E posts and procuring the necessary equipment, ICT, furniture and vehicles		CB/ PROC	2.1.4.1	Follow up support to promote filling vacant posts and to procure the necessary equipment, ICT, furniture and vehicles	2	17	DFID M&E support	Other
Outcome 2.2 Sector capacity with skills and knowledge to collect and process M&E data is in place									
2.2.1	Health sector processes, skills and knowledge strengthened in data gathering, reporting and verification in sanitation and hygiene		CB	2.2.1.1	Technical support to develop standardized national guidelines on HEH monitoring	10	10	Other	Other
				2.2.1.2	Technical support to disseminate guidelines with appropriate orientation, training and supervision	6	27	Other	Other
				2.2.1.3	Promote allocation of appropriate human and financial resources to support and implement HEH program monitoring activities	4	8	Other	Other
				2.2.1.4	Technical develop standard methodology for conducting hygiene and environmental health behaviour change studies	20	10	Other	Other
2.2.2	Education sector processes, skills and knowledge strengthened in data gathering, reporting and verification in sanitation and hygiene		CB	2.2.2.1	Technical support to develop/ update guidelines and materials to support monitoring WaSH in schools	5	10	Other	Other
				2.2.2.2	Technical support to disseminate guidelines with appropriate orientation, training and supervision	7	20	Other	Other
2.2.3	Water-sector staff and institutions which have the mandates, capacities and resources to collect, process and disseminate NWI data	Report on training of trainers for NWI (March 2016) and Report on training roll out for NWI (April 2016)	CB	2.2.3.1	Tracking of Permanent and temporary staff and institutions mobilised by MoWIE at national and regional levels	3	5	DFID M&E support	Other
				2.2.3.2	Manuals and guidelines made available to staff and institutions	2	5	DFID M&E support	DFID M&E support
				2.2.3.3	Training of trainers programme	10	10	DFID M&E support	Other
				2.2.3.4	Training roll out to all regions	5	20	DFID M&E support	Other
				2.2.3.5	Backstopping support in place for regions	5	15	DFID M&E support	DFID M&E support
2.2.4	Water-sector staff and institutions which have the mandates, capacities and resources to collect, process and disseminate regular data	Report on training of trainers for MIS (March 2016); Report on training roll out for MIS(April 2016); Report of stakeholder evaluation (Sep 2016)	CB	2.2.4.1	Roles and responsibilities agreed and specified in relevant procedures	2	5	DFID M&E support	DFID M&E support
				2.2.4.2	Technical support to MoWIE to mobilise resources	10	7	DFID M&E support	DFID M&E support
				2.2.4.3	Technical support to adaptation od job descriptions including the establishment of technical support staff for all MIS users and including user rights administration	2	5	DFID M&E support	Other
				2.2.4.4	Manuals and guidelines made available	2	4	DFID M&E support	DFID M&E support
				2.2.4.5	Training of trainers programme	5	10	DFID M&E support	Other
				2.2.4.6	Support to training roll out and repeat training (zonal, woreda, town, kebele)	15	50	DFID M&E support	Other
				2.2.4.7	Backstopping support in place	13	18	DFID M&E support	DFID M&E support
				2.2.4.8	Stakeholder evaluation of MIS performance in reporting	4	5	DFID M&E support	DFID M&E support

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Effort (days) Int.	Nat.	Budget TA	Budget Expenses

Outcome 2.3 Impact evaluations more widely used to inform WaSH planning and decision-making

No	Output	Key deliverables	Sub-plans	No	Activities	Int.	Nat.	Budget TA	Budget Expenses
2.3.1	NWCO are able to procure, manage and utilise impact evaluations.			2.3.1.1	Technical support to develop guidance materials for WaSH impact evaluations	5	4	Other	Other
				2.3.1.2	Orientation workshop and follow up to use guidelines	4	4	Other	Other

Outcome 2.4 Sector capacity to interpret, use and disseminate data and data products is in place

2.4.1	Capacities built to analyse, interpret and use WASH data in operational response	Training completion reports (for each training workshop)	CB	2.4.1.1	Training of WWTs in using the data from the Management Information Systems for operational responses in the woreda	5	20	DFID M&E support	Other
				2.4.1.2	Series of workshops to promote use and sharing of data by managers	5	15	DFID M&E support	Other
2.4.2	Capacities built at woreda, zonal, regional and federal levels to generate and use data reports for reporting and planning		CB	2.4.2.1	Training in the use of reporting tools and functions	5	20	DFID M&E support	Other
2.4.3	Capacities in handling data requests built at national and regional levels		CB	2.4.3.1	Training and technical support to RWCO and NWCO to handle data requests	3	10	DFID M&E support	Other
2.4.4	Capacities built in all aspects of producing the federal OWNP report		CB	2.4.4.1	Tailored training of the team	5	5	DFID M&E support	DFID CGF
2.4.5	Capacities of the Atlas team built to manage the production of the Atlas		CB	2.4.5.1	Tailored training of the atlas team	5	5	DFID M&E support	DFID CGF
2.4.6	Capacities built for outreach strategy and for development of outreach products		CB	2.4.6.1	Internal training and coaching of the outreach team	5	5	DFID M&E support	DFID CGF
				2.4.6.2	External tailored training of the outreach team	3	0	DFID M&E support	DFID CGF

Outcome 2.5 WaSH M&E training and capacity development supply is in place

2.5.1	WaSH modules are included in EMIS and HMIS training curricula, and in Water training curricula.	Report on revision of training curricula (November 2016)	CB	2.5.1.1	Develop WaSH modules (training guide, learner materials, learning evaluation tools) (duration 2 days maximum)	10	20	Other	Other
				2.5.1.2	Workshop with TVETCs and HSCs re how to integrate WaSH Module into EMIS, HMIS and Water curricula	3	5	Other	Other
				2.5.1.3	Train TVETC and HSC Trainers to offer the WaSH Modules	8	20	Other	Other
2.5.2	M&E module included in Water training curricula, addressing methods and means to collect, process, update, edit and use M&E data.		CB	2.5.2.1	Develop M&E Module (training guide, learner materials, learning evaluation tools)	10	20	Other	Other
				2.5.2.2	Workshop with TVETCs and HSCs re how to integrate WaSH Module into EMIS, HMIS and Water curricula	3	5	Other	Other
				2.5.2.3	Train TVETC and HSC Trainer to offer M&E Module	10	18	Other	Other

Workpackage 3. Data dissemination and use

Outcome 3.1 Service providers and service authorities use data to inform their operational responses, leading to improved effectiveness and better services

3.1.1	Policy and procedures in place to promote and track the use of data by service providers and service authorities in their operational responses	Report on WaSH data use at local levels to improve service delivery (May 2018)	DDU	3.1.1.1	Workshop for regional bureaux/ RWCOs to confirm arrangements and promote horizontal data sharing at local levels	5	5	DFID M&E support	DFID M&E support
				3.1.1.2	Technical support to document standard procedures and process maps for service providers and service authorities in particular at woreda level to use data for operational responses	2	10	DFID M&E support	DFID M&E support
3.1.2	Guidelines developed to guide use of local WASH data for operational responses		DDU	3.1.2.1	Simple guidelines developed on use of WASH data for improved local operations	3	10	DFID M&E support	DFID M&E support
				3.1.2.2	Guidelines promoted through existing training fora, channels etc	2	10	DFID M&E support	DFID M&E support
	Outcome also depends on output 2.4.1 under capacity building		CB			0	0	0	0
3.1.3	Survey reported on data use at local levels to improve operations		DDU	3.1.3.1	Survey designed and data collection planned	2	5	DFID M&E support	DFID M&E support
				3.1.3.2	Data collection	0	15	Other	DFID CGF
				3.1.3.3	Data analysis	1	10	Other	DFID CGF
				3.1.3.4	Draft report prepared and feedback	2	5	Other	DFID CGF
				3.1.3.5	Report published and disseminated	0.5	5	Other	DFID CGF

Outcome 3.2 Data reports from sector MIS systems are used as the primary sources in key WaSH planning and reporting processes

3.2.1	Procedures and tools in place to generate data reports in the required formats for reporting and planning	Improved reporting formats for major programmes at all levels (Sep 2016)	DDU	3.2.1.1	Development of customised tools to generate reports as required for CWA, OWNP and where possible other programmes	2	5	DFID M&E support	DFID M&E support
				3.2.1.2	Development of simple format e.g. factsheet on integrated WaSH at woreda level	1	2	DFID M&E support	DFID M&E support
3.2.2	Roles and responsibilities clarified in production of data reports		DDU	3.2.2.1	Workshop to discuss roles of staff at woreda, regional and federal levels and generation of data reports	3	5	DFID M&E support	DFID M&E support
	Outcome also depends on output 2.4.2 under capacity building		CB			0	0	0	DFID M&E support
3.2.3	Reports generated and used		DDU	3.2.3.1	Technical support to woredas, regions and staff at the federal level to generate reports	4	20	DFID M&E support	DFID M&E support
3.2.4	Greater use of hygiene and sanitation, and institutional WaSH data promoted		DDU	3.2.4.1	Techical support to promote more local use of health and education data through clarification of processes and responsibilities, demand creation through sector channels, and demonstrated examples (two way information flows), and analysis with a focus on assessing disparities/ inequities and using information to better target investments	75	66	Other	Other
3.2.5	Survey reported on the efficiency and impact of the combined MIS reporting system	Report on the efficiency and impact of the combined WaSH MIS reporting system (November 2018)	DDU	3.2.5.1	Survey designed and data collection planned	1	5	DFID M&E support	DFID M&E support
				3.2.5.2	Data collection	0	10	Other	Other
				3.2.5.3	Data analysis	0	10	Other	Other
				3.2.5.4	Draft report prepared and feedback	2	5	Other	Other
				3.2.5.5	Report published and disseminated	1	5	Other	Other

Outcome 3.3 Researchers and other third parties make extensive use of data within WASH MIS systems increasing the evidence base

3.3.1	Policies and procedures in place to share data from sector WASH MIS systems	Report on sharing and use of WaSH data from OWNP MIS systems (July 2018)	DDU	3.3.1.1	workshop to draft procedures to share WASH data from sector MIS systems	2	4	Other	Other
				3.3.1.2	Technical support to finalise procedures	2	5	Other	Other
3.3.2	Data requests sought and fullfilled		DDU	3.3.2.1	Data catalogues developed summarising available data	2	10	Other	Other
				3.3.2.2	Data request processes published (e.g. on OWNP website), availability of data promoted and data requests honoured	1	10	Other	Other

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Effort Int.	Effort Nat.	Budget TA	Budget Expenses
	Outcome also depends on output 2.4.3 under capacity building		CB			0	0		
3.3.3	Archive maintained of publications		DDU	3.3.3.1	Follow-up to collate copies of reports, papers and other products generated using data from WASH MIS systems	1	10	Other	Other
				3.3.3.2	Online archive maintained to facilitate access to publications developed using WASH MIS data	1	15	Other	Other
3.3.4	Survey to document and evaluate the number and purpose of data requests		DDU	3.3.4.1	Survey designed and data collection planned	1	3	Other	Other
				3.3.4.2	Data collection	0	15	Other	Other
				3.3.4.3	Data analysis	0	5	Other	Other
				3.3.4.4	Draft report prepared and feedback	1	3	Other	Other
				3.3.4.5	Report published and disseminated	1	2	Other	Other

Outcome 3.4 OWNP Integrated Annual WaSH Report published every year in October is key reference publication across WaSH sectors

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Effort Int.	Effort Nat.	Budget TA	Budget Expenses
3.4.1	Data exchange agreement between the Ministries	Inter-agency data sharing agreement (by December 2015)	DDU	3.4.1.1	Workshop to bring together decision-makers from MOH, MOE, MOFED & MOWIE to define the process for data exchange between WASH Ministries	1	3	DFID M&E support	DFID M&E support
				3.4.1.2	Draft agreement, share and feedback incorporated	1	1	DFID M&E support	DFID M&E support
				3.4.1.3	Finalise and communicate agreement	1	1	DFID M&E support	DFID M&E support
3.4.2	Responsibility assigned for production of the report		DDU	3.4.2.1	Combined team identified and agreed between Ministries	1	3	DFID M&E support	DFID M&E support
	Outcome also depends on output 2.4.4 under capacity building		CB			0	0		
3.4.3	OWNP annual report	OWNP annual report (by October in 2016, 2017, and 2018)	DDU	3.4.3.1	Agreement of report format and content	3	3	DFID M&E support	DFID M&E support
				3.4.3.2	Additional data collection from regions	6	7	DFID M&E support	DFID M&E support
				3.4.3.3	Data analysis	9	20	DFID M&E support	DFID M&E support
				3.4.3.4	Component sections drafted	9	20	DFID M&E support	DFID M&E support
				3.4.3.5	Combined draft report produced and shared	8	15	DFID M&E support	DFID M&E support
				3.4.3.6	Workshop feedback on draft report	6	4	DFID M&E support	DFID M&E support
				3.4.3.7	Final report edited and approved	6	9	DFID M&E support	DFID M&E support
3.4.4	The OWNP report published and disseminated		DDU	3.4.4.1	Report published and disseminated (printed)	4	11	DFID M&E support	Other
3.4.5	Survey to document and evaluate the use and impact of the OWNP report	report on use and impact of the OWNP report (by May 2017)	DDU	3.4.5.1	Survey designed and data collection planned	2	2	DFID M&E support	Other
				3.4.5.2	Data collection	0	10	Other	Other
				3.4.5.3	Data analysis	2	5	Other	Other
				3.4.5.4	Draft report prepared and feedback	3	5	Other	Other
				3.4.5.5	Report published and disseminated	1	5	Other	Other

Outcome 3.5 Ethiopia WASH Atlas produced every 5 years provides most comprehensive resource for WaSH policy-making and planning

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Effort Int.	Effort Nat.	Budget TA	Budget Expenses
	Data exchange agreement between the Ministries		DDU		Same as above under 4.1	0	0		
3.5.1	Roles and responsibilities assigned for pulling the data sets together		DDU	3.5.1.1	Combined team identified and agreed between Ministries	1	2	DFID M&E support	DFID M&E support
	Outcome also depends on output 2.4.5 under capacity building		CB						
3.5.2	The Ethiopia WASH Atlas written	Ethiopia WaSH Atlas (by March 2017)	DDU	3.5.2.1	Agreement on format and content of the atlas	2	4	DFID M&E support	DFID M&E support
				3.5.2.2	Additional data collected and data verified from regions	2	5	DFID CGF	DFID CGF
				3.5.2.3	Data analysis	15	40	DFID CGF	DFID CGF
				3.5.2.4	Component sections (regions) of the atlas drafted	12	20	DFID CGF	DFID CGF
				3.5.2.5	Atlas produced and shared for final feedback	10	20	DFID CGF	DFID CGF
				3.5.2.6	Feedback on draft atlas	2	5	DFID CGF	DFID CGF
				3.5.2.7	Final atlas edited and approved	5	5	DFID M&E support	DFID M&E support
3.5.3	The Ethiopia WASH Atlas published and disseminated (online and off line)		DDU	3.5.3.1	Atlas published and disseminated	1	5	DFID M&E support	DFID CGF
				3.5.3.2	Flyers and promotion materials for atlas	2	5	DFID M&E support	DFID CGF
3.5.4	Survey to document and evaluate the use and impact of the Ethiopia WASH Atlas	Report on use and impact of the Ethiopia WASH Atlas by January 2018	DDU	3.5.4.1	Survey designed and data collection planned	2	5	DFID M&E support	DFID M&E support
				3.5.4.2	Data collection	0	10	DFID CGF	DFID CGF
				3.5.4.3	Data analysis	2	5	DFID CGF	DFID CGF
				3.5.4.4	Draft report prepared and feedback	2	5	DFID CGF	DFID CGF
				3.5.4.5	Report published and disseminated	1	5	DFID CGF	DFID CGF

Outcome 3.6 Outreach materials are widely utilised including OWNP website developed with data rich content and series of briefing papers, news, blogs, news on events and reports .

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Effort Int.	Effort Nat.	Budget TA	Budget Expenses
3.6.1	Processes and procedures in place to produce and commission briefing papers, news, presentations and website etc.	At least 2 briefing papers per year, 6 news articles per year, 3 blogs per year , 4 presentations per year.	DDU	3.6.1.1	Planning outreach materials for the duration of the project (including writing, review, design, print, distribution)	2	5	DFID M&E support	DFID M&E support
				3.6.1.2	Planning inputs to OWNP website and management of the website including technical support	2	5	DFID M&E support	DFID M&E support
				3.6.1.3	Technical support to website setup (M&E related components)	2	3	DFID M&E support	DFID M&E support
				3.6.1.4	Design and branding advice	1	1	DFID M&E support	DFID M&E support
3.6.2	Roles and responsibilities assigned		DDU	3.6.2.1	Outreach team identified (project, Ministries) and agreed between Ministries	1	2	DFID M&E support	DFID M&E support
				3.6.2.2	Workshop to define roles for management of outreach, writing outreach materials, review etc. identified	2	3	DFID M&E support	DFID M&E support
	Outcome also depends on output 2.4.6 under capacity building		CB		Internal training and coaching of the outreach team	0	0	DFID M&E support	DFID M&E support
					External tailored training of the outreach team	0	0	DFID M&E support	DFID M&E support
3.6.3	Outreach materials produced		DDU	3.6.3.1	Website maintained	5	11	DFID M&E support	DFID M&E support
				3.6.3.2	Briefing papers produced	8	11	DFID M&E support	Other
				3.6.3.3	Blogs produced	8	9	DFID M&E support	DFID M&E support

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Timeline (2015–2019)	Effort (days) Int.	Nat.	Budget TA	Budget Expenses
				3.6.3.4	News items produced		7	9	DFID M&E support	DFID M&E support
				3.6.3.5	Presentations produced		3	8	DFID M&E support	DFID M&E support
				3.6.3.6	Conferences attended		3	8	DFID M&E support	DFID M&E support
				3.6.3.7	Articles produced (based on impact evaluation)		9	30	Other	Other
				3.6.3.8	Other outreach materials produced (film, radio and TV items)		9	50	Other	Other
				3.6.3.9	Management of the outreach materials		8	30	DFID M&E support	DFID M&E support
3.6.4	Outreach materials published and disseminated		DDU	3.6.4.1	Outreach materials published on the website and printed in hard copy		5	11	DFID M&E support	Other
				3.6.4.2	General promotion materials produced (flyers, business cards, T-shirts etc.)		5	11	DFID M&E support	Other
3.6.5	Survey to document and evaluate the use and impact of the outreach materials	Report on use and impact of outreach materials (January 2018)	DDU	3.6.5.1	Survey designed and data collection planned		2	2	DFID M&E support	Other
				3.6.5.2	Data collection		0	20	Other	Other
				3.6.5.3	Data analysis		1	5	Other	Other
				3.6.5.4	Draft report prepared and feedback		2	5	Other	Other
				3.6.5.5	Report published and disseminated		1	5	Other	Other

Workpackage 4. Synergy and complementarity

Outcome 4.1 Coordinated implementation of the OWNP M&E plan involving all WaSH sectors, frequent sharing of experiences and lessons in M&E best practice and sharing of data and collaboration in integrated OWNP reporting

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Timeline	Effort Int.	Nat.	Budget TA	Budget Expenses
4.1.1	OWNP M&E implementation quarterly report sections and meeting reports of WaSH platforms, with regular updates on OWNP M&E (including tracker of requests and responses by the OWNP M&E team across all WaSH sectors)		Syn.	4.1.1.1	Regular updates and reports on OWNP M&E progress provided to implementing partners through existing channels (including NWSC, RWSC, annual sector review, WaSH multi-stakeholder forum etc) and regular quarterly meetings in each partner ministry and annually at regional level to ensure OWNP M&E is maintained high on agendas		58	50	DFID M&E support	DFID M&E support
				4.1.1.2	Requests for support received, logged and responses provided where possible within plans and resources available		20	30	DFID M&E support	DFID M&E support

Outcome 4.2 Coordinated financing provided by development partners in the WaSH sectors to support implementation of the OWNP M&E plan

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Timeline	Effort Int.	Nat.	Budget TA	Budget Expenses
4.2.1	OWNP M&E implementation quarterly report sections on tracking OWNP M&E financing and the harmonisation of development partner support, and plans submitted to financing partners		Syn.	4.2.1.1	Regular updates and reports on OWNP M&E progress, plans and (especially financing) gaps provided to development partners through existing channels (including CWA partner meetings, Joint Technical Reviews, MSF, WSWG, S&HWG etc)		25	45	DFID M&E support	DFID M&E support
				4.2.1.2	Technical support provided to plans required by additional OWNP M&E financing partners		11	20	DFID M&E support	DFID M&E support
				4.2.1.3	Technical support provided to follow-up on plans and implementation to ensure harmonisation		10	25	DFID M&E support	DFID M&E support

Outcome 4.3 Strengtheend information sharinbetween civil society and implementing partners in supporting M&E and innovations in monitoring

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Timeline	Effort Int.	Nat.	Budget TA	Budget Expenses
4.3.1	Regular reporting on NGO monitoring activities included in OWNP M&E implementation quarterly reports		Syn.	4.3.1.1	Regular updates and reports on OWNP M&E progress provided to civil society partners through existing channels (including CCRDA-WSF, WaSH Ethiopia Movement, Millenium Water Alliance, Ethiopia WaSH Alliance etc)		20	25	DFID M&E support	DFID M&E support
				4.3.1.2	Requests for support and collaboration received, logged and responses provided where possible within plans and resources available		15	35	DFID M&E support	DFID M&E support
				4.3.1.3	Learning and practice alliances established and maintained at regional level				Other	Other

Outcome 4.4 Following the M&E support phase, WaSH institutions have the people, skills, systems and finances required to sustain monitoring and reporting on WASH service delivery and to use information in evidence-based decision-making

No	Output	Key deliverables/ proposed milestones	Sub-plans	No	Activities	Timeline	Effort Int.	Nat.	Budget TA	Budget Expenses
4.4.1	OWNP M&E implementation report including an assessment of the strength of MIS enhancement, capacity development, dissemination and use and synergy, with new requirements in WaSH M&E and recommendations for revised planning	OWNP implementation report (annual and quarterly). Annual report by end Februrary.	Ex.	4.4.1.1	Risk management strategy in place		2	0	DFID M&E support	DFID M&E support
				4.4.1.2	Systems in place to track OWNP M&E progress (activities, inputs, outputs, risks) across all M&E workpackages		5	0	DFID M&E support	DFID M&E support
				4.4.1.3	Annual review		25	20	DFID M&E support	DFID M&E support
4.4.2	Alternative sources of financing identified (and reported in section in OWNP M&E implementation quarterly report) for part of OWNP M&E requirement, including commitments from Ministries		Ex.	4.4.2.1	Technical support to explore of alternative options for financing ongoing M&E and development of financing strategy		10	5	DFID M&E support	DFID M&E support
				4.4.2.2	Engagement and relationship-building with stakeolders who may provide continued external technical and financial support		10	0	DFID M&E support	DFID M&E support
4.4.3	Regular monitoring, evaluation and reporting of project impact		Ex./ DDU	4.4.3.1	Systems in place to track to OWNP M&E outcomes/ impacts		25	0	DFID M&E support	DFID M&E support
				4.4.3.2	Communication of project progress and results		0	0	DFID M&E support	DFID M&E support
Total all workpackages							1196	2254		

Annex 5: Terms of Reference

Terms of Reference

Technical and Managerial support for strengthening the Monitoring and Evaluation (M&E) system of the One WaSH National Programme (OWNP) of Ethiopia, and for conducting an Impact Evaluation

1. Purpose and Objective

1.1. Purpose

The main purpose of this assignment will be to strengthen accountability of the Water, Sanitisation and Hygiene (WaSH) sector in Ethiopia by making the WaSH Monitoring & Evaluation (M&E) system fully operational at all levels (i.e., federal, regional and Woreda). A functional WaSH M&E system will make it possible to measure and report progress towards the One WaSH National Programme (OWNP) results. This assignment forms part of the Department of International Development Ethiopia's (DFIDE) wider Evaluation Strategy and will contribute in particular to monitoring and evaluation of progress against specific WaSH related commitments set out in DFIDE's Operational Plan.

1.2. Objectives

The primary objectives of this assignment are:

- Provide technical and managerial support to the National WaSH Coordination Office to strengthen and fully operationalize the WaSH M&E system including updating of the national inventory data to ensure that reliable, timely and strategic information are generated at all levels of administration (i.e., federal, regional and Woreda) to facilitate evidence based decisions;

- Assist the National WaSH Coordination Office and the National WASH Inventory Coordination office to quality assure the data generated through the WaSH M&E system including the National WaSH Inventory (NWI), and device an approach for periodic assessment of the data generated by the WaSH M&E system;

- Assist the National WaSH Coordination Office to review the OWNP indicators and establish baseline values;

- Assist the National WaSH Coordination Office to collect strategic programmatic (financial, technical and socio economic) data to measure and monitor fairness in access and utilization, Value for Money and cost drivers throughout the OWNP's life time;

- Assist the National WaSH Coordination Office to prepare and share quarterly progress (financial, technical and socio-economic) and annual reports and quality assure in the consolidation of annual plans to have a sound basis for the monitoring. Also, assist DFID to carry out annual reviews (ARs) and programme completion reviews (PCR);

- Develop a WaSH Impact Evaluation Framework, carry out a 'evaluability assessment' and suggest a robust evaluation design;

- Carry out an independent impact evaluation, in consultation with the Government of Ethiopia (GOE) partners, donors and other key stakeholders, as per the WaSH Impact Evaluation Framework; and,

- Assist the National WaSH Coordination Office to develop a strategy to scientifically document and disseminate best practices and lessons learnt by the programme for the benefit of the WaSH sector in Ethiopia through the different platforms (*Joint Technical Reviews, annual Multi Stakeholder Forums…*) as well as for enhancing the global knowledge. (If need be, the Provider could suggest and carry out Operational Research to validate best practices/lessons learnt.)

2. Recipient

The immediate recipients of this assignment will be DFID Ethiopia. The primary target audience for the WaSH monitoring findings/reports will be policy makers at the WASH sector Ministries Ministry of Finance and Economic Development (MOFED), Ministry of Water, Irrigation and Energy (MOWIE), Ministry of Health (MOH) and Ministry of Education (MOE) and their experts and professionals, regional bureaus, the pooled fund (CWA) contributing partners and other OWN P partners. The primary target audience for the evaluation findings/reports will be international WaSH funders in addition to the target audience of the monitoring findings/reports.

3. Scope of Work

The scope of this assignment could be broadly divided into three tasks;
- Task-1: Strengthening the WASH M&E System
- Task-2: Impact Evaluation
- Task-3: Dissemination and use of M&E report

3.1. Task-1: Strengthening the WASH M&E System

      3.1.1.   Refinement and Operationalization of the WaSH M&E system:

- The Provider, in consultation with the WaSH Coordination Office, the National WASH Inventory Coordination Office and others, will review and refine the One WaSH M&E Framework and indicators. In addition to financial and technical aspects, the One WaSH M&E Framework and indicators should be able to track and assess the performance of the programme in addressing the fiduciary, environmental, resettlement and social risks (including the needs of girls, women and the disabled and other marginalized groups) as outlined in the OWNP Environmental and Social Management Plan, the OWNP Fiduciary Mitigation Plan and the OWNP Programme Operational Manual (POM attached).

- The Provider, in consultation with the WaSH Coordination Office and the National WaSH Inventory Coordination Office, will prepare a four year pan to fully operationalize the One WaSH M&E system, including full operationalization of the WaSH MIS. The plan, at a minimum, should have:

    i.   Sound capacity building and sustainability sub-plan that can be delivered across various reporting levels in a timely manner, and could be sustained beyond the life of this assignment;
    ii.   Procurement plan for the goods and services required for the full operationalization of the One WaSH M&E system. This includes but may not be limited to the procurement of mobiles phones and solar chargers for updating the inventory data and provision of training for the rollout of the MIS system in the woredas (districts).
   iii.   Strategy to create synergy and complementarity amongst the MIS systems of the MoH, MoE and MoWIE. In addition, the plan should clearly define the roles and responsibilities of different WaSH M&E actors in the four Ministries (MoFED, MoWIE, MoH and MoE) and their lower (regional and Woreda) organs;

- The Provider will provide technical and managerial support to the WASH Coordination Office and the National WASH Inventory Coordination Office to implement the One WaSH M&E/four year plan at all levels. In particular, the Provider will support:

    i.   The rolling out of the WaSH Management Information System (MIS) to all Woredas. This includes updating the MIS system of the respective Woredas, providing training on data capturing using mobile phones and conducting data analysis.
    ii.   Updating of the existing (2011) National WaSH Inventory;

iii. Development and implementation of a strategy for timely renewal of the National WaSH Inventory; and,

- The Provider will liaise with other partners (i.e., AfDB, the Water Supply Programme Africa of the World Bank , the World Bank and UNICEF) who are supporting the One WaSH M&E system to increase the quality, usability and sustainability of the One WaSH M&E system, and to avoid duplication.

3.1.2. Enhancement of the quality of data generated by the WaSH M&E system:

- The Provider will provide technical and managerial support to verify/quality assure the data generated through the One WaSH M&E system. This will include triangulating the reported data with other sources such as reports from Regional Health Bureaus (RHB), MOWIE, MOH, MOE, Demographic Health Surveys, UNICEF/WHO Joint Monitoring Reports and others. Make recommendations and assist in implementing measures to improve data quality.

3.1.3. Compilation, analysis, reviews and reporting:

- The Provider will assist the WaSH Coordination Office and the National WaSH Inventory Coordination Office with timely compilation, analysis and periodic (quarterly, half yearly and annual) reporting of high quality strategic programmatic (technical and financial) WaSH data. The WaSH quarterly, half yearly and annual progress reports should be disaggregated by gender (women and girls), age (young and elderly), disadvantaged groups (disabled, pastoralists, urban slum dwellers and rural poor) and location (rural, urban, Woredas and regions as recommended in the enhanced social assessment report. These reports should also contain a value-for-money analysis to help identify the main cost drivers of the programme; and,

- The Provider, in collaboration with the government and development partners, will carry out annual reviews (ARs) and end of project/project completion reviews (PCR) as per the scope/guidelines developed by the government and WaSH partners.

3.2. Task-2: Impact Evaluation

3.2.1. Primary objective of the impact evaluation is to determine the efficiency, effectiveness and sustainability of the OWNP. The evaluation at a minimum should able to measure:

i.   The intended as well as unintended outcomes and impacts of the OWNP by region and population groups;
ii. Measure the relative contributions of major OWNP interventions/components to the overall change in the WaSH status in Ethiopia between 2014/15 and 2017/18;
iii. Results/WaSH related outcomes and impacts attributed to DFIDE's support
iv. Cost-effectiveness of the OWNP and DFID's support to the OWNP. To achieve these objectives, the Provider is expected to carry out the following tasks.

- The Provider will assist the WaSH Coordination Office to develop an Impact Evaluation Framework including development/refinement of the One WaSH theory-of-change.

- The Provider, in consultation with the WaSH Coordination Office, will undertake an 'evaluability assessment' of the OWNP. The 'evaluability assessment' should at a minimum be able to answer whether it would be possible to:

i.   Measure the intended as well as unintended outcomes and impacts of the OWNP.
ii. Measure the relative contributions of major programme interventions/components to the overall change in the WaSH status;

iii. Assess the cost drivers and the value for money of the OWNP (overall and by component), and test the validity of the assumptions about costs and benefits at the initiation of the programme.
iv. Calculate how much of the overall change in the WaSH status between 2014/15 and 2017/18 could be attributed to the OWNP, and of which how much could be attributable to DFIDE's support.
v.   Measure the impact of the OWNP on equity, empowerment, accountability and transparency, particularly for underserved populations.
vi. Assess the sustainability of the OWNP.
vii. Differentiate between the theory failure and implementation failure.

- The Provider on the basis of the 'evaluability assessment' will identify a robust evaluation design to determine the efficiency and effectiveness of the OWNP in delivering its objectives.

- The Provider will identify the potential risks and challenges for implementing the proposed/suggested evaluation design and prepare and implement a risk mitigation plan.

- The Provider, in consultation with the WaSH Coordination Office, will develop an Impact Evaluation Plan with clear sequential steps and deliverables and clear timeline.

- The Provider will carry out an independent Impact Evaluation including establishment of a reliable and valid baseline, mid-term and end-term data.

- The mid-term evaluation will be used to review the OWNP design, planning, implementation processes to maximize its impact during the remaining period of the programme. The end-line evaluation will inform what has been achieved through OWNP and through DFID support to the programme. It will also be used to guide next phase of the OWNP. In addition, at least two lessons learnt reports/policy briefs will be produced (one after the mid-term review and the other after the end-line evaluation) by the Provider to enhance evidence-based decision making and global knowledge on how to implement multi-sectoral WaSH programme.

- The evaluation will also address government and development partners need for accountability around the OWNP and provide evidence about any successor to this programme.

- The service provider is expected to carry out the proposed impact evaluation in line with the OECD-DAC evaluation criteria, and with DFID's policy on evaluation (annexed). The final evaluation questions will be agreed during the inception phase of this assignment. Illustrative evaluation questions categorized according to the OECD-DAC evaluation criteria are:

    i. Relevance:
        - To what extent the OWNP implementation framework/design appropriate for attaining the OWNP goals as per the OWNP's theory-of-change and that of the National Development plan the Growth Transformation Plan?

        - How the OWNP complementing other on-going government and development partner programmes that directly and/or indirectly contribute to WaSH objectives?

    ii. Effectiveness:
        - How robust is the programme design in ensuring the transformation of inputs into outputs, and outputs into outcomes to ensure effectiveness of the programme?

        - What is the progress towards achieving the overall program objective and in reducing the social and regional inequalities?

- To what extent the programme has enhanced accountability of the service provider to communities particularly to underserved communities and groups such as women, girls and disabled people?

iii. Efficiency:
- Which programme components/interventions are showing the most positive impact How can the programme build on or expand these successes?

- How is value for money considered in the overall governance of the programme?

- Does the quantity of and quality of the results justify the quantity and quality of the means used for achieving them? How cost-effective have the means been converted into results? Could the same results be achieved more cost effectively?

iv. Impact:
- Has there been any change in the coverage and use of WaSH services particularly in underserved areas, communities and socially excluded groups? How does this vary across regions? To what extent can this be attributed to the programme?

- What impact the project had in terms of:
    a) Reducing water related diseases and improving health status of people, particularly underserved people.
    b) Improving the nutritional status of poor and vulnerable including women, girls and disabled.
    c) Decreasing the time spent to collect water
    d) Ensuring sustainability   of schemes constructed and services provided

- What is the extent of the relative contribution of major programme interventions to the overall change in the WaSH status in the country?

- What is the impact of the OWNP on empowerment, accountability and transparency, particularly for underserved populations?

v. Sustainability:
- What is likely to happen to the positive effects of the programme after the external assistance ends?

- Was this external technical and managerial technical support able to build the capacity of the National WaSH Coordination office to refine and implement the One WaSH M&E beyond the life of this assignment?

- Are interventions supported through the OWNP, well integrated with local institutions, social and cultural conditions?

On the basis of the 'Evaluability Assessment', the final evaluation questions, framework, design methodology and plan will be agreed in consultation with GOE, DFID, AfDB and others.

3.3. Task-3: Dissemination and use of M&E reports

- The primary target audience for the WaSH monitoring findings/reports will be MOFED, MOWIE, MOH, MOE, regional bureaus, CWA contributing partners and other OWNP partners. And the primary target audience for the evaluation findings/reports will be international WaSH funders in addition to the target audience of the monitoring findings/reports. However, the target audience will be clearly defined by the Provider during the inception phase to maximize evidence-based decision making.

- The service provider will develop dissemination strategies for the monitoring as well as for the evaluation findings/products. These strategies will outline the most effective ways of influencing identified target audience at different level.

- The M&E findings will speak directly to beneficiaries, policy makers, policy influencers, national stakeholders' and the global community. It will provide insights into how to plan and implement integrated WaSH programming in low-resource settings. Therefore, the Provider will assist the National WaSH Coordination Office to develop M&E dissemination and use strategies to:

  i. Scientifically document and disseminate best practices and lessons learnt for the benefit of the WaSH sector in Ethiopia as well as for enhancing the global knowledge. (If need be, the Provider could suggest and carry out Operational Research to validate best practices/lessons learnt.)

  ii. Enhance evidenced-based decision making to maximize the impact of the OWNP.

4. Methodology

This assignment will have a six months inception phase. During the inception phase, the Provider will carry out the following activities:

4.1. Review and synthesize the governance structure of the WaSH M&E and prepare a WaSH M&E capacity development plan:

- Review of the existing OWNP M&E system both its internal makeup in the National WaSH coordination office at federal, regional and Woreda level and their linkages to the M&E systems of the implementing agencies MOWIE, MOH, MOE and MOFED from the perspective of managing and implementing effective M&E system;

- Take stock of the work done so far by others on WaSH related M&E to ensure complementarity and avoid duplication of efforts; and,

- Assess the readiness and capacity of the National, Regional and Woreda level WASH coordination offices and the WASH sector to implement the OWNP M&E system at various levels; and assist to prepare capacity development plan and facilitate its implementation.

4.2. Review and assess the periodicity, quantity and quality of data available on WaSH in Ethiopia:

- Review and compile the WaSH related data in Ethiopia from existing data sources including the Ethiopia Demographic Health Survey 2011, the mini DHS 2014, the Ethiopian Service Provision Assessment 2014, data from health, education and WaSH MIS and other data sources; and,

- Review the periodicity, validity and reliability of existing WaSH data in the context of the WaSH M&E framework/OWNP, and suggest data/information gaps that need to be filled to be able to measure performance of the OWNP including performance around fiduciary, environmental, resettlement and social risks management.

4.3. Develop a WaSH M&E system enhancement plan:

- Review and asses the piloted WASH Management Information system and the national WaSH Inventory to identify and advice on additional data requirement and possible areas of improvement;

- Propose the M&E system enhancement plan that captures the intervention packages required to refine and strengthen the system in the programme period. In doing so, ensure appropriate coordination and complementarity with other supports geared towards supporting the enhancement of the M&E system (support from PBS programme , AFDB, World Bank and Water Supply programme Africa); and,

- Conduct consultation workshop to review and finalize the suggested system enhancement plan in coordination with the WASH coordination office and other key stakeholders.

4.4. Review and refine the OWNP theory-of-change and logframe:

- Review evidence around the theory-of-change of the OWNP and suggest revision to the theory-of-change; and,

- Review log-frame/results framework and (if need be) suggest refinement to objectively measure progress. The One WASH National Programme log-frame/results framework should be robust enough to be able to ascertain progress on planning, (technical and financial) management, value-for-money (VfM) and equity;

4.5. Carry out an 'Evaluability assessment' of the OWNP to measure the impact, efficiency, effectiveness and sustainability of the OWNP.

- develop a WaSH evaluation framework;

- develop a robust evaluation design with appropriate evaluation methodologies. The design document should have clear logical explanations for the types of methods (quantitative and/or qualitative), analytical frameworks and sources of data (primary and/or secondary) to be used to carry out the WaSH evaluation;

- develop a risk mitigation plan for carrying out the WaSH evaluation; and,

- prepare a plan to implement the proposed WaSH evaluation design and the risk-mitigation plan.

4.6. Develop data dissemination and use strategies

- Carry out a quick stakeholders mapping to prioritize target audience for the monitoring as well as evaluation findings/products to increase evidence based decision making and transparency in the sector; and,

- Support the Coordination office in developing effective data dissemination and use strategies for the: (a) monitoring; and, (b) evaluation products.

4.7. During the post-inception phase, the Provider will:

- Provide technical and managerial support to the national WaSH coordination office to:
  - fully operationalize the OWNP M&E system, as per the M&E enhancement plan prepared in the inception period, by the end of 2015;

  - support timely generation of valid and reliable WaSH data and information at all levels and production of high quality periodic WaSH progress reports (inputs from Provider to continue during the entire duration of the programme with a sliding scale);

  - facilitate and support strengthening the WaSH Coordination Office and its cascaded organs, as per the WaSH M&E capacity development plan done in the inception phase, by the end of 2015;

  - support the WASH Coordination office in conducting the periodic and timely updating the National WASH Inventory done in 2011 as per the revised indicators and establish baseline for the new ones by the end of 2015;

  - carry out an independent mid-term review in 2016/17 and impact evaluation in 2018/19; and,

  - provide technical and managerial support to the national WaSH coordination office to disseminate and improve use of the M&E findings (inputs to continue during the entire duration of the programme).
  .
- The service provider is expected to publish in full the evaluation report as per the DFID's evaluation policy. Also, data sets pertaining to this evaluation will be made available to other researchers for analysis, with due consideration given for the privacy of respondents.

5. Staffing Skills & Expertise

5.1. The service provider is expected to engage a high quality team of experts with skills and expertise in a range of disciplines. The team is expected to be gender balanced. The team should ideally include a mix of full and part time country based experts and call down international experts. Ethiopian team members will be essential for this assignment. Numbers of staff required will be determined/proposed by the Provider. Consortiums of different organisations to provide the full range of expertise and experience needed for this assignment, particularly to carry out an independent impact evaluation, will be acceptable.

5.2. DFID would expect the Provider to demonstrate a high level of experience and expertise in the following areas:

- Able to put together a relevant multi-disciplinary team with expertise in WaSH, health, social development, M&E, capacity building, information management, research and evaluation methodologies, and data dissemination and use (essential);
- Demonstrated experience to manage and work as a team and to work with and through governments and other partner organizations (essential);
- Extensive experience in developing theory-of-change, logical frames, and M&E frameworks for WaSH programmes (essential);
- Demonstrated experience in establishing and operationalizing multi-sectoral M&E System, particularly for WaSH or related sectors (essential);
- Expertise in data collection and statistical calculations of WaSH indicators (essential);
- Expertise in calculating and tracking value for money and cost drivers in WASH or similar programmes (essential);
- Extensive experience of designing and implementing data/results verification and performance audits of programmes implemented by governments (essential) especially in difficult or fragile environments (desirable);
- Adequate experience in designing and providing capacity building supports for M&E and information management preferably for WASH sector (essential);
- Demonstrated experience in developing data dissemination and use plan (essential) including experience in collating best practice and disseminating lessons learnt (desirable);
- Proven experience in designing and conducting Impact Evaluation of programmes preferably for WASH programmes (essential);
- Proven capacity to work effectively with government alongside other agencies, maximising efficiencies and avoiding duplication of effort (essential);
- Excellent written and verbal communication skills (essential);
- Previous knowledge and working experience in Ethiopia and/or other similar settings (desirable).

6. Duty of Care

6.1. The Provider is responsible for the safety and well-being of their personnel and Third Parties affected by their activities under this contract, including appropriate security arrangements. They will also be responsible for the provision of suitable security arrangements for their domestic and business property. All duty of care, transport, translation and logistical support, office space, and insurances will be the responsibility of the Provider.

6.2. DFID will share available information with the Provider on security status and developments in-country where appropriate.

6.3. All Provider personnel will be offered a security briefing by the British Embassy/DFID on arrival. All such Personnel must register with their respective Embassies to ensure that they are included in emergency procedures. A copy of the DFID visitor notes (and a further copy each time these are updated), which the provider may use to brief their personnel on arrival.

6.4. The Provider is responsible for ensuring appropriate safety and security briefings for all of their personnel working under this contract and ensuring that their personnel register and receive briefing as outlined above. Travel advice is also available on the FCO website and the evaluation supplier must ensure they (and their Personnel) are up to date with the latest position.

6.5. The Provider is responsible for ensuring that appropriate arrangements, processes and procedures are in place for their personnel, taking into account the environment they will be working in and the level of risk involved in delivery of the Contract (such as working in dangerous, fragile and hostile environments etc.).

6.6. If bidders are unwilling or unable to accept responsibility for Security and Duty of Care as detailed above, bids will be viewed as non-compliant and excluded from further evaluation.

6.7. Acceptance of responsibility must be supported with evidence of capability and DFID reserves the right to clarify any aspect of this evidence. In providing evidence Tenderers should consider the following questions:

i. Have you completed an initial assessment of potential risks that demonstrates your knowledge and understanding, and are you satisfied that you understand the risk management implications (not solely relying on information provided by DFID)?

ii. Have you prepared an outline plan that you consider appropriate to manage these risks at this stage (or will you do so if you are awarded the contract) and are you confident/comfortable that you can implement this effectively?

iii. Have you ensured or will you ensure that your staff are appropriately trained (including specialist training where required) before they are deployed and will you ensure that on-going training is provided where necessary?

iv. Have you an appropriate mechanism in place to monitor risk on a live / on-going basis (or will you put one in place if you are awarded the contract)?

v.   Have you ensured or will you ensure that your staff are provided with and have access to suitable equipment and will you ensure that this is reviewed and provided on an on-going basis?

vi. Have you appropriate systems in place to manage an emergency / incident if one arises?

7. Logistics and Procedures

7.1. The technical and managerial assistance team/personnel of the service provider will be placed in the WaSH Coordination office, housed in the Ministry of Water Irrigation and Energy. The service provider will be expected to supply their own logistic requirements including undertaking minor alteration/renovation of the office space, purchasing of office equipment, supplies (if required), and managing their transportation.

7.2. The service provider is not only expected to work closely with the national WaSH coordination office to fully operationalize the OWNP M&E system but is also expected to carry out an independent impact evaluation. Therefore bidders of this ToR should comment on how independence in carrying out the impact evaluation will be maintained from the programme implementing entities.

8. Roles and Responsibilities, Governance, Reporting and Contracting

8.1. The roles and responsibilities of the Provider are outlined on section 3 and 4 of this ToR.

8.2. The Provider will report to the head of WaSH Coordination Office at MOWIE and DFIDE Human Development Team's WaSH adviser and deputy programme manager. While the WaSH Coordination Office will lead on technical and programmatic areas in consultation with DFID and other partners, DFID will lead on contractual issues in consultation with the WaSH Coordination Office and other partners

8.3. At key points of this assignment, the WaSH Coordination Office and DFIDE's Human Development Team will call upon the expertise of other federal, regional and Woreda level bodies and DFIDE's results, economic and governance advisors to quality assure the deliverables of the Provider.

8.4. The service provider will engage with The National WASH Inventory office and the MoH, MOE and MoFED and regional and Woreda level bodies/partners as appropriate.

8.5. The Provider will submit quarterly progress report to the head of WASH coordination office and DFID Ethiopia. The content of the report will be agreed during the inception phase.

8.6. The performance of the team will be jointly assessed by the head of WASH coordination office, DFID WaSH adviser, DFID project/programme officer and

representatives from key stakeholders on a quarterly basis. The WaSH coordination office and DFIDE will make the final decision on extra activities to be conducted by either service provider.

8.7. The Providers bidding for this contract should describe how they will nurture good working relationships whilst at the same time maintaining independence and impartiality with the One WaSH implementing partners.

8.8. Contracting: DFID Ethiopia will issue the contract for the entire duration of the programme after the review of the bid documents. DFID and representatives of the host county counterparts will assess the full bids submitted under this tender. Implementation will proceed after the Provider provides an inception report that is to the satisfaction of DFID and the MOWIE. DFID reserves the right to re-tender for the contract if the inception report does not explicitly and satisfactorily meet the conditions set forth.

8.9. Deliverables of the Provider will be reviewed and quality assured by the DFID and MOWIE. DFID and MOWIE will make the final decision on the quality and acceptability of the deliverables.

8.10. DFIDE requires an output-based contract, linking payments to milestones, with transparency of anticipated inputs. Financial disbursements will be made according to an agreed schedule on a satisfactory completion of agreed activities within the review work plan and framework.

8.11. The Provider will grant DFID and MoWIE/GoE a world-wide, non-exclusive, irrevocable, royalty-free licence to use all materials/products produced under this ToR. This may include without limitation, the reproduction, publication and sub-licence of all materials/products produced under this ToR. The Provider will also make available to DFID and MoWIE/GoE all primary and secondary data/information/raw data collected as a part of this ToR, with due consideration given for the privacy of respondents.

9. Key Performance Indicators (KPI's) for the Provider

9.1. The performance of the Provider will be monitored with the government counterparts through the joint quarterly meetings and annual reviews. To incentivize good performance, payments will be made on meeting specific Key Performance Indicators (KPIs). KPIs will be finalized during the post-tender contract negotiations but may include:

- Quality-related and performance-related targets for service delivery: Quality of reports/deliverables as per DFID's standards and requirements. (Measured by the feedback received from both internal and external quality assurers).

- Compliance to regulations and standards: Number of outputs/deliverables that are error free and in line with DFID's standards and requirements. (Measured by the feedback received from both internal and external quality assurers).

- Financial management and VfM: Sum of deviation of expenditure against agreed budget for this assignment. (This will be measure by the level of accuracy/deviation of monthly/quarterly forecast received from the M&E provider).

- Time: Sum of deviation of planned activities against the agreed work plan. (This will be measured by the proportion of undertaken activities against planned activities for the reporting period).

- Interaction between stakeholders and service providers: The Provider's ability to carry out quality consultation and interactions with the One WaSH stakeholders, and to offer effective advice. (This can be measured through feedback collected from stakeholders on the performance of the M&E provider.)

9.2. The KPIs for the M&E provider will be reviewed after the inception phase and consequently during the lifetime of the contract as needed. All new KPIs will be agreed by the DFID Ethiopia, MOWIE and the M&E provider prior to incorporation into contracts.

9.3. DFID will consult with the MOWIE and relevant federal, regional and Woreda level bodies to assess whether KPIs have been met before payment is made. Invoice payments will only be made on the satisfactory approval of the programme manager and the budget holder using Aries to provide an audit trail of the process. (withholding a % of payment if KPIs are not delivered on time) will be articulated in the contract between DFID and the Provider.

10. Deliverables

10.1.   Key deliverables expected from the bidder/Provider will include:

An inception report within four months: The inception report to include:

i.   An enhanced OWNP M&E framework
ii.   A work plan to fully operationalize the OWNP M&E MIS system / a capacity building plan with objectively verifiable milestones for the full programme period
iii.   An agreed approach to periodically quality assure the data generated by the OWNP M&E system
iv.   A refined theory-of-change and log-frame with additional indicators as indicated in the scope of work (i.e., section 3 of this TOR)
v.   An 'evaluability assessment' report, and evaluation design and a plan to carry out an independent impact evaluation (IE) with objectively verifiable milestones (such as baseline, mid-term and end-line reports). The IE plan could include a study design, sampling frame, power calculations, draft tools, proposed analytical pieces and their strengths and limitations
vi.   A data dissemination and use strategy with objectively verifiable milestones
vii.   An exit plan/ a plan to sustain the benefits of this technical and managerial support beyond the life of this project with objectively verifiable milestones.

10.2.   Post-inception phase the key deliverables will include, but not limited to:

- Preparation and submission of quarterly financial and programmatic progress reports to the head of the WaSH coordination office and to DFID Ethiopia. These reports should clearly state progress against the milestones and timeline agreed during the inception phase;

- Biannual and Annual financial and programmatic progress reports;

- Final scope of work of the evaluation will be determined on the basis of the evaluative assessment, and accordingly the baseline, mid-term and end-term evaluations will be carried out and reports will be produced with clear recommendations for the future improvement of the programme; and,

- Production and dissemination of the M&E findings and best practices/findings from the evidence reviews.

- Deliverables for the post-inception phase will be finalized during the inception phase.

Table 1 below is a guide of the WaSH M&E programme deliverables.

Table 1: Table of Deliverables

Deliverable	Due By	Format	Recipient
Inception Report	End of April 2015	Report	DFID and National WASH Coordination Office representing GoE (NWCO)
Progress reports	Quarterly and Biannual starting from July and October 2015	Report	DFID and NWCO
Annual Reports	Dec 2015, 17	Report	DFID and NWCO
Mid-term evaluation	Dec 2016	Report	DFID and NWCO
Project Completion Report	Dec 2018	Report	DFID and NWCO
Impact Evaluation	Dec. 2018	Report	DFID and NWCO

11. Timing and Cost

11.1.   The duration of the contract is expected to be from January 2015 to December 2018 with a six months of inception phase and with gradual decrease in technical and managerial inputs from the around the midpoint of this assignment. (Indicative times for post-inception phase deliverables are mentioned in section 4.7.)

11.2.   The bidders/Providers are requested to submit separate budgets for the inception and post inception phase. The inception and post-inception phase budgets should have break ups by each major component at least by three tasks mentioned in SOW (i.e., Section-3 of this ToR). The total cost of this assignment should not exceed £4m including taxes and/or any other direct or indirect charges to accomplish all three tasks. Of the £4m, £1m will be allocated to fund critical gaps/goods and services required to fully operationalize the OWNP M&E system update the national WaSH Inventory, which will be handled by the WASH Coordination and National WASH Inventory Coordination Office. The Provider is expected to Pre – Finance the fund in addition to performing the fund manager role for this component. The fund manager will ensure DFID approval prior to disbarment of funds and shall l be responsible to ensure the efficient utilization of this fund and submit full accountability for this expenditure as per the DFID rules.

11.3.   The Supplier shall commit to being fully prepared in the event any decision is made to scale up (increase) or scale down (decrease) the scope of the Programme (i.e. in relation to the Programme's inputs, outputs, deliverables, outcomes and fund element) during the course of the contract

12. Background and Rationale

12.1. Ethiopia, home to over 90 million people, has not only registered an impressive annual economic growth of around 11% over the past decade but also has effectively leveraged the gains from economic growth to make progress towards the Millennium Development Goals (MDGs), in particular toward poverty reduction, education and health MDGs. However, the progress towards MDG-7 pertaining to WaSH has been mixed. Although proportion of people with access to improved water has increased from 14% in 1990 to 52% in 2011 as per the National WASH Inventory data, there are large differences between regions, and between rural and urban areas. Proportion of people with access to improved sanitation, which has increased from 2% in 1990 to 21% in 2011, is off-track to meet the MDG target. To accelerate progress towards WaSH MDGs, the Government of Ethiopia (GOE) has prioritized WaSH in their national Growth and Transformation Plan (GTP), and has developed a multi-sectoral WaSH Implementation Framework (WIF), a WaSH Monitoring and Evaluation (M&E) Framework and a One WaSH National Programme (OWNP). DFID is planning to invest £106 million over four years on the OWNP.

12.2. DFID support to OWNP is in line with DFID Ethiopia's Operational plan (Attachment#1) that sets out its vision to: (i) protect the most vulnerable by building the resilience of the very poorest, reducing food insecurity, and, improving livelihoods and security in fragile and/or conflict-affected areas; (ii) consolidate recent gains and help achieve the MDGs by continuing to support, extend and improve proven programmes to expand access to quality basic services; and (iii) make the impact of the UK's support more transformational. Based on DFID's analysis of need in the WaSH sector, the objectives for DFID's support for WaSH (as well as for health and education sector) in Ethiopia are: (a) Increasing access to and quality of services; (b) Increasing and measuring results and impact, and, (c) Increasing equity. The potential pathways (theory-of-change) through which these objectives will be achieved in the WaSH sector is described in the 'DFID Business Case for supporting the One WaSH National Program' (Attachment#2). Other DFID supported on-going and recently concluded programmes which complement the OWNP are presented in Table-1.

Table 2: Other DFIDE programmes that complement DFID's support to the OWNP

No	Programme	What it is supporting
1	Promotion of Basic Services (PBS), around 7% spend on water, 16% spend on Health) (2011-2018)	Recurrent expenditure mainly salaries. Pays for salaries of Woreda/district water staff and Health Extension Workers. It also supports strengthening of public financial management, social accountability and monitoring systems. (£510m)
2	DFID/IDA Water, Sanitation and Hygiene Programme (2007 – 2013)	Implementation of rural WaSH and town water supply schemes with related capacity building. (£66m)
3	Basic services in Somali Region (2013–2016)	Improving access to water, health and education in Somali region (£30m)
4	Productive Safety Net Programme (PSNP) (2010-2015)	The PSNP provides resources to food insecure households via payments to able-bodied members for work on labour intensive public works (including some basic water supplies and major soil and water conservation activities which raise the water table for domestic and agricultural use) and via Direct Support to incapacitated households. (£213m)
5	Health MDG Pooled Fund (2011-2015)	Supports Health Sector Development Programme (excluding salaries). Finances procurement of essential commodities, plus training, equipment and access to, and quality of, health services (£275m)
6	General Education Quality improvement Programme (GEQIP1, 2009-2013)	Targets improvements to overall quality of general education, and includes block grants to schools (£95m)
7	Strategic Climate Institutions Programme (SCIP) (2012-2015)	SCIP aims to help build Ethiopia's institutional capacity to respond to climate change inviting proposals from government, academia and civil society (£10m).

12.3.   The OWNP is a seven year (July 2013 to June 2020) multi-sectoral programme for achieving the WaSH sector goals set out in the GTP (Attachment#3). The GTP aims at providing universal access to safe water and sanitation facilities in Ethiopia. The GTP, among other things, targets for: (a) reducing the proportion of non-functional water points/facilities to 10%; (b) improving the practice of hand-washing at critical times to 77% of the population; and, (c) achieving open defecation free status in 80% of communities. The OWNP programme aims to achieve these targets by ensuring

equity and sustainability. The OWNP is formulated as per the provision of the WASH Implementation Framework (WIF), which calls for One Plan, One Budget and One Reprot (Attachment#4). The WIF was officially endorsed and signed by the WaSH Ministries namely, Ministry of Finance and Economic Development (MOFED), Ministry of Water, Irrigation and Energy (MOWIE), Ministry of Health (MOH) and Ministry of Education (MOE) in 2013 to guide the implementation of the programme. The WIF clearly defines major areas of cooperation between the four ministries such as joint planning, resource mobilization, implementation; creation of management and coordination structure and quality assurance, and the OWNP programme document clearly spells out how the WIF will be operationalized to maximize efficiency and impacts (Attachment-5). The OWNP (2013-2020) has four main components:

- Component-1 focuses on rural and pastoral WaSH and intends to construct over 55,000 new water points/water supply schemes, over 42,000 dug-wells and rehabilitate over 20, 000 existing water schemes. It also aims at improving access to improved latrines and hygiene services;

- Component-2 focus on urban WaSH to augment and expand the urban water supply schemes, sanitation practices, and management of wastewater and public toilets in all urban areas;

- Component-3 focuses on institutional WaSH for improving water supply and sanitation facilities and hygiene practices at all health institutions and schools; and,

- Component-4 focuses on programme management and capacity building of institutions and implementing partners at all level through training, post-construction management support, equipment, tools and support to monitoring and reporting.

12.4. A well-functioning M&E system is a critical part of good programme management. It is also an essential tool for maximizing impact, attaining value-for-money and ensuring accountability. Timely and reliable M&E provides information to improve programme implementation, organizational learning and knowledge sharing, and to reduce fiduciary risks. There is a clear commitment from the GOE to strengthen the national WaSH M&E systems to ensure generation of valid and reliable information on the WaSH status in Ethiopia, in a timely and transparent way, within the framework of the OWNP .

12.5. To encourage timely collection, aggregation, storage, sharing and analysis of WaSH data, the MOWIE, in consultation with MOH, MOE, development partners and others, has developed a WaSH M&E framework and manual (Attachment#6). The WaSH M&E framework and manual have been designed to carry out sector-wide, joint monitoring, review and evaluation. The WaSH M&E framework and manual include:

i. Analytical narratives for 15 key WASH performance indicators.
ii. A roadmap to develop and implement an integrated web-based Management Information System (WaSH MIS).
iii. A roadmap to prepare and maintain an up-to-date national WaSH inventory.
iv. Guidelines for the preparation of sector-wide periodic progress reports.
v. Commitment and guidelines for conduction of annual WaSH census in all schools and health facilities.

As per the WaSH M&E framework and manual, the following two key activities have been initiated:

- A web-based Management Information System (WaSH MIS) is being currently implemented in 52 Woredas (Districts) and the government is planning to scale it up to 300 more Woredas by 2014 and to all 900 Woredas in Ethiopia by 2015; and,
- The government has also established a National WASH Inventory Coordination office in the MOWIE and has prepared a National WaSH Inventory (NWI) to guide the planning and decision making processes.

In order to support the scale up of these efforts and assist GoE to fully operationalize the WASH M&E MIS system, DFID Ethiopia (DFIDE), through this ToR, is looking for a service provider (the "Provider") to provide technical and managerial support to the National WaSH Coordination Office (NWCO) to refine and fully operationalize the WaSH M&E system/framework. The refined WaSH M&E system will enable the sector to provide reliable data on a timely basis on: (a) access to clean water, sanitation and hygiene services disaggregated by gender (women and girls), disadvantaged groups (disabled, pastoralists, urban slum dwellers and rural poor) and location (rural, urban, Woredas, and regions); (b) resource allocation and utilization; and, (c) adherence to financial and programmatic implementation guidelines/frameworks, safeguards and risk mitigation measures. These guidelines/frameworks include: the OWNP Operational Manual (POM) (Attachment#7); the OWNP Environmental and Social Management Framework (ESMF) (Attcahment#8); the OWNP Resettlement Policy Framework (Attachment#9) and the recommendations of the OWNP (enhanced) Social Assessment (Attcahment#10). The Provider is also expected to undertake a robust evaluation, in collaboration with the MOFED, MOWIE, MOH, MOE and others, to assess the impact of the OWNP in ensuring equity and sustainability.

12.6. The Provider is expected to work closely with the MOWIE, MOH, MOE and MOFED and their regional and Woreda level organs, as well as with the development partners supporting the OWNP.

12.7. In addition to DFID, the World Bank, African Development Bank, and UNICEF have committed to support the OWNP but are at different stages of

preparedness to contribute to the government's Consolidated WaSH Account (CWA). The Government of Finland and the Government of Italy are considering supporting the CWA, but have not yet made firm commitments. In order to coordinate the planning, implementation and reporting of the OWNP the GOE has established a National WaSH Coordination Office as per the Memorandum of Understanding signed between the four Ministries.

12.8.   Similar to DFID, the Water Supply Programme Africa of the World Bank, the African Development Bank (AfBD) and UNICEF have earmarked resources to support the WaSH M&E. While support from the AfDB is likely to focus on strengthening the WaSH M&E infrastructure, the DFID and World Bank support are likely to focus on providing technical and managerial support for rolling out the WaSH MIS, updating the National WaSH Inventory on an annual basis, monitoring of the 15 key WaSH indicators, mainstreaming gender in the WaSH planning and delivery processes. Support from other development partners (DPS) are also being designed to complement each other.

12.9.   To facilitate complementarity and collaboration, recently the GOE, through the National WASH Coordination Office has requested DFID and AfDB to co-lead on the process of refinement, operationalization of WaSH M&E and also to coordinate DPs engagement in supporting the sector M&E as per the provision of the OWNP Programme Operational Manual (POM) .

12. Appendices

1. DFID Ethiopia Operational Plan
2. DFID Business Case for supporting the One WaSH National Program
3. GOE's Growth and Transformation Plan (GTP)
4. One WaSH Implementation Framework
5. One WaSH National Program Document August 2013
6. One WaSH National M&E Framework and Manual
7. One WaSH National Program Operational Manual (POM)
8. One WaSH National Program Environmental and Social Management Framework (ESMF)
9. One WaSH National Programme Resettlement Policy Framework
10. One WaSH National Programme Ethiopia Social Assessment
11. DFID log-frame for supporting the One WaSH National Programme