

# TECHNICAL & FINANCIAL FILE

## INSTITUTIONAL STRENGTHENING AND CAPACITY DEVELOPMENT OF EWSA ELECTRICITY UTILITY

### RWANDA

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THE BELGIAN  
DEVELOPMENT COOPERATION **.be**

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## ABBREVIATIONS

<b>ACRONYM</b>	<b>DESCRIPTION</b>
AfDB	African Development Bank
AFREA	Africa Renewable Energy Access Program
BADEA	Arab Bank for Economic Development in Africa
Bdi	Burundi
BTC	Belgian Development Agency
CB	Capacity Building
CBF	Capacity Building Fund
CBP	Capacity Building (Action) Plan
CD	Capacity Development
CNA	Capacity Needs Assessment
CS	Cluster Specialist
DFID	Department for International Development
DRC	Democratic Republic of Congo
DP	Development Partner
EARP	Energy Access Rollout Programme
EDPRS	Economic Development and Poverty Reduction Strategy
EGL	Energy of the Great Lakes Countries
ELECTROGAZ	Établissement Rwandais de Distribution de l'Eau, de l'Electricité et de Gaz
ENDEV	Energizing Development Program
EPRER	Access to Electricity for the Rural Population by Utilization of Renewable
ESSP	Energy Sector Strategic Plan
EU	European Union
EUEI PDF	European Union Energy Initiative Partnership Dialogue Facilities
EWSA	Energy, Water and Sanitation Authority
FED	Fond Européen de Development
FRW	Rwandan Franc
GDP	Gross Domestic Product
GEF	Global Environmental Facilities
GIS	Geographic Information System
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GO	General Objective

GoR	Government of Rwanda
GPS	Global Positioning System
HR	Human Resources
HV	High Voltage
ICP	Indicative Cooperation Programme
ICT	Information and Communications Technology
IFDC	International Fertilizer Development Center
IPP	Independent Power Provider
IREARPPP	Increase Rural Energy Access in Rwanda through Public Private Partnerships
JICA	Japan International Cooperation Agency
KfW	Kreditanstalt für Wiederaufbau
KPI	Key Performance Indicator
KWh	Kilowatt-hour (Unit' of electricity)
Ken	Kenya
LV	Low Voltage
M&E	Monitoring and Evaluation
MDGs	Millennium Development Goals
MIFOTRA	Ministry of Public Services, Skills Development and Labour
MINAGRI	Ministry of Agriculture and Animal Resources
MINEAC	Ministry for East African Cooperation
MINALOC	Ministry of Local Government and Social Affairs
MINECOFIN	Ministry of Finance and Economic Planning
MINIRENA	Ministry of Environment and Lands
MINICOM	Ministry of Trade and Industry
MININFRA	Ministry of Infrastructure
MOU	Memorandum of Understanding
MTEF	Medium Term Expenditure Framework
MW	Megawatt (measure of electrical power or capacity)
MV	Medium Voltage
NBI	Nile Basin Initiative
NECC	National Electricity Control Center
NDF	Nordic Development Fund
NELSAP	Nile Equatorial Lakes Subsidiary Action Program
NGO	Non-Government Organization

NL	(The) Netherlands
O&M	Operations & Management
PAREF Project	The Project of Support Program to the Development of the Forestry Sector in
PM	Prime Minister
PMU	Project Management Unit
PPA	Power Purchase Agreement
PPP	Public-Private Partnership
PRSP	Poverty Reduction Strategy Paper
PSCBS	Public Sector Capacity Building Secretariat
PV	Photovoltaic
RAF	Responsible for Administration, Finance (and procurement)
RAFi	International Responsible for Administration, Finance (and procurement)
RBEP	Regional Biomass Energy Program
RBS	Rwanda Bureau of Standards
RDB	Rwanda Development Board
RECO	Rwanda Electricity Corporation
REFIT	Renewable Energy Feed in Tariff
REMA	Rwanda Environmental Management Authority
RRA	Rwanda Revenue Authority
RURA	Rwanda Utilities Regulatory Agency
Rwa	Rwanda
RWASCO	Rwanda Water and Sanitation Corporation
RWF	Rwandan franc
SCADA	Supervisor Control and Data Acquisition
SED Project	Sustainable Energy Development Project
SCBI	Strategic Capacity Building Initiative
SDF	Skill Development Fund
SO	Specific Objective
SPIU	Single Project Implementation Unit
SWAp	Sector Wide Approach
SWG	Sector Working Group
SWOT	Strengths, Weaknesses, Opportunities and Threats
TA	Technical Assistant
Tza	Tanzania

TFF	Technical and Financial File
Ug	Uganda
UNDP	United Nations Development Program
USAID	United State Agency for International Development
VAT	Value Added Tax
Vision 2020	Rwanda Vision 2020 (long-term development programme)
WB	World Bank
WDA	Workforce Development Authority

## EXECUTIVE SUMMARY

The Government of Rwanda has embarked on a process of public sector reform through which a new implementing institution in the energy sector was created in 2011, namely the Energy, Water and Sanitation Authority (EWSA). This Authority is meant to implement the national energy policy and strategy. However, EWSA, being a relatively new institution, has a need for expert support in order to enable the organization to execute its mandate successfully.

In the framework of the ICP 2011-2014 between Rwanda and Belgium, support to the development of the Energy sector through institutional strengthening and capacity development has been foreseen. The goal of the present intervention is to transform this engagement into action by strengthening the functioning and performance of the Electricity Utility within EWSA.

In order to support the EWSA Electricity Utility, an amount of **5 million €** is foreseen for direct support to this directorate. The duration of the intervention is **4,5 years** and the proposed General and Specific Objectives are:

- **General Objective:** “The Energy sector is able to provide sufficient, reliable and affordable energy for all Rwandans”
- **Specific Objective:** “EWSA's Electricity Utility is able to provide, in a sustainable way, reliable energy to its customers.”

Three outputs (results) have been identified:

- **Output 1:** Operations and maintenance of electricity infrastructure in the pilot district are strengthened in order to contribute to the overall reliability of electricity infrastructure in Rwanda.
- **Output 2:** Management and support functions at the Electricity Utility central level are strengthened in order to increase the Utility's performance and enhance strategic management.
- **Output 3:** EWSA's staffing and competence development functions are strengthened in order to contribute to the Utility's performance

Capacity Development support in this intervention will take multiple form like coaching and mentoring, industrial attachment and especially long, medium and short term technical assistance. The intervention will also provide minor logistical support. Regarding technical assistance, the intervention will align with the principles described in the Aid Manual of Rwanda (prioritize transformational over transactional activities, focus on the transfer of capacity).

Furthermore, in line with the Paris Declaration, the Aid Agenda of Accra and the Rwanda Vision 2020, this intervention will combine various modus operandi, depending on the management areas. No matter the choices made in terms of systems and responsibility modes, partnership, collaboration, transparency and mutual information will apply in managing the intervention.

Finally, regarding the cross cutting issues, the focus of this intervention will be mainly on gender and environment.



## ANALYTICAL RECORD OF THE INTERVENTION

DGD National Number	3012664
BTC Navision Code	RWA 12 083 11
Partner Institution	Ministry of Infrastructure (MININFRA) Energy, Water and Sanitation Authority (EWSA)
Duration of Specific Agreement	66 months
Duration of implementation	54 months
Rwandan Contribution	Estimation: 170.000 € (in kind)
Belgian contribution	5 000 000 EUR
Estimated date for Signature of Specific Agreement	Not specified
Intervention Sectors	23010 : Energy policy and administrative management <i>Energy sector policy, planning and programmes; aid to energy ministries; institution capacity building and advice; unspecified energy activities including energy conservation</i>
General Objective	The energy sector is able to provide sufficient, reliable and affordable energy for all Rwandans
Specific Objective	EWSA's Electricity Utility is able to provide, in a sustainable way, reliable energy to its customers.
Intermediate Results	<p><b>Output 1</b> : Operations and maintenance of electricity infrastructure in the pilot district are strengthened in order to contribute to the overall reliability of the electricity infrastructure in Rwanda</p> <p><b>Output 2</b>: Management and support functions at the Electricity Utility central level are strengthened in order to increase the Utility's performance and enhance strategic management</p> <p><b>Output 3</b>: EWSA's Human Resource staffing and competence development functions are strengthened in order to contribute to the Utility's performance</p>

# 1 SITUATION ANALYSIS

## 1.1 The general policy context for the Energy Sector

### 1.1.1 Vision 2020 and the importance of the energy sector

In its **Vision 2020** document, written in 2000, the GoR described what Rwandan society and economy should look like in 2020. The major aspiration was to transform the country into a middle income country. The accomplishment of this ambition would require an annual economic growth rate of at least 7%. In order to bring about the necessary rise in the standard of living of the population, growth would also have to be Pro-Poor, giving all Rwandan's the chance to gain from the new economic opportunities.

Vision 2020 has been converted into action by a series of medium-term strategic plans. The first was the **Poverty Reduction Strategy (PRSP)** finalized in 2001. This was the Government of Rwanda (GoR)'s first systematic assessment of the actions needed to reduce poverty and generate pro-poor economic growth. It was followed by the Poverty Reduction Strategy Paper (PRSP) which covered 2002-2006, and subsequently the Economic Development and Poverty Reduction Strategy (EDPRS I) covering the period 2008-2012.
















**EDPRS I (2008-2012)** marked a distinct change in the approach to development. A key conclusion of the PRSP experience was that the social sectors (particularly health and education) had been well addressed through the previous programmes, while the real economy i.e. the sectors dealing with the production of goods and services, had not. Priority was, therefore, given to accelerating growth, creating employment and generating exports. These were to be catalyzed through public investment in infrastructure, and through regulatory reform. These strategies were intended to reduce the costs and risks of doing business and to create an attractive environment for private sector investment and activity.

During the last few years, Rwanda's economy has been growing at an annual average rate of 8.3%. In its new Economic Development and Poverty Reduction Strategy (**EDPRS II 2012-2017**), the GoR is even projecting an average annual growth of 11.5% between 2013 and 2018. According to the GoR's vision, economic growth will be, among other things, driven by the **uninterrupted provision of energy at prices that are stable and regionally competitive**. Therefore, access to modern sources of energy (petroleum and electricity) at affordable prices will be essential if the country is to achieve this objective. These energy sources are crucial when it comes to developing the services sector and the industry in Rwanda.

On the other hand, the provision of cost effective and appropriate energy solutions to the poor must also contribute to poverty alleviation, particularly in rural areas where energy services are currently scarce or expensive.

### 1.1.2 The evolution of the Energy sector

Given the GoR's ambition, no single energy source on its own will be able to meet the energy needs of the country in the coming years. Each energy source has its own unique characteristics and the choice of the most appropriate source of energy depends on its foreseen use. The figure below, taken from the Energy Sector Strategic Plan 2013-2018, illustrates the proportion of energy the GoR expects to obtain from bio-products, petroleum products and electricity for different uses in the future. The red arrows illustrate where significant increases in the use of particular energy sources are expected in order to drive the economic growth or the poverty reduction targeted under the EDPRS II.

	Transport	Heating and Cooking	Lighting	Modern Domestic and commercial Technologies	Industrial processing
Bio-products	 Small fraction of transport expected to use Biofuels	 Bio-products dominate; transition away from wood to charcoal and Biogas.		 none	 Small use of Bio-products e.g. wood burning for tea processing
Petroleum	 Vast Majority of transport will continue to use petroleum products	 LPG will be used but will remain a luxury for the urban wealthy	 Kerosene may be used but Electricity will dominate	 none	 Petroleum to be used for heavy machinery or where grid connections are unavailable
Electricity	 Electric Vehicles not envisaged in the next 5-years	 Electricity will not make economic sense for heating and cooking	 We expect a significant increase in both on and off-grid electricity for lighting	 Electricity will be the only possible option	 We expect a significant increase in Electricity use for industrial processing

**Figure 1:** Illustrative view of portion of energy from different sources in 2017

From the figure above, it is clear that bio-products will remain the most appropriate and cost-effective source of energy for heating and cooking. The 5-year strategy of the GoR for the period 2012-2017 is to encourage cleaner, more efficient and sustainable uses of bio-products by transitioning away from wood to more advanced technologies such as biogas and by making the production and use of charcoal more efficient.

As far as petroleum is concerned, it is clear that the demand for this source of energy will continue to rise. The envisaged eradication of the need to burn diesel for electricity production will be more than off-set by the increased need for petroleum products in transportation, particularly aviation, and heavy industry.

Finally, though it currently represents a small portion of Rwanda's Energy mix, electricity will become very important in the future since it is necessary for modern sectors such as manufacturing and ICT. Therefore, increasing levels of both access and generation capacity is vital if the country is to achieve the levels of economic growth and poverty reduction that are targeted over the coming 5-years.

## 1.2 EDPRS II and the electricity sub-sector

### 1.2.1 Objectives and strategies for the electricity sub-sector

In order to make sure that the energy sector effectively contributes to economic growth and poverty alleviation, the GoR has set specific objectives and targets in the EDPRS II<sup>1</sup> for the energy sector:

1. Increase Rwanda's electricity generation capacity to 560 MW, leveraging large-scale private sector investment by 2018;
2. 100% of the Rwandan urban and rural households have access to electricity (on and off-grid), by 2018

<sup>1</sup> Economic development and poverty reduction strategy (EDPRS II), 2013 – 2018, *Shaping our development*, draft 26 march 2013

3. Electricity in Rwanda needs to be provided at a regionally competitive tariff

In the Energy Sector Strategic Plan 2013-2018, these objectives are represented as follows:

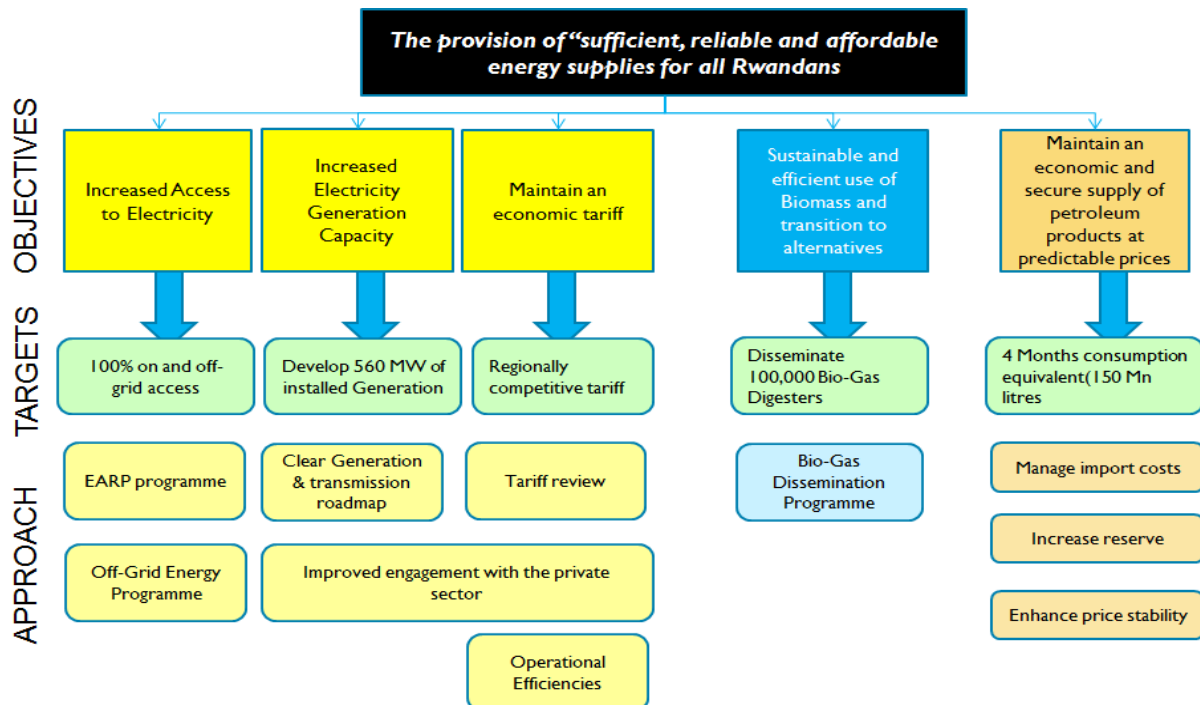


Figure 2: Summary of Energy sector Vision, Objectives, Targets and strategic approaches

The strategic approaches for all three objectives are discussed in more detail below.

**1. Increasing electricity generation capacity**

For this objective, the focus is on the exploration and use of alternative and renewable sources of energy such as geothermal energy. The GoR is well aware that the investments needed to increase the production of electricity can not only be provided by the government. Therefore, a lot of effort will have to go into attracting private sector investors through Public Private Partnerships (PPPs). One of the ideas in the Energy Sector Strategic Plan is to create an Energy Development Fund that will finance technical and commercial feasibility studies for specific projects in which a private investment is required. Moreover, the GoR will continue to streamline the process of obtaining licenses and permits for private companies.

**2. Increasing access to electricity**

As far as the “Access to Electricity” is concerned, the strategic approach of the GoR, proposed in the Energy Sector Strategic Plan 2013-2018 and the EDPRS II, is twofold:

- On the one hand, the GoR wants to continue its efforts, under the EARP programme, to connect rural households to the national electricity grid.
- On the other hand, the GoR also emphasises the need for off-grid solutions, especially in remote geographical areas where levels of consumption are too low to justify a grid extension and connections to the national grid. In such cases, the GoR is envisaging off-grid solar power and hydro power installations to provide electricity to the local population.

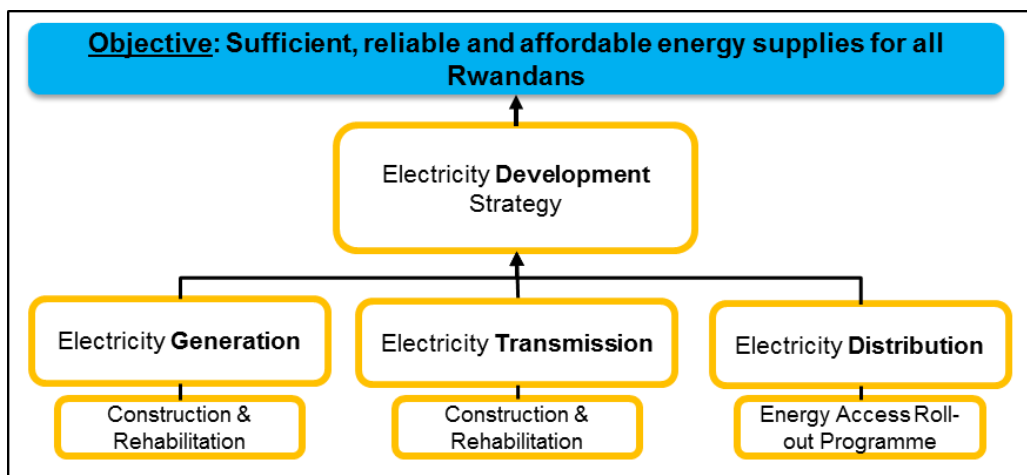
### 3. Assuring and maintain a regionally competitive tariff

The current electricity tariff is heavily subsidized, with about 20% of EWSA's revenue coming through government subsidies in 2011/12<sup>2</sup>. These subsidies were introduced to insulate consumers from the impact of the costly diesel-powered electricity generation EWSA needed to employ as other generation capacity failed to keep pace with consumer demands. As a first step to evolve towards a regionally competitive tariff, the GoR has decided in its Energy Sector Strategic Plan to transition away from rental diesel by 2015. As a result the costs to EWSA of generating electricity is expected to drop significantly and by then it might no longer be necessary to grant direct subsidies to the electricity tariff. This means that by then EWSA's tariff will have to become completely cost reflective.

But transitioning EWSA away from operational subsidies is only one part of assuring a regionally competitive tariff. In fact, there are a number of areas through which EWSA could increase operational efficiency, thus reducing operation and maintenance costs and increasing revenues. Since the operational costs of EWSA have a direct impact on the height of the tariff, improvement of operational efficiency would certainly contribute to a further decrease of the electricity tariffs.

#### **Conclusion**

As demonstrated above, GoR's focus for the electricity sub-section in the coming years is on increasing electricity generation and transmission/distribution capacity. Schematically, the strategy of the GoR to assure the "provision of sufficient, reliable and affordable energy supplies for all Rwandans", described in the Energy Sector Strategic Plan, can be presented as follows:



**Figure 3:** Schematic representation of the GoR strategy for the Electricity sub-sector

As DPs have adopted the same logic, the bulk of their support is directed to Electricity Generation and Access while Operations and Maintenance of existing infrastructure have not received as much support. (See 1.3.2). However, the envisaged increase in Electricity Generation and Access will have to be paralleled by an increase in operational and maintenance capacity in EWSA. If not, the projected achievements in the Strategic Plan will remain largely theoretical and will not produce the desired impact in terms of economic and pro-poor growth. This assertion will be further developed in the following chapters.

#### 1.2.2 Capacity Development in EDPRS II

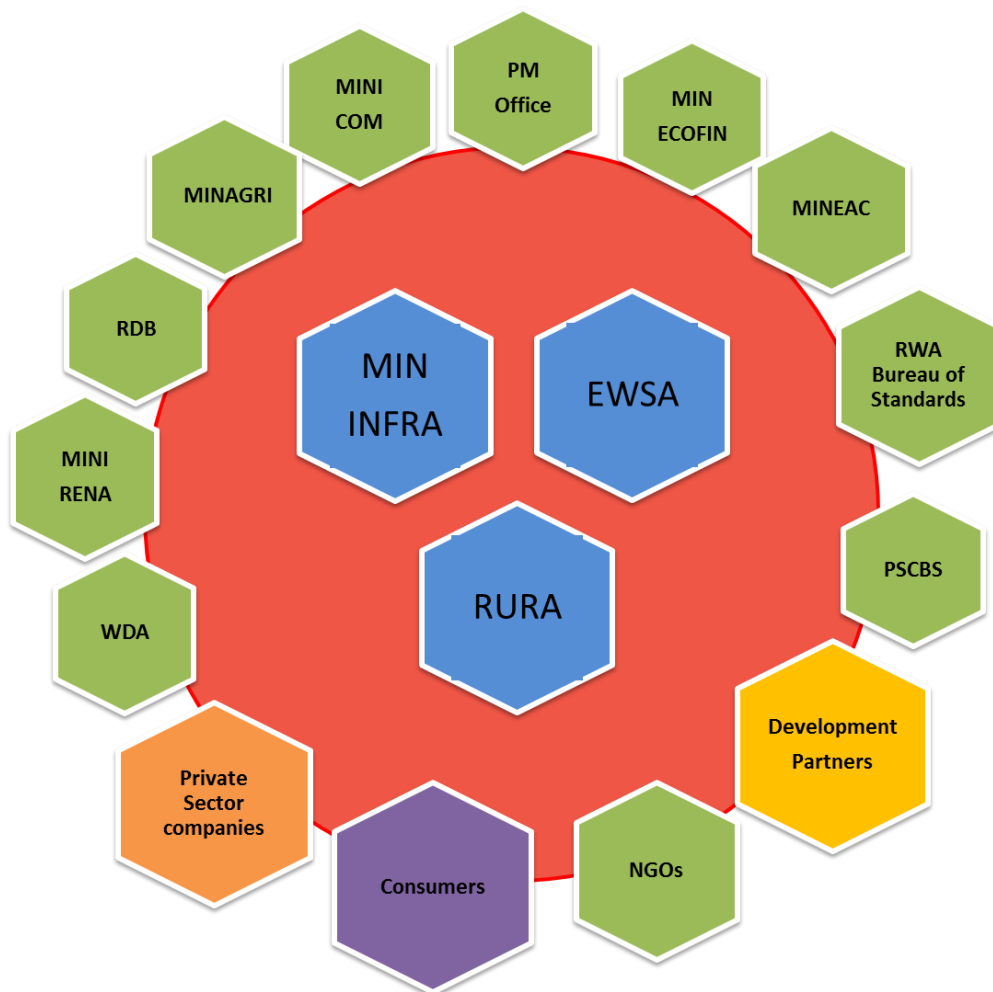
In EDPRS II, the GoR clearly recognizes that the ultimate success of its strategy will depend on the

<sup>2</sup> Based on preliminary information provided by EWSA.

capacity of sectors, delivery institutions and districts to deliver under each of the thematic areas of EDPRS II. Therefore, **capacity development** is considered to be a **crucial element** of the strategy and an integral component in all sectors. In 1.5, the CD approach of the GoR and the role of PSCBS in this context will be further described.

### 1.3 Stakeholders in the electricity sub-sector

A considerable number of stakeholders are currently active in the electricity sub-sector. The figure below shows the three main public stakeholders (center) together with other public and private stakeholders.



**Figure 4:** Schematic overview of public and private stakeholders in the Electricity sub-sector

Below, a more detailed overview of the main actors is provided, together with a brief explanation of their institutional role in the sub-sector.

### 1.3.1 Overview of main public stakeholders in the electricity sub-sector

STAKEHOLDER	INSTITUTIONAL MANDATE
<b>MININFRA</b>	The <b>Ministry of Infrastructure</b> is primarily responsible for setting the overall policy and strategy of the energy sector, and for coordinating the developments of the electricity sub-sector.
<b>EWSA (see 1.5)</b>	As the implementing agency, the <b>Energy Water and Sanitation Authority</b> is responsible for the development and operation of electricity infrastructure. EWSA is also the single buyer of electricity produced by Independent Power Producers (IPPs) and is therefore ultimately responsible for negotiations with the private sector.
<b>RURA</b>	<p>The <b>Rwanda Utilities Regulatory Agency</b> is responsible for the oversight of the energy sector. Its responsibilities include:</p> <ul style="list-style-type: none"> <li>• Approving tariffs that allow EWSA to recover efficiently incurred costs but protect consumers and tax-payers from inefficiencies.</li> <li>• Reviewing requests from new private investors and issuing licenses to allow them to enter the market.</li> <li>• Establishing the feed-in tariff an Independent Power Producer (IPP) would receive for supplying energy to the national electricity grid.</li> </ul>
<b>MINECOFIN</b>	The <b>Ministry of Finance and Economic Planning</b> is responsible for developing clear strategies to stimulate private investments in the energy sector. This includes the establishment of risk mitigation strategies such as establishing MIGAs (Multilateral Investment Guarantee) and PPP arrangements.
<b>RDB</b>	The <b>Rwandan Development Board</b> is responsible for promoting the Energy sector, seeking private investors, and assuring investor care. RDB will also provide contract negotiation expertise.
<b>MINIRENA</b>	The <b>Ministry of Natural Resources</b> is responsible for ensuring that natural resources such as hydro, peat, and geothermal are used in an efficient and environmentally sustainable manner.
<b>MINEAC</b>	The <b>Ministry for East African Cooperation</b> is responsible for the coordination of implementation of regional energy projects and programs. In this domain, MINEAC is closely working together with MININFRA.
<b>PSCBS (see 1.6)</b>	The <b>Public Sector Capacity Building Secretariat's</b> mandate is to guide, facilitate and coordinate the implementation of capacity building interventions in the public sector in Rwanda. More specifically, PSCBS is



	to be systematically involved in the design of CB in the public sector, act as the guarantor of quality for the implementation of CB components and coordinate the monitoring of CB.
<b>Other stakeholders e.g. MINAGRI, MINALOC, WDA)</b>	Electricity provision is vital to all economic and social sectors in Rwanda. Therefore, the different sector ministries also have a role to play in the electricity sub-sector, especially in the field of policy making. On the other hand, the electricity sub-sector is active in a broader institutional context and therefore, it is also influenced by transversal public actors such as MINALOC and the WDA.

**Table 1:** Overview of public stakeholders in the energy sector

### 1.3.2 DP's interventions in the Electricity sub-sector

As already mentioned under 1.2.1, the support provided by Development Partners is mainly focused on Electricity Generation and Access through numerous building projects of power plants but also transmission and distribution infrastructure (See type: **Infra**). Out of the 50 interventions mentioned here below, only 4 of them specifically address capacity building issues in the energy sector (Type: **CD**). Leaving aside the regional initiative, only 3 Capacity Development interventions remain. The corresponding rows are highlighted in grey.

Funding source	Programme/ Project	Type	Areas of focus	Amount	Dates / Duration
World Bank	Gicumbi Project	<b>Infra</b>	Electrification of the Gicumbi area from Rukomo to Rwesero (78Kms of MV and around 4000 Households)	4,4 M\$	n.c
	Janja Project	<b>Infra</b>	Electrification of Gakenke district (56 Kms of MV and around 3000 consumers)	5,1 M\$	n.c
	Gikomero project	<b>Infra</b>	Electrification of Gikomero and Rutunga sectors of Gasabo district. (20Kms and 2000 consumers)	1,4 M\$	n.c
	Northern Province	<b>Infra</b>	200 Kms of Low Voltage line + 10,000 connections in the Northern province	900 MRWF	n.c
	National electrification planning	<b>Plan</b>	SOFRECO consultancy to make a 5 year national electrification plan for the whole country.	n.c	n.c
	EARP	<b>Infra</b>	EARP phase 1	75 M\$	2009 - 2014
	SED Project -	<b>Infra</b>	Geothermal Compact (New global geothermal facility) co financed by GEF and AFREA/Netherlands and NDF	8 M\$ - 50 M\$	n.c
	<b>Planned</b>	<b>Infra</b>	Regional Rusumo Falls Hydropower Project including the transmission network- possible co-financing from AFDB, Netherlands Embassy and others	Est 490 M\$	n.c
	<b>Planned</b>	<b>Infra</b>	60M USD for Electricity Access Scale-up and Sector-wide Approach Development Project + 10M USD for green connexions (GEF), solar water heaters, PV and efficiency	70 M\$	2013-2016
		<i>Support to SCBI</i>	<i>CD</i>	<i>18 experts in the EWSA Electricity Development Directorate and in the Corporate Services</i>	



Embassy of NL	Bungwe Project	Infra	Gicumbi and Butaro districts (43Kms of MV line and 3000 consumers)	4,3M\$ 49,MFrw	n.c
	Western Province	Infra	150 Kms of MV line under construction in the Western Province	1,3 M\$	n.c
	Western Province	Infra	295 Kms of LV line in the Western province + 25,000 connections	1,300 MFrw	n.c
	EARP	Infra	EARP phase 1, through MINECOFIN, implemented by EWSA	30 M€	2009 - 2014
	NELSAP/NBI	Infra	Interconnexion project	24.75 M\$	n.c
	Kiwuatt Project	Infra	transmission line Kigali to Goma with KfW and AfDB	25 M \$	n.c
	PAREF Project	Infra	Delegated cooperation to BTC	10 M€	2008-2013
	RBEP Biomass	Infra	Biomass projects and renewable energy in Rwanda, Burundi, DRC, implemented by IFDC	20 M€	n.c
	ENDEV	Infra	Contribution managed from The Hague	70 M€	n.c
	Planned	Infra	Rusomo Falls project with Rwanda, Burundi and Tanzania	12 M€	n.c
Planned	Infra	Possible support to EARP 2 <sup>nd</sup> phase	20 - 25 M€	July 2013 ?	
KfW / GIZ	Planned: Co-financing of the Hydro Master Plan	Plan		150 K€	n.c
	Regional transmission lines	Infra	Co funding regional line between Rwanda and DRC with AfDB (19M €) and the Netherlands (25 M € through KfW) Transmission line between Burundi (3M €) and Rwanda (19M €) + co funding EU (16M € through KfW)	n.c	n.c
	Planned: RUSIZI 3	Infra	Hydropower project (145MW), support in development phase,	22 M€	n.c
	Capacity Building in EGL	CD	Risk mitigation facility at regional level (Rwa, Ug, Ken, Tza, Bdi) with EU: envelope managed by the African Union	50M €	n.c
	Planned		EARP phase 2	n.c	n.c
	Planned: RUSOMO	Infra	KfW could finance transmission lines	n.c	n.c
Belgium	EPRER I + complement	Infra	Interconnection of the electric lines of the West (Rustiro, Rubavu) and the South (Nyaruguru) Electrification of 50 health centers with solar energy. Construction of the Micro-hydro power plant of Rukarara II (2MW). Financial support of the national and regional institutions of energy EWSA and that of EGL.	17,5 M €	19/12/2007 – 18/12/2011
	Planned	Infra	National Electricity Access Rollout Program EARP 2	17 M€	2014 ?
	Planned	Infra	Geothermal Development	27 M€	2014 ?

	<b>Planned</b>	<b>Infra</b>	Private sector participation through development of adequate FIT	6 M €	2014 ?
	<b>Planned</b>	<b>CD</b>	<b>Institutional Strengthening and capacity Building of EWSA Electricity Utility</b>	<b>5 M €</b>	<b>2014 ?</b>
<b>EU</b>	IREARPPP	<b>Infra</b>	Rusizi III: Evacuation & distribution line to Rwanda + safety assessment of Rusizi I & II dams	4,1 M €	n.c
	<b>Under discussion, while programming the 11th FED</b>	<b>Infra</b>	Support of energy sector in Rwanda and in the region	Est 100 M\$	2014 ?
			Increased rural access to Electricity through PPP	n.c	27/04/2007 – 31/12/2014
	<b>In preparation:</b>	<b>Infra</b>	Geothermal Development / EUEI PDF : Geothermal Initiative for Eastern Africa	n.c	
<b>AFD</b>	Cyanika Miko Project	<b>Infra</b>	Electrification of Nyamagabe district. (8Kms of MV and 712 consumers)	1,3 M\$	n.c
	EROP			3.3 M€	
	<b>Planned</b>	<b>Infra</b>	Contribution to EARP 2	10M US\$	2014 ?
	<b>Planned</b>	<b>Plan</b>	Co-financing of the Hydro Master Plan	150 K€	n.c
<b>GoR</b>	Eastern province	<b>Infra</b>	Electrification of 6 districts in the Eastern province + 50,000 consumers.	68.6 M\$	By end of March 2013
	<b>Planned</b>	<b>Infra</b>	Contribution to EARP 2, counterpart to AfDB	4 M\$	2014 - 2017
<b>Japan</b>	<b>JICA CD intervention</b>	<b>CD</b>	<b>Technical Cooperation Project for EWSA's Capacity Building for Efficient Power System Development</b>	<b>4,5 M\$</b>	<b>From Mar, 2011 to Feb, 2014</b>
		<b>Infra</b>	Grant Project for Improvement of Substations and Distribution Network	30 M\$	From Feb, 2012 to Sep, 2013
		<b>Infra</b>	Geothermal Energy Development		
<b>USAID</b>	Planning phase	<b>Plan</b>			
<b>Exim India</b>		<b>Infra</b>	Construction of Nyabarongo hydropower plant		2009 - 2013
<b>BADEA / SDF</b>		<b>Infra</b>	Increase electricity access in 3 areas in Rwanda Project		2009 - 2012
<b>AFDB</b>	<b>Planned</b>	<b>Infra</b>	Contribution to EARP 2	42 M\$	2014 - 2017
<b>OFID</b>		<b>Infra</b>	With BADEA : Three hydroelectric power station rehabilitation (Gihira, Gisenyi and Mukungwa)		2005 - 2011
	<b>Planned</b>	<b>Infra</b>	Contribution to EARP 2	12 M\$	Sept 2012

**Table 2:** Overview of Development Partners in the energy sector

Information kindly completed and corrected by the e-SWAP Secretariat (March 2013, MININFRA, Rwanda)

*Not official - Still subject to change*

### 1.3.3 Other actors

#### 1.3.3.1 Independent Power Providers

Independent Power Providers (IPPs) are private companies that construct and/or operate Electricity Generation infrastructure in the country. These IPPs conclude a Power Purchase Agreement (PPA) with the EWSA Electricity Utility based on which they receive a fixed price per kWh that they produce for the national grid, the so-called feed-in tariff. In February 2012, a general Renewable Energy Feed in Tariff (REFIT) has been approved by the GoR. This approval was a significant step towards attracting private sector investments in renewable energy generation. In fact, the existence of a standardized tariff leads to increased investor certainty and removes the need to negotiate each contract on an individual basis. This approval is only one of the measures taken by the GoR to facilitate private sector involvement in the Energy sector. Another measure, also mentioned under § 1.2.1, is the creation of an Energy Development Fund that will finance technical and commercial feasibility studies for specific Energy Generation projects.

For the moment, private sector actors are only active in Electricity Generation in Rwanda. However, the Rwandan Electricity Law, voted in 2011, also foresees private sector involvement in Electricity Transmission and Distribution.

#### 1.3.3.2 Electricity Consumers

In the group of electricity consumers, a distinction has to be made between **household consumers** and **big (industrial) consumers**.

##### *Household consumers*

Although the high population density should facilitate network expansion and access to electricity, in 2012 only 16% of Rwanda's households were connected to the national electricity grid. However, through the EARP programme, the GoR has stepped up its effort to provide access to the national grid for more households, especially in rural areas.

Connections to the national grid for rural households are for the moment heavily subsidized. Currently a customer is expected to make a direct contribution of around 56000 RWF to the cost of their connection. This contribution will be paid off in monthly installments over a period of approximately 10 years. The rest of the cost is borne by the GoR or by DPs.

Consumers are currently **not represented through consumer organizations**. However, in case of commercial disputes, individual consumers can contact EWSA directly through its call-center. Moreover, consumers can also file an official complaint through the Regulator (RURA).

##### *Big consumers*

EWSA currently has around 1100 big customers among which ministries, embassies, industrial customers etc. For these customers, EWSA Commercial Unit employs dedicated account managers who provide them with extra service.

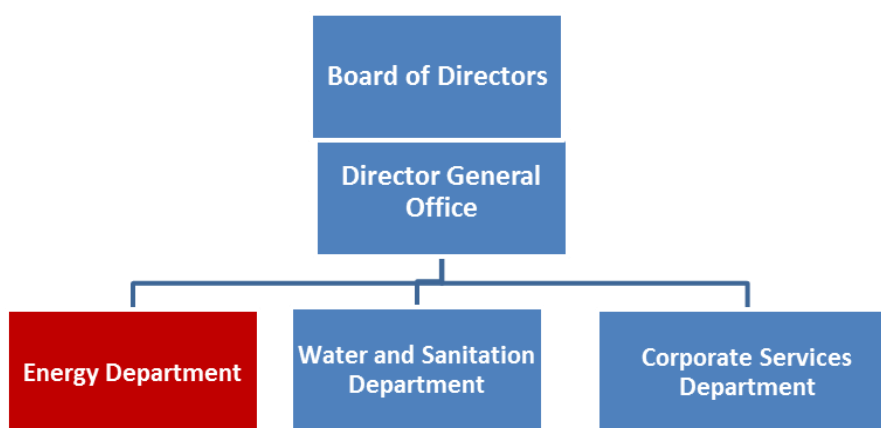
As stated in EDPRS II, providing efficient connection for these types of customers, especially industrial customers, is one of the priorities for the Energy sector.

## 1.4 Electricity, Water and Sanitation Authority (EWSA)

### 1.4.1 High level structure

The Electricity, Water and Sanitation Authority (EWSA) was established in 2010 under law N°43/2010 by merging the National parastatals in charge of water and electricity distribution, RECO and RWASCO. Its main mission is “to implement Government Policy for developing energy, water and sanitation sectors through the coordination, conception, development, monitoring and evaluation of the actions and programmes that are within the framework of its mandate”. Practically, this means that EWSA, as an implementing agency, is responsible for developing and operating electricity, water and sanitation infrastructure in the country and for all activities that can contribute or are related to this objective. In EWSA’s organic law, activities such as conducting studies, data collection, sensitization of consumers and investors, etc. are identified.

Legally, EWSA’s structure and staff level is determined under the Prime Minister’s Order N°41/03 of 20/05/2011. The organizational chart below illustrates the high-level organizational structure of EWSA.



**Figure 5:** High-level organizational chart of EWSA

Since early 2013, the organizational chart, including the number of staff members is being reviewed and a draft version of the new chart has been submitted to the cabinet of the Minister of Infrastructure<sup>3</sup>. The draft version of the new organizational chart maintains the high-level organizational structure, as depicted above. However, there is a difference between the number of staff foreseen in the PM’s Order and the new proposition. The table below summarizes the proposed changes, comparing the number of staff members defined in the current PM’s Order with those in the new proposition.

	<b>Prime Minister’s Order 2011</b>	<b>New proposition 2013<sup>4</sup></b>
Director General Office	37 staff members	33 staff members
Energy Department	669 staff members	809 staff members
Water and Sanitation Department	756 staff members	836 staff members
Corporate Services Department	277 staff members	324 staff members

**Table 3:** EWSA’s foreseen evolution in terms of staffing (2011-2013)

<sup>3</sup> Information based on a draft version that was not yet approved by cabinet.

<sup>4</sup> Information based on a draft version that was not yet approved by cabinet. These numbers do not include 87 staff members in the envisaged Energy SPIU and 54 staff members in the envisaged Water SPIU.

In general, the Energy Department is responsible for developing and operating Energy infrastructure in EWSA, while the Water and Sanitation Department has the same role for infrastructure related to water provision and sanitation. The Corporate Services Department bundles all support functions such as HR, financial management, procurement, etc.

### 1.4.2 The Energy Department within EWSA

Complementing EWSA's high level structure explained above, the Energy Department's detailed structure is explained below. Since the water and sanitation department is out of scope of the present intervention, the analysis below does not focus on the functioning of this department.

Within the Energy Department, there currently exist three substructures:

- The **Energy Development Directorate** is responsible for the development of new Energy Generation infrastructure.
- The **EARP Unit** is actually a SPIU for rural electrification. In the organizational chart, this SPIU is directly attached to the Deputy Director General Energy.
- The **Electricity Utility Directorate** is responsible for operating and maintaining existing electricity generation, transmission and distribution infrastructure. In fact, after completion, infrastructure developed by one of the first two previous substructures is handed over to this Utility Directorate.

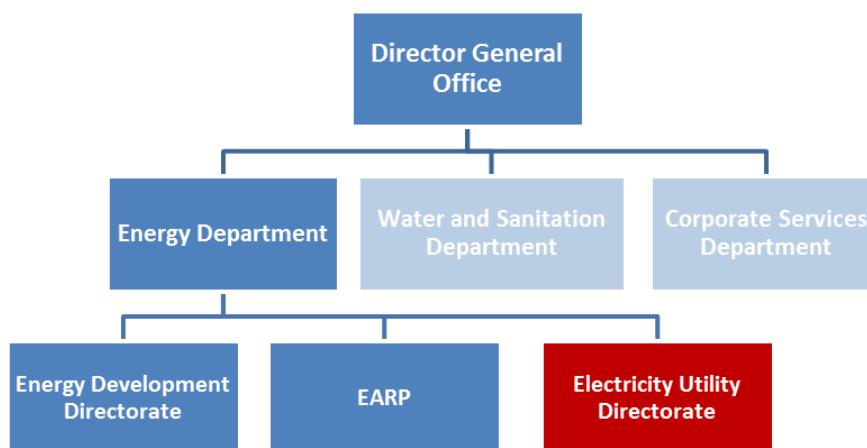


Figure 6: Substructures of the Energy Department in EWSA

As explained above, the workload in the Electricity Utility is closely related to the degree of activity of the Energy Development Directorate and of the EARP Unit. Indeed, an increase in investments in generation and access will, with some delay, result in an increase of infrastructure to be operated and maintained by the Electricity Utility. (see also p.52)

### 1.4.3 The Electricity Utility Directorate

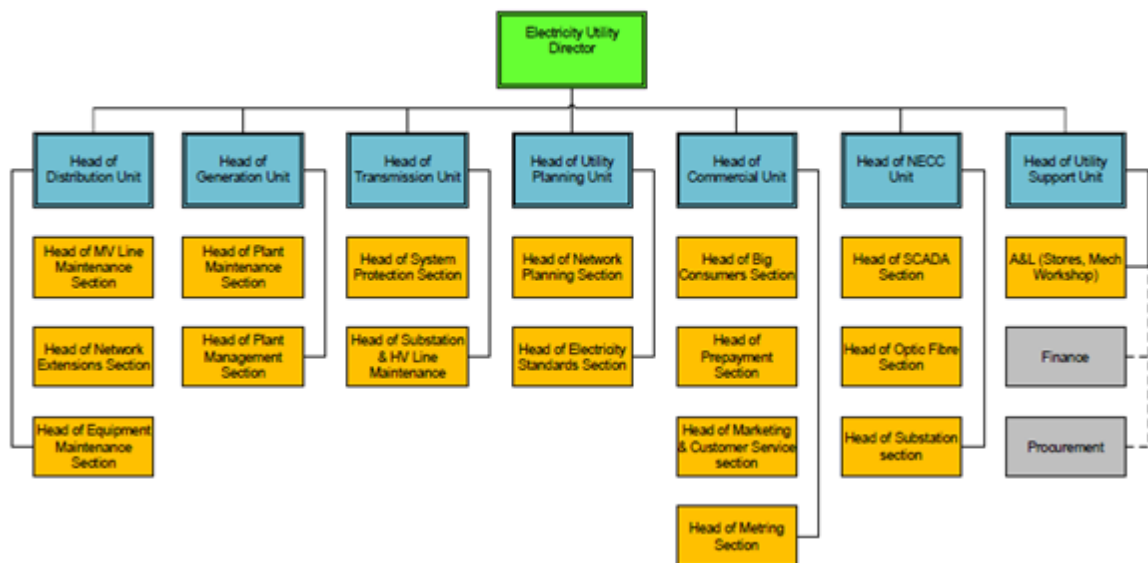
#### 1.4.3.1 Organization and functioning

The Electricity Utility Directorate currently includes 6 Units:

- **The Electricity Generation Unit**, responsible for operating and maintaining existing EWSA power plants.
- **The Electricity Transmission Unit**, responsible for maintenance of the existing transmission network and for extension of the transmission network.

- **The Electricity Distribution Unit**, responsible for maintenance of the existing distribution network and for management of new connections through minor line extension.
- **The National Electricity Control Center (NECC)**, responsible for load forecasting and managing daily electricity supply and demand to ensure safe and minimal interruptions of power supply to customers.
- **The Electricity Commercial Unit**, responsible for billing and collection but also for customer relations through the EWSA call center. (management of complaints)
- **The Electricity Planning Unit**, responsible for preparing technical requirements for MV or LV extensions in coordination with the Planning and Monitoring Unit in Energy Development Division (currently not operational). Moreover, this Unit is also responsible for monitoring of network loads (statistical metering) and coordination of maintenance on the network together with the Generation, Transmission and Distribution Unit.

In the new organizational chart of EWSA, a seventh Unit, the **Electricity Utility Support Unit**, is also foreseen. This Unit should be responsible for financial reporting and asset management in the Electricity Utility. However, since the new organizational chart has not yet been validated by cabinet, this Unit is not yet operational. The organizational chart of the Electricity Utility, including the Utility Support Unit, can be found below:



**Figure 7:** Organizational Chart of the Electricity Utility Directorate

*Not official - Still subject to change*

Each Unit within the Electricity Utility has its own internal organization:

- In the **Electricity Generation Unit** O&M of power plants is mainly done by deconcentrated teams at plant level. However, more specialized maintenance or repairs are done by a mobile team that is stationed in Kigali.
- In the **Electricity Transmission Unit**, all maintenance and grid extension staff is stationed in Kigali. The Transmission Unit is supported in its functioning by power plant staff that is responsible for first line inspection of HV lines leaving the power plant and by the NECC responsible for supervising the functioning of the entire transmission grid through a SCADA

system.

- The **Electricity Distribution Unit** has technical staff that can connect households and solve minor problems. They are stationed both at the level of EWSA Branches (one or two districts) and at the national level. However, more specialized maintenance or repairs are done by a mobile team that is stationed in Kigali.
- **The National Electricity Control Center (NECC)** is located in Kigali and all its staff work in the same building.
- The **Electricity Commercial Unit** is organized in more or less independent commercial EWSA branches. Each branch manages its own customers and commercial staff at branch level work together with Distribution staff also stationed at branch level. Overall coordination is done from Kigali while specific commercial services for the Kigali area are also available.
- **The Electricity Planning Unit** is located in Kigali and all staff is working in the same building.

#### 1.4.3.2 Operational SWOT of the Electricity Utility Directorate

During the formulation, the functioning and performance of the different Units, both at national and district level, were analyzed. The findings of this exercise are presented below. They serve as the basis for defining the focus of the intervention in chapter 3<sup>5</sup>.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Overall relatively competent staff available in all Units</li> <li>• Overall sufficient staff available for current tasks</li> <li>• Focus on on-the-job training by peers for staff members in different units</li> <li>• Well-developed billing and recovery system (Cash Power)</li> <li>• Well-developed call center</li> <li>• SCADA monitoring of transmission lines</li> <li>• Relatively low level of technical and non-technical system losses</li> </ul>	<ul style="list-style-type: none"> <li>• O&amp;M procedures and manuals are not always available for existing infrastructure (power plants, substations and lines)</li> <li>• O&amp;M is mostly reactive: no preventive approach</li> <li>• Limited expertise and decisional power for crisis interventions (breakdown management) at the deconcentrated level</li> <li>• Lack of performance indicators for operational and strategic steering</li> <li>• No SCADA monitoring for power plants or distribution lines</li> <li>• Ad-hoc communication between units: communication lines are not institutionalized</li> <li>• Concentration of information at the level of the Heads of Units, related to a lack of support staff / middle management</li> </ul>

<sup>5</sup> This SWOT is a compilation of the information gathered by the formulation team during interviews with the Heads of Unit of the Electricity Utility, key staff in the Corporate Services Department and field staff, responsible for O&M of power plants and distribution lines.

	<ul style="list-style-type: none"> <li>• Important differences in internal organization of the different Units</li> <li>• No standardized job descriptions with competence profiles available within EWSA</li> <li>• No structural approach to individual capacity development for staff members</li> <li>• No existing system for workload calculation/forecasting and staff planning in EWSA</li> <li>• EWSA training center is currently ill-equipped and bound to disappear</li> <li>• Overall weak operational, logistical and financial management information.</li> <li>• Limited economic awareness in EWSA</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Outsourcing of non-critical functions could improve performance of the Electricity Utility</li> <li>• Existence of untapped sources to finance CD activities within EWSA (CBF and own training budget)</li> <li>• Training strategy within EWSA that is being developed</li> <li>• Procedure manual (in preparation) might clarify functioning of the Electricity Utility (exercise supported by KPMG)</li> <li>• Ongoing exercise, supported by JICA, of mapping existing distribution lines in GIS that can be the basis for future SCADA monitoring of the distribution network.</li> <li>• Creation of the Electricity Utility Support Unit might solve some bottlenecks in financial management, procurement and logistical management.</li> <li>• Envisaged successes in implementation of Oracle integrated information management system</li> <li>• Existence of a preliminary study on staff</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Unstable organizational chart creates uncertainty in the organization.</li> <li>• Rapid increase in Generation, transmission and distribution infrastructure might disrupt the functioning of the corresponding Units in the Electricity Utility.</li> <li>• Very centralized financial management (no delegation) creates a bottleneck at the highest level of EWSA</li> <li>• Limited staff working on HR development in EWSA</li> </ul>



retention within EWSA	
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Table 4: EWSA Electricity Utility SWOT

### 1.4.4 The Water and Sanitation Department

Not within the scope of this intervention.

### 1.4.5 The EWSA Corporate Services Department

#### 1.4.5.1 Organization and functioning

Under the direction of a Deputy Director General, the Corporate Services (CS) Department includes 8 units providing support and services to all EWSA departments / business units:

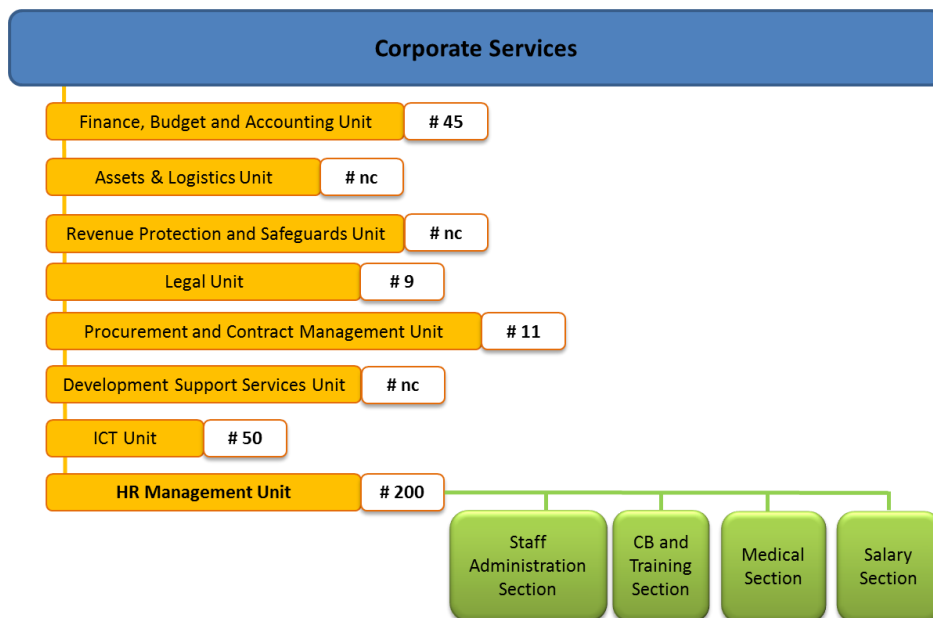


Figure 7: Organizational Chart of the CS Department

*Not official - Still subject to change*

- A **Finance, Budget and Accounting Unit**: responsible for EWSA budget preparation and follow-up .
- An **Assets and Logistics Unit**, in charge of managing the common logistics and stores (for energy, water and sanitation), office supplies, cars, etc. Some of these responsibilities are expected to be handed over to the future Electricity Utility Support Unit, namely the management of the Electricity spare parts and components stores.
- A **Revenue Protection and Safeguards Unit**, in charge of fraud and theft prevention
- A **Legal Unit** for advisory services, contracting and tendering procedures.
- A **Procurement and Contract Management Unit**, centralizing up to now the procurement operations for all EWSA departments. However, decentralisation is foreseen and soon or later the envisaged Electricity Utility Support Unit will inherit this procurement responsibility.

- A **Development Support Services Unit**, supporting the Energy and Watsan Development departments
- An **ICT Unit** in charge of managing EWSA datacentres, systems and OS (ICT Operations), LAN /WAN and other networks (ICT Networks), developing applications (Software Development) and helpdesk. This unit should be replaced, in a near future, by a fully operational Division comprising of an ICT Infrastructure and Support Unit and an ICT Software Applications Unit.
- An **HR Management Unit**, further described here below.

#### **1.4.5.2 Structure of the HR Management Unit**

The HR Management Unit currently comprises 4 sections:

- 1) **Staff Administration Section**, in charge of contracts, recruitment, performance appraisal, career development, etc.

##### **Recruitment**

The HR Management Unit does not have a mid-term or a long-term recruitment planning for the moment. This is mainly due to the situation of transition EWSA is currently in. For the moment, the Recruitment Section is only handling replacement of key staff members. All other recruitments are put on hold. In general, the HR Management Unit does not have a structural approach or an instrument for workload calculation or long and medium term staff planning. Recruitment is, in general, based on demands from Heads of Unit and negotiated with MIFOTRA

Recruitment Planning would allow for induction course planning, equipment and workplace planning.

##### **Performance management**

In compliance with public sector regulations, all EWSA staff have a yearly performance appraisal, based on a performance contract. However, almost all staff members receive a good evaluation. HR Management collects and stores all appraisal documents. Currently, information from these appraisals is not used to guide individual capacity development or talent management.

##### **Retention/motivation/remuneration**

Turnover rate in EWSA is very high, probably due to the fact that EWSA staff is paid according to the Public Service framework. Often, experienced staff leaves EWSA for a higher pay in the private sector. HR Management also notices that staff turnover is often related to an increase in capacity of concerned staff, for instance because of received training abroad. Therefore, EWSA has put a clause in the contract of staff sent abroad stating that they have to stay in EWSA for 3 years after a long term training (1 year or more). HR Management is currently investigating other ways to work on staff retention and motivation.

##### **HR Administration**

HR Administration is completely centralized. In order to contact the administration, EWSA field staff has to come to Kigali.

- 2) **Capacity Building and Training Section**

HR Unit has no global overview on CD efforts within EWSA since departments work directly with DP's without necessarily reporting to HR

### **Staffing of the EWSA training center**

The EWSA training center is currently staffed with 1 Head of training center and one training officer. Their main job is to organize trainings, on demand, for EWSA staff. However, most trainings at the training center are organized by DP's (especially JICA).

### **Training needs and quality of training**

Training needs detection is currently mainly based on training plans that are submitted by the EWSA Heads of Units, together with the annual budget. The job of the training center staff is to assess whether requested trainings can be organized in-house (internal or external trainers) or whether people should have the training outside EWSA, in Rwanda or abroad. However, no real control on whether the proposed staff members need the proposed training is conducted. There is no approved training policy available that can be used to guide such decisions. (document already drafted) There is also no database in which training center staff is able to keep track of received training by individual staff members. And even if such a database would exist, it would probably not contain all available information since not all training requests pass through the training center.

As far as the quality of trainings is concerned, the training center currently does not organize systematic evaluation of the quality of trainings (skills or knowledge transfer) nor of the impact of trainings on the work floor (change in behavior or performance).

### **Training facilities**

The EWSA training center in Kigali currently has 3 own classrooms that are large enough to organize trainings for small to medium size groups. However, classrooms are poorly furnished with tables and suitable chairs lacking. Moreover, didactical equipment is outdated with electrical installation for training purposes dating back to 1988. The only exception are the distribution line poles installed by JICA for didactical purposes. Finally, there seems to be no catering facilities for people partaking in trainings. In recent year, no real investments have been made to improve the EWSA training center. This is probably due to the fact that in the medium term, the training center will be demolished because of changed regulations for urbanization. In the short term, the training center is continuing its functioning at the current site. But already now the Head is looking for alternatives to organize EWSA trainings. One of the options that are currently being explored is to seek strategic partnerships with existing training facilities in the country such as Tumba College of Technologies, National University or Kigali Institute of Technology or Kigali Institute of Management. Such partnerships could be mutually beneficiary since graduates from these institutes could obtain an internship within EWSA while EWSA staff could be trained in the institutes facilities. For the moment, only the first part of the partnership is in place so no staff members of EWSA have been trained yet in cited training institutes.

### **Training budget**

Officially EWSA has an official training budget of around 300 million RWF. From this budget, only an estimated 10% is currently used for competence development. At the same time, EWSA is currently not using any CBF-funding. One of the main reasons is that EWSA doesn't have a well-developed CB plan that can be used as justification for CBF funding. The apparent under-utilization of available funding for competence development is all the more remarkable given the fact that additional efforts are needed to increase overall competence in EWSA as a whole and the Electricity Utility in particular.

## **3) Medical Section**

#### 4) Salary Section (payroll, insurance, etc.)

## 1.5 PSCBS and Capacity Building in the Rwandan Public administration

### 1.5.1 PSCBS and the CB cycle

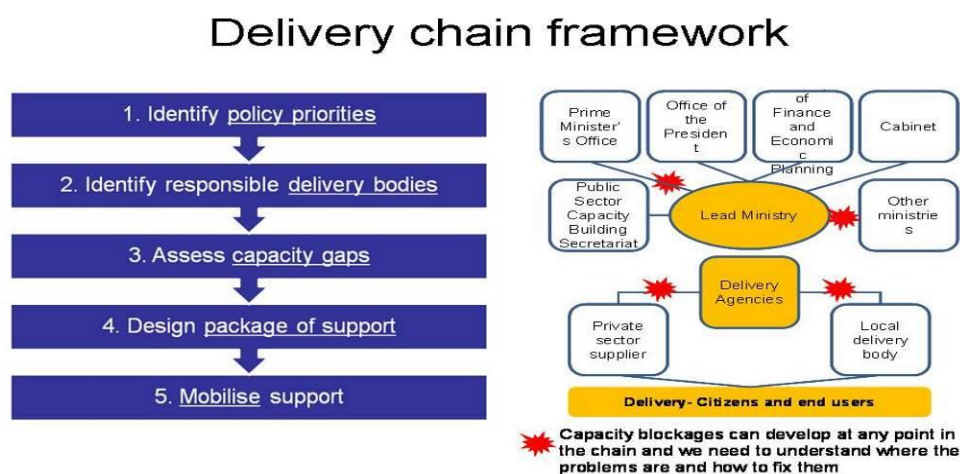
As already mentioned in 1.3.1, PSCBS has the mandate to guide, facilitate and coordinate the implementation of capacity building interventions in the public sector. More specifically, PSCBS is to be systematically involved in the design of CB interventions in the public sector, act as the guarantor of quality for the implementation of CB interventions and coordinate the monitoring of CB.

Recently, PSCBS has increased its influence in the public sector with regard to CB initiatives. In fact, with effect from Fiscal Year 2012/2013, a Capacity Building Action Plan Template was annexed to the Budget Call Circular requiring all public institutions, provinces and districts to attach CB plans to their action plans and budgets. By doing this, a CB Cycle, linked to the planning and budgetary cycle was established. Through the CB cycle, PSCBS is now able to directly engage with all public sector institutions in the framework of national planning, M&E and the budget cycle. It is expected that the CB cycle will enhance PSCBS' leverage in coordinating CB interventions in the public sector.

### 1.5.2 PSCBS' CB toolkit

Already in 2011, PSCBS developed its "Guide for Strategic Capacity Building in the Public Sector" to serve as a toolkit providing guidance for conducting Capacity Needs Assessments (CNA) and formulating Capacity Building Action Plans (CBP) for Rwandan public sector institutions. This toolkit provides the instruments that public sector institutions can use in the CB cycle. It allows PSCBS to further position itself as a catalyst of capacity development in Rwanda and to act as a technical knowledge broker to support Rwandan institutions in their CB effort.

The toolkit proposes a five step process which has been linked to the GoR planning and budgeting cycle. The full cycle of CNA/CBP should be undertaken once every three years and reviews should be done annually in synchronization with the planning and budgeting process.



**Figure 8:** The delivery chain approach for sector wide CB

Furthermore, the PSCBS' CB toolkit contains also a Capacity Building Framework that can be used to

assess capacity needs in public sector organizations. The Framework distinguishes between three levels of capacity:

- **The individual level:** attitude, knowledge and technical skills vested in people.
- **The organizational level:** internal policies, arrangements, procedures and frameworks that allow an organization to operate and to deliver on its mandate.
- **The institutional level:** policies, legislation, power relations and social norms that describe the broader system within which individuals and organizations function and that facilitates or hinders their existence and performance.

Equally important and useful concepts in the CB Framework are: capacity creation, capacity utilization and capacity retention since those 3 steps should necessarily be taken into account when developing strategies and objectives for capacity development.

### 1.5.3 PSCBS' involvement in the Electricity sub-sector

PSCBS currently has a number of instruments through which it can intervene or is already intervening in the Electricity sub-sector:

- **Capacity Needs Assessments:** PSCBS provides methodological support for public entities that want to conduct a capacity needs assessment in their organization or even for an entire sector. For the Energy Sector, a capacity needs assessment is planned and the results should be available during the last quarter of 2013. The results of this CNA will be integrated in the baseline study (see §3.4.1)
- **Capacity Building Fund:** The purpose of this fund is to finance strategic capacity building activities in a coordinated, transparent and efficient manner. The advantage of the Fund is that, in principle, it has oversight of wide range of public sector capacity building activities, and can therefore seek to achieve maximum impact through these interventions. Funding can be used to finance training courses, consultancies and technical assistance or other activities for capacity development. Applications for funding must be based on a thorough CNA and a capacity building plan.
- **Strategic Capacity Building initiative:** PSCBS has initiated and now coordinates the Strategic Capacity Building Initiative (SCBI) with various institutions in the Energy sector. Under the SCBI, international experts are expected to not only deliver on the priorities of each institution where they are located but also build the capacity of local counterparts with the potential to become experts in the future. This way, SCBI moves away from the traditional 'fly-in, fly-out' approach to consultancy. Instead, international experts are hired into a mentorship role for a long period of time and paired with three local counterparts. An overview of available and planned SCBI expertise in the Electricity sub-sector (within EWSA) is given hereunder.

Profile	Anchorage / Destination
Energy Planning Expert	EWSA Development Directorate
Geothermal Drilling Engineer	EWSA Development Directorate
Geothermal Geologist	EWSA Development Directorate
Geothermal Geophysicist	EWSA Development Directorate
Geothermal Reservoir Engineer	EWSA Development Directorate
HR Expert	Corporate Services Department
Investment Program Management	EWSA Development Directorate
Lake Kivu Expert	EWSA Development Directorate
Energy Legal Expert	EWSA Development Directorate

Network Operations / Transmission Expert	EWSA Development Directorate
Oil and Gas Expert	EWSA Development Directorate
Peat to Power Expert	EWSA Development Directorate
Power Supply Planning / electricity expert	EWSA Development Directorate
Renewable Energy and EE Expert	EWSA Development Directorate
Energy Policy Expert	EWSA Development Directorate
Procurement Expert	Corporate Services Department
Hydropower Expert – 1	EWSA Development Directorate
IPP Transaction Advisory firm	EWSA Development Directorate

**Table 5:** Update SCBI recruiting procedures (mid of Jan 2013, PSCBS)

In principle, capacity building initiatives in a sector should be coordinated in the Sector Working Groups (SWG) and PSCBS is represented in most of them by a cluster specialist (CS). However, in the energy sector, this coordination is still relatively weak. The “Support to Strategic Capacity Building 2013-2017” project of the Belgian-Rwandan cooperation will strengthen this sector coordination.

## 2 STRATEGIC ORIENTATIONS

### 2.1 Focus of the intervention

#### 2.1.1 Guiding principles

The focus for the present intervention was determined, by applying the following guiding principles:

- The will to contribute to the **achievement of the Strategic objectives** for the Energy Sector in Rwanda (EDPRS II)
- The need to avoid scattering of available resources in order to achieve a **tangible impact** of the intervention.
- The need to **complement** existing and planned interventions and initiatives in the Energy Sector
- The need to remain **coherent** within the Belgian-Rwandan cooperation portfolio in the Energy Sector

#### 2.1.2 Justification of the focus on the Electricity Utility in EWSA

As explained in chapter 1, the Belgian-Rwandan cooperation is mainly active in the Electricity Sub-sector today. In parallel with the present intervention, two other interventions, one on Geothermal development and one on Access to electricity, are formulated. These interventions will contribute respectively to the achievement of the “Electricity Generation” and the “Access to Electricity” objectives in the EDPRS II. Therefore, in order to **maintain coherence** within the Belgian-Rwandan portfolio, the present intervention will also contribute to the strengthening of the Electricity sub-sector while leaving the Biomass-subsector and the Petroleum-subsector out of its scope.

Within the electricity sector, three organizations are especially important since they contribute directly to the achievement of the strategic objectives of the Energy Sector. These actors were potential beneficiary organizations for the present intervention:

- First, there is the **Rwanda Utilities Regulatory Agency (RURA)**. As the regulator, RURA is responsible for the oversight of the Energy sector. This agency will likely be the anchorage point for the 4<sup>th</sup> intervention in the energy sector, as foreseen within the ICP of the Belgian-Rwandan cooperation. Since the present intervention aims to be complementary to this future intervention, it will focus its support on another actor.
- Secondly, there is the **Ministry of Infrastructure (MININFRA)**. As a lean policy focused ministry, MININFRA is primarily responsible for setting the overall policy and strategy of the energy sector and for coordinating the development of the electricity sub-sector. The present intervention will also not focus its support directly on MININFRA since this Ministry must maintain linkages with all actors in the sector and depends on information from these actors in order to execute its mandate. In order to be effective, a direct intervention within MININFRA would necessarily involve managing several parallel interventions in other sector organizations (RURA, EWSA,...). As a consequence, this approach would require the intervention to **scatter its resources** throughout the sector thus **diminishing its potential impact**. Also, for its functioning MININFRA would benefit more from a bottom-up approach according to which the M&E function in one sector organization/entity would be strengthened in order to ensure better reporting from this entity towards MININFRA both for performance monitoring and policy making purposes.

- Finally there is the **Energy, Water and Sanitation Authority (EWSA)** that is responsible for developing and operating electricity infrastructure in the country. The exclusion of the two above mentioned main actors leads to the selection of EWSA as the major beneficiary organization for the present intervention. The important role that EWSA has to play in **achieving the strategic objectives** of the Electricity Sub-sector fully justifies the focus of the support on this Authority. However, the focus on EWSA does not prevent the other two main actors (MININFRA, RURA) from benefitting indirectly from the intervention's support.

In the past, a lot of funding has been directed towards Electricity Generation and Electricity Access. With the importance given to Generation and Access in the EDPRS II strategic plan, this focus of DP support is unlikely to change in the future. Even now, one can see that DPs, in their ongoing and planned interventions, emphasize both Electricity Generation and Access through **investments in electricity production capacity and grid extension**. As far as EWSA is concerned, this means that DP support is mainly oriented toward the Energy Development Directorate and the EARP team.

The limited support for Capacity Development in EWSA largely follows the same logic. As shown in the figure below, the bulk of SCBI support, for instance, is focused on the Energy Development Directorate. The Electricity Utility Directorate only receives support from JICA but this intervention will end early 2014.

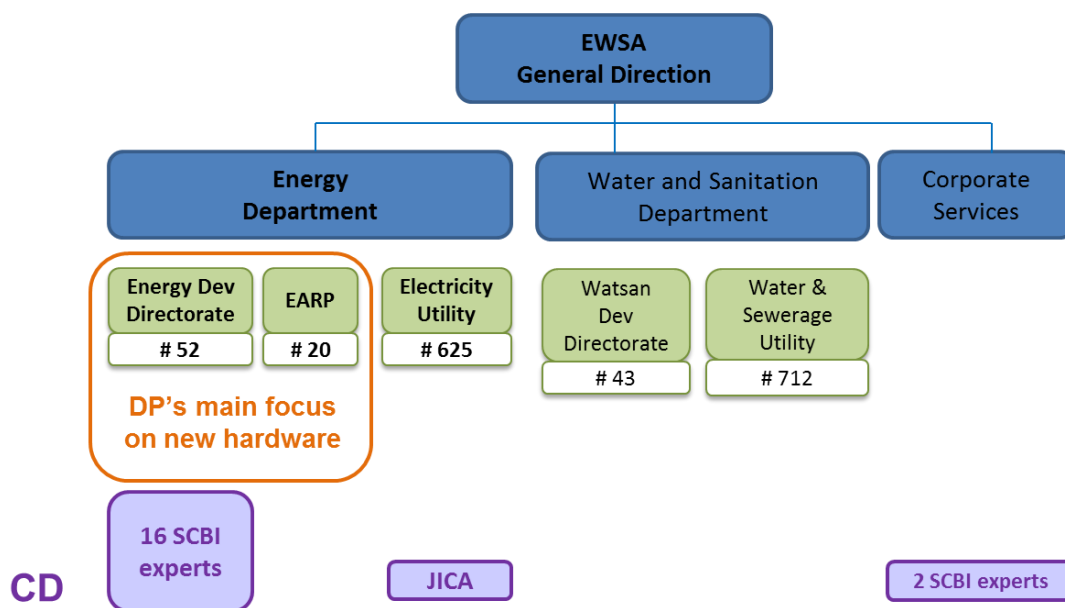


Figure 9: Schematic representation of hard and soft support to the Energy Department

In order to be **coherent** and **complementary** with the interventions of other DPs, and to enhance the sustainability of ongoing investments, the present intervention will **focus its CD support on the Electricity Utility within EWSA**.

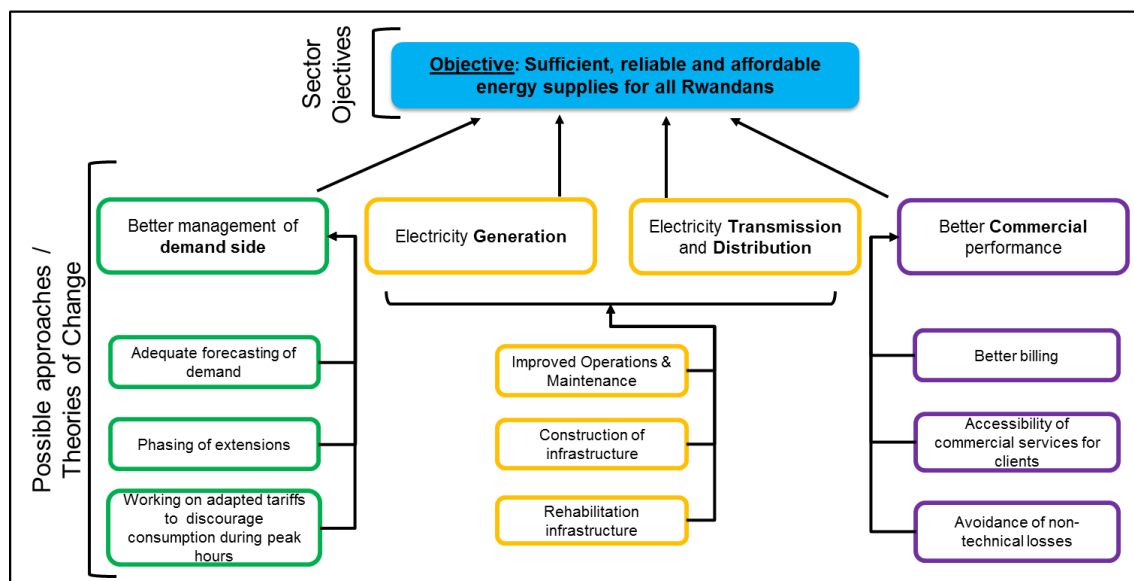
### 2.1.3 The Electricity Utility and the strategic objectives for the Energy sector in Rwanda.

On top of the above-mentioned reasons for selecting EWSA Utility as the beneficiary organization, it also has to be mentioned that there is a strong link between the focus on the Electricity Utility and the achievement of **strategic objectives** for the Energy sector in Rwanda.

In Chapter 1, the Rwandan strategy to provide “sufficient, reliable and affordable energy supplies for all Rwandans” was described and analyzed. Below, the summary of this strategy was completed with



possible **complementary axes** of intervention that are **not explicitly present in the Energy Policy and Strategy**.



**Figure 10:** Schematic representation axes of intervention in the electricity sub-sector

The figure above shows that the strategic objective for the Energy sector cannot be achieved solely by working on Energy Development and Access. In fact, work on other areas is necessary in order to achieve this objective:

- Improved Operations and Maintenance can contribute to the reliability of Electricity Generation, transmission and distribution and to the durability of investments made
- Management of the demand side is absolutely necessary in order to maintain the balance between offer and demand
- Solid commercial performance is necessary in order to make sure that all consumed electricity is also paid for and that produced electricity can be consumed.

In each of the three above mentioned areas, the Electricity Utility has an important role to play, be it through direct interventions (O&M, commercial services) or through the provision of reliable data on electricity consumption or on operational experiences with newly installed infrastructure. Therefore, the focus on the Electricity Utility is highly relevant for the achievement of the Strategic objective for the Energy sector.

## 2.2 Methodological approach for the intervention

### 2.2.1 Use of PSCBS framework

The present intervention will use the definition of Capacity Development that features in the PSCBS guide for Strategic Capacity Building in the Public Sector as a basis for its methodological approach:

*“Capacity Development is an endogenous process which entails change of knowledge, skills, work processes, tools, systems, authority patterns, management style, etc. It is a process that takes place*

*in people or organizations, and cannot be forced. People and organizations can have strong or weak incentives to change, develop, and learn, coming from the environment and/or from internal factors. However, eventually the change is an internal process that has to happen in the people or organizations changing”.*

When assessing capacity needs in the present intervention, the PSCBS Capacity Building Framework, will be used. The table 6 below summarizes the matrix approach adopted by PSCBS in its framework:

	Capacity creation	Capacity utilization	Capacity retention
Individual level	Development of adequate skills, knowledge, competencies and attitudes	Application of skills, knowledge, competencies on the workplace	Reduction of staff turnover, facilitation of skills and knowledge transfer within institutions
Organizational level	Establishment of efficient structures, processes and procedures	Integration of structures, processes and procedures in the daily workflows	Regular adaptation of structures, processes and procedures
Institutional environment and policy level	Establishment of adequate institutions, laws and regulations	Enforcement of laws and regulations for good governance	Regular adaptation of institutions, laws and regulations

**Table 6: PSCBS’ capacity building framework**

Below, the consequences of the use of PSCBS’ definition and framework are discussed in further details.

## 2.2.2 The organization level as entry point

Based upon PSCBS’ capacity development framework, the entry-point of the intervention will be the organizational level. The intervention wishes to strengthen the organizational capacities of the Electricity Utility as a means towards a more efficient and effective delivery of its mandate which is to operate and maintain Electricity Generation, transmission and distribution infrastructure. Therefore, the support provided by the intervention will be described in terms of support to **specific organizational functions** in **specific parts** of the EWSA Electricity Utility. However, the focus on organizational strengthening will also be complemented with innovative support strategies at the individual and institutional level.

## 2.2.3 Flexibility during implementation

### 2.2.3.1 Flexibility to define and adapt the focus

In chapter 1, a SWOT analysis has been conducted to identify functions that need strengthening within the EWSA Electricity Utility. At the start of the implementation of the intervention, the information in this SWOT analysis will be complemented with a more in-depth capacity analysis of the supported

functions. This analysis, also called a **functional review**<sup>6</sup>, will help to **refine the existing focus of the intervention**, based on **changes in the institutional context** or in the **functioning** of the Electricity Utility or EWSA. This refining exercise can include prioritizing support to certain functions while (temporarily) reducing the focus on other functions. Based on the initial functional review, the PMU can even propose to add specific functions or specific geographical areas to the scope of the intervention.

Each year, prior to the operational and financial planning of the intervention, the initial **functional review will be updated**. The output of the updated functional review, complemented with other monitoring and assessment tools, will help to **(re)define the intervention focus** and, as a consequence, provide guidance to the operational and financial planning for the following year.

This process of updating and refining the functional review will provide the intervention with the necessary flexibility to **adapt to the rapidly changing institutional environment** in the Energy sector in Rwanda. Therefore, this flexibility is very important for the intervention to maintain its relevance throughout the entire duration of implementation.

### **2.2.3.2 Flexibility to define and adapt the Capacity Development approaches**

PSCBS' definition of capacity development clearly emphasizes the fact that CD entails a **change process** within people or organizations. This means that activities of the present intervention will have to include **stimulating and facilitating** change as part of the overall CD processes. However, since change **cannot be forced**, stimulating and facilitating change is not a simple and straightforward process. Indeed, even for change process experts, it is very difficult to predict where and how either support for/and or resistance against change might evolve and become apparent. .

Therefore, the intervention will remain flexible when it comes to the definition of CD activities and the use of CD approaches. In chapter 3, some indications are given as to what approaches and activities could be used during the intervention as to make best use of emerging opportunities for change and cope with resistance and other impediments for change. However, the intervention team has the **obligation to review the proposed approaches** and evaluate their appropriateness while taking into account evolutions in the institutional context or operational experiences. The M&E approach of the intervention, described in detail below, will provide the necessary information on the quality of the implemented CD activities but especially on their outcomes with respect to the functioning and performance of the organization and to the behavior of individual staff members.

The revision of activities and approaches is a **continuous process** that can be done at any given moment during the **implementation period** of the intervention. This also implies that the intervention team should invest time and energy in testing new approaches to CD and take into account the lessons learned from these pilot experiences for future CD strategies and activities.

The intervention will not only be accountable for the quality and quantity of the delivered outputs of the intervention but also for demonstrating the learning process that the intervention went through in order to make sure that the delivered outputs actually contribute to the achievement of the Specific Objective / outcome.

### **2.2.4 Monitoring and Evaluation to support change**

As explained above, a certain amount of flexibility is necessary for the intervention to be able to achieve the envisaged outputs and contribute to the envisaged outcome and impact. However, flexibility can only be justified if, at the same time, mutual **accountability** between the partners and towards the donor is guaranteed. On the other hand, flexibility does not imply that changes to the

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<sup>6</sup> See §3.3.1

intervention strategy may be made in a chaotic and/or arbitrary way. On the contrary, changes in the intervention strategy should be based on a sound system of **systematic learning** that leads to well justified and defensible **strategic decision making**.

In order to respond to the need for clear **accountability, systematic learning and strategic steering**, the intervention will elaborate and document the pathways of change comprised in its (evolving) intervention strategy. To do this, a solid Monitoring and Evaluation (M&E) approach that allows to assess to what extent the envisaged change and CD process did or did not materialize, will be developed. Key elements of the envisaged M&E approach are explained below.

#### 2.2.4.1 Cyclic M&E to support a change process

By looking at an M&E system in terms of **systematic learning and strategic steering**, it is clear that M&E cannot be treated as a one shot activity at the end of an intervention. In fact, M&E must contribute to a process of continuous improvement of the intervention strategy. Therefore, M&E must accompany the change process, facilitated by the intervention, by performing continuously repeating Plan-Do-Check-Act cycles.



Figure 11: Deming Circle (PDCA)

In the present intervention, M&E will be treated as an integral part of project management that has an important role in guiding the intervention strategy and thus the strategic and operational planning.

The present TFF will propose specific indicators on different result levels in chapter 3. However, given the cyclic nature of M&E, these indicators will have to be refined and complemented on a regular basis in order to reflect the change process the intervention is facilitating.

#### 2.2.4.2 Different types of indicators

One of the central elements of any M&E system is the monitoring of different sets of indicators. In order to measure these indicators, the M&E system of this intervention will, to the extent possible, rely on and make use of existing M&E frameworks, systems and tools, including:

- EDPRS indicators
- Existing monitoring systems of EWSA and MININFRA
- PSCBS tools for monitoring Capacity Development

A classic Logical Framework usually contains 3 types of indicators:

- **Output indicators:** These indicators measure the delivery of outputs and the quality of those outputs on the basis of project management indicators. These indicators will mainly serve accountability purposes although a link with learning and steering also exists.
- **Outcome indicators:** These indicators measure the level of achievement of the Specific Objective. While accountability is still important regarding this type of indicators, the main focus here is on learning and strategic steering. Tracking these indicators can give the

intervention an idea on whether the activities are well targeted and whether they contribute to real change. These indicators will draw from existing monitoring frameworks (to the extent possible) and will relate to improved performance of EWSA's Electricity Utility.

- **Impact indicators:** These indicators measure the level of achievement of the General Objective. The intervention is not accountable for the final impact; it can only aim to contribute to the achievement of this objective. For this level, country/sector indicators will be monitored. This level will fully rely on existing Rwandan M&E systems.

Although the above mentioned traditional indicator levels are **essential and useful**, unfortunately, they do **not always capture the progress in the actual change process** that the intervention is facilitating. In fact, changes in people and organizations are often subtle and, if only measured by means of classical output and outcome indicators, almost invisible. On the other hand, changes in individual or group behavior or use of new instruments and methodologies provided by the intervention (outputs) are good indicators that the intervention is on the right track, long before the achievements of the intervention become visible in the outcome indicators. In an unpredictable and highly volatile environment of a Capacity Development intervention, picking up these early signs of change and acting upon them is crucial for the success of the intervention.

To counter this lack of indicators on change, the so-called **missing middle**, the intervention will go well beyond the classical indicators framework and will try to actively monitor the **change process**. This implies that the intervention will try to monitor **changes in behavior** (linked to skills transfer) and look for **early signs of increased performance** that help the intervention in learning from experience and steering the intervention towards the achievement of its development goal. Since change is unpredictable and highly dependent on the context, the TFF will only make suggestions for this type of intermediate level indicators. The actual development of such indicators will be done during the baseline and, from then on, at regular intervals during implementation in order to reflect changes in the intervention strategies and corresponding envisaged pathways of change and CD.

The figure below shows the different types of indicators that will be used in the intervention.

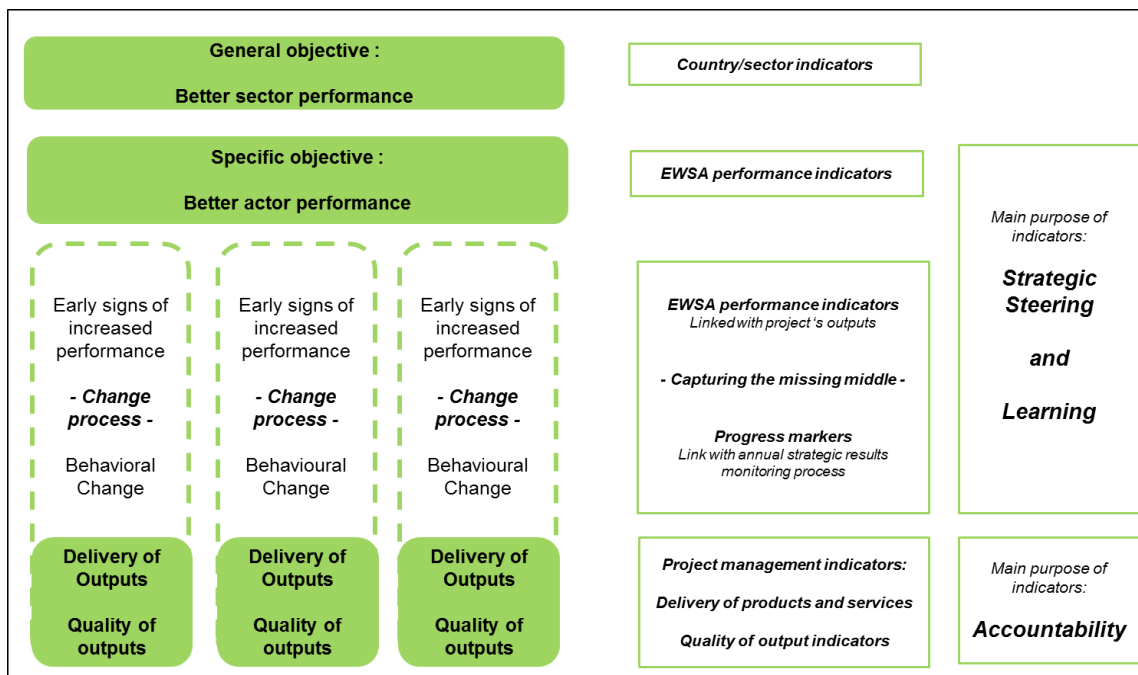


Figure 12: Types of indicators for the intervention

## 2.2.5 Capacity Development support by the intervention

### 2.2.5.1 Providing Technical Assistance for change facilitation

Technical assistance can take different forms and can assume different roles in the present intervention. However, each type of technical assistance shall contribute to some extent to a change process facilitated by the intervention; this comprises working on individual and organizational capacity enhancement.

- A **Technical Assistant, in charge of Change Facilitation** will be responsible for the coordination of the entire change process(es) supported by the intervention. This type of technical assistance is generally long term assistance since the change process should be supported during the entire implementation period of the intervention. This person will be responsible for **assuring coherence** between different types of assistance, foreseen in the intervention but also for assuring that the different activities of the intervention contribute to the achievement of the Specific Objective. Moreover, this TA is responsible for **generating support** within the EWSA Electricity Utility for the **change process** through internal communication, negotiation, networking with key change agents, coaching etc.
- A **Specialized Technical Assistant (TA)**, responsible for providing long or medium term support can also be recruited during the intervention. This type of TA will concentrate his/her efforts on one or more functions, assumed within the EWSA Electricity Utility while working with staff members in existing teams. The TA will work on **organizational capacity** (instruments, procedures) in the teams he or she is working with as well as on **individual capacity** of the team members through on-the-job coaching. This type of Technical Assistance is fully aligned with the **SCBI approach of PSCBS**.
- Finally, technical assistance in the present intervention can also take the form of **targeted consultancies**. In this case, the added value of the consultants is purely technical and so they are recruited for specific expertise and skills rather than for their broad knowledge on the sector. The primary objective of this type of assistance is to **develop a specific product** (such as a tool, a system, a solution to a technical problem,...) in a limited timeframe. However, the work of a consultant will always be accompanied by a technical assistant, already active in the intervention. The Technical Assistant will remain responsible of quality assurance for the delivered product. Moreover, he or she will also accompany the introduction of the developed product in EWSA and assure that the organization (and individual staff members) are able to use the developed product.

### 2.2.5.2 Activities to strengthen individual capacity

Activities for individual capacity development can take different shapes in the present intervention and each shape has its specific characteristics. However, these activities should always be linked to the tasks that the individual has to perform within his/her team. Learning objectives should always be linked to an envisaged improvement in the functioning or the performance of the team. Possible activities for individual capacity development are described below:

- **Short term trainings and workshops** will be primarily used as a way to **introduce new concepts**, especially for new staff members in the EWSA Electricity Utility. This type of activities can also be used to **inform and sensitize** the people that participate in them. The direct impact of this type of activities in term of visible changes on the workplace is usually rather limited. However, this type of group activities do play an important part in assuring that



staff members receive basic information that can be built upon through on-the-job training. Also, organizing workshops is a good way to keep staff members updated on on-going changes in the organization. As such, short term trainings and workshop must be treated as a first step in a multi-phased learning or change process.

- The intervention will only in a very limited number of cases finance **long term training (master programme)** for beneficiaries in the intervention. In fact, the advantages of sending someone on a long term training (abroad) must be weighed against the **disadvantages of disconnecting that person** from his work context and possibly losing this person in the process. Before financing this type of activities, a retention strategy will have to be developed and implemented in the beneficiary organization.
- The intervention will favor **on-the-job training and coaching** since evidence shows that on the job training and coaching produce the best results in terms of changes in individual performance. Technical assistants play an important role in this type of activities but on-the-job training can also be done by external trainers/coaches, supervisors (line managers) or even by peers. EWSA already has some experience with on-the-job coaching by peers. However, in this case, the line manager and staff members responsible for coaching their colleagues must also be strengthened in order for them to do a good job in this area.
- **Industrial attachment** can be considered as a hybrid between long term training and on the job coaching. This approach is very useful when specific (technical) expertise is not available in the organization while at the same time, partner organizations can be identified that have the same mandate and the same operational processes. In this case, the intervention can finance **an internship** that allows selected staff members to learn a specific job by working in the partner organization for a limited period of time. Although this approach has considerable benefits, the advantages of the industrial attachment approach must be weighed against the **disadvantages of disconnecting that person** from his work context and possibly losing this person in the process.
- In some cases **field visits and study tours** can be a good approach to bring new ideas into an existing team or to confront people with alternative approaches. The impact of this type of activities is mainly on the level of new insights. However, afterwards, participants still have to be accompanied in order to translate these new insights into practice.
- Finally, other types of learning like **self-study and e-learning** are well suited to increase knowledge of staff members on specific topics.

### 2.2.5.3 Logistical support

To complement the support to Capacity Development, the intervention will also provide a specific budget for logistical support to the EWSA Electricity Utility. The use of this budget will always be linked to activities on capacity development and will allow EWSA staff members to put into practice the newly acquired individual competencies or organizational procedures/processes.

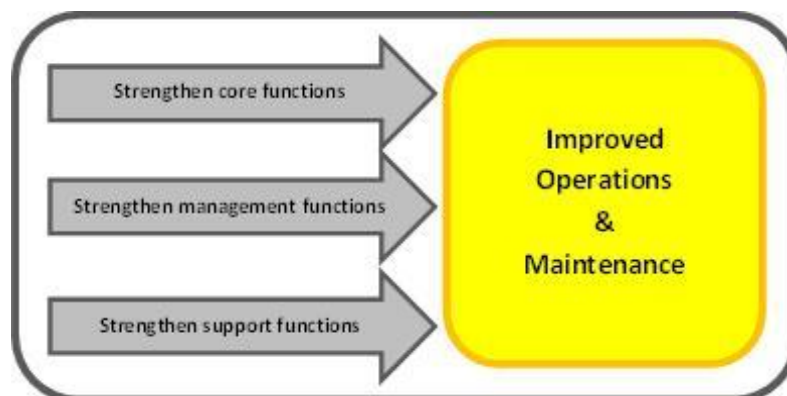
Logistical support in this intervention will be limited to the purchase of small equipment, tools or minor infrastructural investments.

## 2.3 Strategic Areas for the intervention

The intervention wishes to strengthen the capacities of the Electricity Utility as a means towards a more efficient and effective delivery of its mandate which is to operate and maintain Electricity

Generation, Transmission and Distribution infrastructure. Therefore, the intervention will support **specific organizational functions in specific parts** of the EWSA Electricity Utility. The figure below shows three types of functions that will be supported:

- **Core functions**
- **Management functions**
- **Support functions**



**Figure 13:** Supported functions

Based on the information provided under chapter 1, the key areas/functions that will be supported by the intervention are the following:

**Area 1: Support to Operations and Maintenance (O&M) in a pilot district**

This is a support to the **core functions** of the EWSA Electricity Utility. The idea here is to work at the operational level with Electricity Utility staff involved in O&M of existing infrastructure within a given district. On the one hand, the intervention aims to gradually strengthen O&M practices in the pilot district. On the other hand, the plan is also to test new approaches for O&M in the pilot district and to capitalize experiences. These experiences can later be replicated by EWSA in other districts not directly supported by the intervention.

The **selection of the pilot district**, based on a specific set of criteria, will have to be done at the **beginning of the implementation** period. Criteria that should be taken into account are:

- The presence of different types of infrastructure (hydro-power, fuel plants, etc.) to make sure that infrastructure in the pilot district is representative for other districts in the country.
- The number of consumers served in the district, representing the importance of this district in terms of (potential) revenue and perception of the reliability of EWSA electricity provision.
- The urgency to work on O&M in the selected district, given an important (future) increase in electricity generation, transmission and/or distribution infrastructure.
- Synergy with on-going or past interventions of the Belgian-Rwandan cooperation.

The PMU can also propose to work in more than one district if the budget and the duration of the intervention allow such an extension.

**Area 2: Support to Management and Support functions at the Electricity Utility central level**



The idea here is to strengthen the Electricity Utility central level in order to resolve existing bottlenecks<sup>7</sup> but also to prepare the organization for the future increase of infrastructure that has to be operated and maintained. Important functions that need strengthening are: logistical and financial management, procurement, planning, communication and reporting. Moreover, the support will also focus specifically on the strengthening of strategic management through enhanced M&E. Especially this last area will help stimulate economic awareness within the Electricity Utility in particular and the Energy Department in general.

### **Area 3: Support to the HR function within the Corporate Services Department**

The idea here is to make sure that the Electricity Utility always has sufficient qualified staff at its disposal at any given time in the future. In order to achieve this, EWSA needs to develop a methodology for staff forecasting and a structured approach for individual capacity development for its staff. Moreover, EWSA also needs to develop an approach for retention of qualified staff, while at the same time taking into account the specific nature of the public sector in terms of remuneration etc. . Therefore, the intervention will develop new HR instruments for EWSA and test them within the Electricity Utility. As experiences within the Electricity Utility will be used to improve the developed HR instruments, the support to the HR function will not only benefit the Electricity Utility but also the other directorates within EWSA, including HR staff itself.

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<sup>7</sup> See SWOT analysis §1.4.3.2

## 3 INTERVENTION FRAMEWORK

### 3.1 General objective

The General Objective (GO) for the intervention, taken directly from the Energy Sector Policy and Strategy, is the following:

**“The Energy sector is able to provide sufficient, reliable and affordable energy for all Rwandans”**

### 3.2 Specific objective

The Specific Objective (SO) for the intervention is:

**“EWSA Electricity Utility is able to provide, in a sustainable way, reliable energy to its customers.”**

### 3.3 Expected outputs

The intervention has 3 expected outputs, based on the 3 strategic areas mentioned in § 2.3:

**OUTPUT 1:** Operations and maintenance of electricity infrastructure in the pilot district are strengthened in order to contribute to the overall reliability of electricity infrastructure in Rwanda.

**OUTPUT 2:** Management and support functions at the Electricity Utility central level are strengthened in order to increase the Utility’s performance and enhance strategic management.

**OUTPUT 3:** EWSA’s staffing and competence development functions are strengthened in order to contribute to the Utility’s performance

Each of these three outputs will be described in further detail below. As already explained, the activities mentioned in this TFF only serve as an indication as to where the intervention should be heading. However, these activities can (and must) be adapted according to strategic reflections and choices during implementation.

### 3.3.1 OUTPUT 1: Operations and maintenance of electricity infrastructure in the pilot district are strengthened in order to contribute to the overall reliability of electricity infrastructure in Rwanda.

The strengths and weaknesses analysis (see SWOT in chapter 1) shows that O&M of Electricity Generation, Transmission and Distribution at district level is not standardized and that written procedures are quasi non-existent. Moreover, there seems to be no preventive approach to maintenance. Within the framework of the first output, the intervention will tackle such issues related to O&M.

This output will have **four components**:

#### **Component 1.1: Operations and maintenance of Generation infrastructure in the pilot district are strengthened**

Work on this component will start with an **in-depth analysis (functional review) of existing O&M practices and performance** for each power plant in the pilot district, taking into account that O&M staff is also located at the national level. This analysis will focus on different sub-areas of O&M such as health and safety management, workshop management, spare parts management, planning and scheduling, etc. Specific attention will be given to the analysis of the environmental component in O&M. As much as possible, results of this analysis will be benchmarked with information on O&M of power plants in other districts, other countries, both in the region and on other continents. The goal of this exercise is to identify areas where existing individual, organizational and institutional capacity can be strengthened in order to increase O&M performance.

Based on the analysis, an action plan will be developed to address identified weaknesses in O&M. Together with EWSA staff, involved in O&M of power plants, **new working procedures** will be developed for all different sub-areas of O&M and the intervention will **accompany the implementation** of these new procedures. This includes, among other things, providing on-the-job coaching of power plant staff members.

In parallel, a **system to monitor** O&M performance with indicators for each power plant and each type of power plant will be developed. This M&E system will serve to **guide and adapt future O&M practice** but will also have to include information useful for **strategic steering** at the level of the EWSA Electricity Utility. Therefore, information on O&M will have to be combined with information on performance of the power plant; including information on technical, operational, economical, financial and environmental performance. Moreover, it will have to be possible to **aggregate data** from different power plants to have an overview of O&M of power plants on the level of the district. (See component 2.2). The intervention will **accompany the development and implementation** of this M&E system. And in its turn, the information from the M&E system will likely reveal the need for further adaptation of O&M procedures. This means that the development of new O&M procedures is not a one shot activity but a continuous process for the duration of the intervention and after. At the end of the intervention, the M&E system must be completely established and integrated in the overall quality management system of the Electricity Utility.

## **Component 1.2: Operations and maintenance of Transmission and Distribution infrastructure in the pilot district are strengthened**

For this component, the **same approach** will be used as in Component 1.1. The intervention will start working on this component with an **in-depth analysis (functional review) of existing O&M practices and performance** and will accompany **adaptation and implementation** of O&M procedures. An **M&E system to monitor O&M performance** will also be developed and implemented for transmission and distribution infrastructure.

However, there are two big differences that will be taken into account when working on O&M for transmission and distribution infrastructure:

- Contrary to generation infrastructure, transmission and distribution infrastructure is not geographically concentrated but dispersed throughout the district
- O&M staff is to a large extent centralized at the national level, bringing about specific challenges for O&M of substations and HV, MV and LV lines.

Finally, under this component, the intervention will also **support the on-going GIS-mapping of the distribution network** (LV lines) by the Utility Planning Unit. While this exercise is piloted from the national level, the actual work of collecting GPS coordinates of existing lines is done at the district level.

## **Component 1.3: Experiences in increasing performance in Operations and Maintenance in Electricity Generation, Transmission and Distribution are capitalized and communicated to relevant stakeholders**

The first two components under output 1 focus on increasing O&M performance in the pilot district. However, the intervention also wants to contribute to increasing O&M performance in other districts, not covered directly by the intervention. Therefore, the intervention will **continuously collect information** on lessons learned on O&M in the pilot district both **informally during implementation** and formally by organizing **structured capitalization exercises**. Meetings with relevant stakeholders in the Electricity sub-sector will be organized on a regular basis in order to **exchange on lessons learned** on O&M. Finally, experiences from this intervention will also **be bundled in a publication** that will also be shared with stakeholder in the sub-sector.

## **Component 1.4: Long term technical assistance**

In order to ease the budget follow-up of the intervention, a specific budget line (in direct management) has been created to host the different long-term technical assistance profiles.

### 3.3.2 OUTPUT 2: Management and support functions at the Electricity Utility central level are strengthened in order to increase the Utility's performance and enhance strategic management.

The SWOT in chapter 1 shows that communication and reporting are centralized at the level of the different Heads of Units in the Electricity Utility. Moreover, some bottlenecks exist in financial management, procurement and logistical management currently situated in the Corporate Services Department. Finally, some challenges were identified regarding M&E for strategic management and policy-making.

Within the framework of the second output, the intervention will tackle the above mentioned issues. This output will have **three components**:

#### **Component 2.1: The organization of management and support functions at the Electricity Utility central level is strengthened.**

Work on this component will start with an **in-depth analysis (functional review) of existing management and support processes** at the EWSA Electricity Utility central level. Important functions that need to be analyzed are: communication and reporting, strategic planning, monitoring and evaluation, financial management, logistic management, procurement, project management, etc. HR processes, especially the ones related to competence development, staff retention and staffing, supported under output 3, will also be reviewed during this functional review.

The goal of this exercise is to identify areas where existing individual, organizational and institutional capacity should be strengthened in order to increase management and support performance within the Electricity Utility.

Based on the above mentioned analysis, the intervention will develop and implement specific activities to **accompany the necessary changes** in the functioning of the Utility's central services. For most functions, this exercise will include a support to the process of enhancing or redefining working procedures and implementing them.

As far as procurement, financial management and logistics are concerned, the intervention will **support the installation of the Utility Support Unit** within the Electricity Utility. This will include the design of new processes, procedures and organizational structures for the Support Unit. To some extent, this installation will also include the integration of existing sub-teams in the Utility Support Unit. This creation and integration exercise has to be accompanied by the intervention to make sure that staff involved has the necessary capacity to function in the new context. Moreover, adequate attention must also be given to keeping involved staff motivated during and after the change process.

#### **Component 2.2: The capacity of the EWSA Electricity Utility to report regularly and accurately on KPI's for operational management, strategic management and policy making is strengthened.**

Work on this component will be **strongly linked** to the development of the M&E system foreseen under components 1.1 and 1.2. However, 1.1 and 1.2 will focus on the operational level, while this component will address M&E for **strategic management and for policy making**. In this context, the link between operational costs of EWSA Electricity Utility and EWSA Electricity Utility revenues will be established and visualized. The idea is to show to what extent strategic and operational decisions have an impact on the **economic viability** of the organization. By doing this, the intervention intends to **increase economic awareness** within EWSA and within the Electricity Utility in particular.

In general, activities under this component include the identification of Key Performance Indicators (KPI) as required for strategic management within the EWSA Utility and the development of a Planning, Monitoring & Evaluation system to monitor them. This also involves setting up or **refining processes and systems for data collection and reporting** and the development of a specific approach for **processing and preparing information for policy making** purposes. In the process, individual capacity of staff members should also be strengthened.

Work under this component does not only involve EWSA. In fact the MININFRA is a very important stakeholder when it comes to strategic management and policy making. Therefore, the intervention will make sure to include key MININFRA staff in the work done under this component:

- MININFRA will be involved in the identification of KPIs in order to make sure that these KPIs respond to MININFRA's need for strategic and policy making information.
- The systems for data collection and reporting will be developed together with MININFRA staff in order to make sure that they are compatible with existing systems
- MININFRA staff, involved in M&E will receive the same individual capacity development support as staff responsible for strategic M&E within EWSA.

### **Component 2.3: Long term technical assistance**

In order to ease the budget follow-up of the intervention, a specific budget line (in direct management) has been created to host the different long-term technical assistance profiles.

### **3.3.3 OUTPUT 3: EWSA's staffing and competence development functions are strengthened in order to contribute to the Utility's performance**

The SWOT in chapter 1 shows that, currently, no structural approach to individual capacity development for staff members exists in EWSA. Furthermore, EWSA does not have a system for workload calculation/forecasting and staff planning. These functions are however critical to ensure that the EWSA Electricity Utility always has sufficient qualified staff at its disposal at any given time in the future. Given the fact that EWSA Electricity Utility is likely to expand considerably its activities in the near future (increase in production capacity and grid extension), these weaknesses pose an important risk for business continuity.

Under the third output, the intervention will try to tackle the above mentioned issues. The functional review, foreseen under component 2.1 will analyze more in detail existing HR processes, especially the ones related to competence development, staff retention and staffing. Information obtained from this functional review will help guide the work that will be done under output 3.

Output 3 will have **four components**:

#### **Component 3.1: A comprehensive approach to competence development is developed in EWSA and tested in the EWSA Electricity Utility**

Under this component, instruments will be developed that will support competence development:

- The intervention will enhance, together with EWSA staff, the EWSA training strategy in order for it to become a real Individual Capacity Development Strategy. This CD strategy could then be used to guide decisions on Individual Capacity Development within EWSA in general and the Electricity Utility in particular.

- The intervention will develop, together with EWSA HR staff, **standardized job descriptions** (with competence profiles) for the most common function types within the EWSA Electricity Utility. Based on standardized job descriptions, defining required competences, the intervention will develop, together with EWSA HR staff **training curricula for induction and advanced training**. And based on these curricula, training material will be developed.
- The intervention will develop, together with EWSA HR staff, a **database** where, for each staff member, all **activities for individual capacity development can be registered**. The use of the database will be tested for EWSA Electricity Utility staff. The importance of this database is to **avoid duplication of investments** in individual CD for specific staff members but this database should also serve as a source to **identify competent internal trainers or coaches**.
- The intervention will develop, together with EWSA staff a specific **approach for M&E of individual capacity development** activities within EWSA. The focus of this M&E approach will be on demonstrating the use of acquired knowledge, skills and attitudes in the workplace. This M&E system will also provide important information on the **usefulness of specific CD approaches** for the development of specific competencies and their contribution to enhance job performance.
- The intervention will support EWSA HR staff in the development of **Capacity Needs Assessments (CNA)** and **Capacity Building Plan (CBP)** that can be used to **attract CBF / SCBI / other sources' funding** and to **justify** the use of EWSAs' own training budget.
- The intervention will support EWSA HR Staff and Electricity Utility management to conceive **healthy (non-monetary) incentive systems** in support of successful individual CD leading to demonstrated and lasting good performance of staff. This area involves working on staff retention and career development. In this context, special attention will be given to gender aspects.

The intervention will work together with EWSA HR staff to develop and implement all the above mentioned instruments. However, this implementation will also require the intervention to work on **adapting existing working procedures and installing new ones** within the EWSA HR Unit. Furthermore, individual capacity of involved HR staff will be strengthened in order for them to be able to fulfill their role in EWSA. By doing so, competences and capacities of EWSA's HR staff will also be increased.

Under this component, a general budget is also foreseen to finance specific individual CD activities for Electricity Utility and EWSA HR staff. This budget was regrouped under this component but should contribute to the achievement of all three outputs of this intervention. Use of this budget will be limited to activities foreseen under the enhanced CD strategy of EWSA and will finance activities not financed by CBF or EWSAs own budget.

### **Component 3.2: EWSA short, medium and long term need for adequate training facilities is supported**

The EWSA **training center can play a pivotal role** in providing adequate induction and advanced training for Electricity Utility staff, especially when new curricula and training materials will be developed. However, the SWOT analysis in chapter 1 showed that the EWSA training center is **currently ill-equipped** and that in the medium term, the training center will have to **disappear** because of urbanization regulations. Therefore, the intervention will support EWSA to find solutions that assure the availability of adequate facilities for internal training.

Under this component, three types of activities will be supported:

- The intervention will contribute to the financing of up to date **technical equipment** that can be used in trainings. This technical equipment can later be moved when the EWSA training center has to relocate to a different location
- The intervention will support EWSA HR staff in **developing strategic partnerships** with existing training centers and the industry. Through these partnerships, EWSA will be able to assure training for its staff members in other facilities, in case the organization does not dispose of own facilities.
- Finally, the intervention will also provide a **budgetary envelope** that can be used to finance **preparatory studies** for the construction of a new EWSA training center. This way, the intervention will contribute to a long term solution for EWSAs need for adequate training facilities.

### **Component 3.3: A comprehensive approach to staffing is developed for EWSA and tested in the EWSA Electricity Utility**

Under this component, the intervention will develop, together with EWSA HR staff a methodology for **workload calculation and forecasting** in the organization. This methodology must allow EWSA to **calculate required staffing level** for each profile in a more objective manner (AS IS). Moreover, the development of the methodology will be combined with the development of a specific instrument for workload **simulation and forecasting**. This instrument will allow EWSA HR staff, with the support of the intervention, to develop a new approach to medium and long term **recruitment planning** of EWSA staff.

Additionally, the intervention will **accompany the testing** of the selected methodology and the developed instrument in the Electricity Utility. This activity will be closely linked to the support foreseen under outputs 1 and 2. Based on experiences in the Electricity Utility, the methodology and the instrument can later be **refined** in order to be useful for the rest of EWSA.

### **Component 3.4: Long and Medium term technical assistance**

In order to ease the budget follow-up of the intervention, a specific budget line (in direct management) has been created to host the different long and medium-term technical assistance profiles.

## **3.4 Indicators and means of verification**

As described in chapter 2, the intervention will establish an M&E framework that can be used for **accountability**, for **systematic learning** and for **strategic steering purposes**. Given the cyclic nature of M&E, the intervention will go through different M&E processes during the intervention. These processes will include a number of key moments for strategic reflection and reporting. Before entering into detail on the indicators for this intervention, the global M&E process will be described in further detail.

### **3.4.1 Different components of Monitoring**

The different monitoring processes are summarized in the figure underneath.



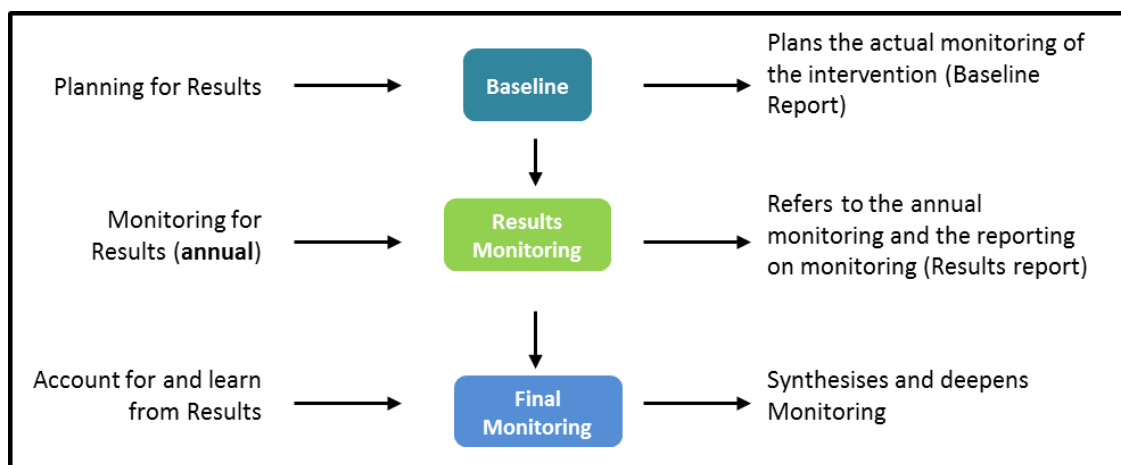


Figure 14: Monitoring processes

### Baseline

The Baseline is the first component of the Monitoring process. The baseline is about preparing the monitoring of the intervention and is also an opportunity to make sure:

- That stakeholders are on a **same level of understanding** of the change process (the intervention) that is supposed to take place
- That everybody knows how **progress towards this change** (compared to the starting situation) will be measured
- That **risks are identified and taken into account** in the implementation strategy.

By providing the intervention with a finalized and realistic monitoring framework, the baseline is the link between formulation and implementation. The **Baseline report** is the final output of the baseline process which contains:

- *the monitoring matrix*: updated results framework with indicators – including (to the extent possible) the relevant findings of the Capacity Needs Assessment (CNA), the baseline, target and intermediate values, sources of verification, frequency of data collection and responsible for data collection and analysis (i.e. indicators protocols).
- *the risks management plan*: a listing of major risks, their analysis and **the response measures that will be taken**

The intervention team can use the generic ToR for the Baseline Work Plan in Annex 7.

### Results Monitoring

Results Monitoring is the centerpiece of monitoring as it is a recurring, **annual** process that is crucial for **learning, strategic steering and accountability**. It is a participative exercise during which the members of the PMU, together with key stakeholders, analyze how the intervention is doing in terms of results. The intervention team – on the basis of information collected through the monitoring of indicators - tries to find answers on questions such as:

- Where are we in terms of results ? On track ?
- What is working and what isn't ? What can we learn ?
- Are we still doing things right and doing the right things ?
- What are important risks and how should they be managed ?

- What should we do differently ? What recommendations to make to the steering committee ?
- What progress markers/milestones can we see for the next year?
- Etc.

During Results Monitoring, the intervention will analyze the indicators that are intended to monitor the change processes. After a review (based on the questions above), the intervention team will set out a **number of new indicators** (progress markers/milestones/performance indicators) that will allow them to **track the change processes in the next 12 months**. Furthermore, based on the strategic reflection mentioned above, some changes to the intervention strategy will be formulated as recommendations for the PSC in the annual Results Report. The PSC has the mandate to approve or reject the propositions of the PMU.

### Final monitoring

Final monitoring is the final piece of the Monitoring process through which:

- results achieved at the end of the implementation of an intervention are summarized
- lessons learned are documented after a final reflection on the development process supported by the intervention

In this final monitoring process, the intervention team will do analyses similar to the ones in Results Monitoring, but with a view on the whole of the intervention's implementation process. It will give a final update on results achieved and will focus on what lessons EWSA, the steering committee, MININFRA, BTC and other stakeholders can learn from the intervention. On the basis of this information, a Final Report for the intervention is produced.

### 3.4.2 Different components of Evaluation

In this context, the term 'review' is used for external evaluations at project level. The main function of a review is to offer an external perspective on the intervention's performance as well as to analyse in-depth the on-going or completed development process. In doing so, reviews are used to:

- analyse if interventions have to be re-oriented in order to achieve the development outcome
- inform strategic decisions
- identify and reflect upon lessons learned

Performed by an independent external actor, reviews play an important role in the **accountability** of the intervention's performance.

Reviews are organized twice during the lifetime of the intervention:

A **Mid-Term Review (MTR)** will be organized after two years of implementation. In the MTR the focus is on **strategic decision making** for the intervention. Therefore, special attention will be given to the validity of and functioning of the intervention's Theory of Change by using a theory-based evaluation methodology (e.g. realist evaluation)

An **End-of-Term Review (ETR)** will be organized at the end of the intervention. In the ETR, the focus is on **learning**. Therefore, special attention will be given to expected and unexpected change at the level of beneficiaries by using a Most Significant Change (MSC) methodology.

### 3.4.3 Results Framework

A result oriented monitoring framework has been set up for this intervention. This framework is based on the intervention strategy. The indicators reflect the delivery of main outputs (and their quality), intermediary changes (i.e. the change processes, skills transfer), outcome and impact. Additional indicators will need to be developed during implementation for those indicators looking at the intermediary changes, i.e. the change processes. Indicators at this level are progress markers (milestones) and performance indicators that give early signs of change. The results framework can be found in annex 7.2.

## 3.5 Description of beneficiaries

### Direct beneficiaries

- The direct beneficiaries of the intervention are EWSA and more specifically the Electricity Utility Directorate and the HR Unit.

### Indirect beneficiaries

- Other staff members of EWSA that will benefit from the methodologies, approaches and instruments developed in EWSA and tested in the Electricity Utility.
- The MININFRA will also benefit from the intervention through improved inputs for policy making.
- PSCBS will benefit from the intervention since PSCBS, through its involvement in the PSC, will be able to fulfill its mandate concerning Capacity Development in the Energy Sector.
- Final beneficiaries are the people of Rwanda that will have an increased access to “sufficient, reliable and affordable energy”

## 3.6 Risk Analysis

### 3.6.1 Implementation risks

Risks	Risk Level	Mitigation measures
<p>Poor interest for Capacity Development</p> <p><i>CD seen as a “nice to do” compared to the hardware objectives in the Electricity sub-sector</i></p>	High	<p>Via the future Belgian support to PSCBS (RWA1208411): This intervention, about to be signed and to start, foresees strategies to reinforce trust between PSCBS and sectors through better information exchange, closer relationship between cluster experts and counterparts in MDAs, PSCBS involvement in CNAs and CB plans, visibility exercises and sharing of success stories</p> <p>Anchorage of the CD intervention in the energy sector foreseen at EWSA level, reinforcing day to day ownership and comprehension of what Capacity development really stands for.</p> <p>Close contributions to the content of the intervention through direct involvement of PSCBS into the steering committee, making this instrument a high-level platform for integrating Capacity Development in the EWSA agenda</p> <p>Complementarity of the Belgian CD interventions (top-down</p>

		<p>approach of RWA 1208411 and proposed bottom-up approach with RWA1208311)</p> <p>CD as a transversal theme in the new EDPRS II</p>
Lack of harmonization with current CD approaches (e.g.: SCBI) leading to competition for resources	Low	<p>Taken into account in the formulation phase, through a large panel of interviews and meetings with stakeholders active in CD</p> <p>Design of intervention making use of existing approaches (e.g.: SCBI, industrial attachment)</p>
Lack of continuity in the intervention because of the absence of adequate staff	Medium	<p>Recruitment of replacement staff will be a priority for BTC. In order to bridge the time gap, extra support can be foreseen at the level of the BTC Representation in Kigali (administration, finance, logistics) or from BTC HQ.</p>
Lack of appropriation and/or availability of the recommendations and suggestions made by the project team, in particular in relation to change management at the highest level	Medium	<p>Joint description of the ToR of the change co-manager, joint selection and joint appraisal of his performance should increase appropriation by EWSA of the outputs of the project</p> <p>Sensitization of EWSA stakeholders to the challenges of CD through regular high-level meetings with PSCBS, BTC, EWSA and MININFRA</p>
EWSA Organizational restructuring	Medium	<p>Scoping mission and formulation mission have taken place in a constantly moving organizational environment. Flexibility (in terms of focus and approach) is one of the pillars of the intervention since this will allow the intervention to adapt its approach to changes in the institutional environment, including an organizational restructuring. (see §2.2.3)</p>
Staff resistance to change since it can be perceived as an increase in the control on their schedule and workload	High	<p>Technical assistants have a role in facilitating the change by paying attention to signs of resistance and developing strategies to overcome this resistance together with involved staff.</p>
Lack of committed project staff	Medium	<p>Careful recruitment of qualified candidates with attractive compensation will mitigate the risk of not being able to recruit adequate staff and the risk of early departure.</p>
Lack of sufficient funding during implementation	Low	<p>The financial arrangements in chapter 5 of this TFF, specifically the ones on finance management, guarantee the availability of funding for the intervention.</p>

**Table 7:** Implementation Risks

### 3.6.2 Management risks

Risks	Risk Level	Mitigation measures
Limited availability of international, regional	Medium	<p>Advertise positions through PSCBS, LEnCD , BTC</p> <p>Capacity development networks and others specialized</p>

and/or national technical expertise in the sector, CB and public sector reform <i>Pm, this is the issue that SCBI is facing while recruiting experts and even national counterparts</i>		platforms Involve HR specialists in designing job descriptions in order to make sure that the sought profiles / mix of skills / competences are potentially existing and available on the market
Limited availability of EWSA designated Director of Intervention	Medium	Clarify the expected inputs from the DI and make sure that it fits with his/her other roles and responsibilities Appoint a full-time EWSA Project Coordinator to deal with day to day administrative, financial management and procurement related issues, allowing the DI to focus on the content and outputs of the intervention
High staff turnover within EWSA	High	Support to a retention policy is included in the intervention Prepare clear job descriptions with clear performance indicators will stimulate and motivate staff. In case of departure of staff, these documents can be the basis of a new recruitment.
Lack of accurate information	High	A major need identified by all the stakeholders in the sector. Therefore one of the main axes of the proposed intervention through the development of a P,M&E system, the integration of Key Performance Indicators,
Delays in procurement of adequate national and international technical assistance	Medium	Sufficient support functions to the project implementation unit are foreseen. The PMU will be integrated in a Single Project Implementation Unit (SPIU) if it is put in place and if it facilitates the implementation of the intervention

**Table 8:** Management Risks

### 3.6.3 Effectiveness risks

Risks	Risk Level	Mitigation measures
Inadequate understanding of CB and its added value by EWSA	High	The change co-manager has an important role in clarifying the role of the intervention and in mustering support for the change process.
CB tools and solutions not adapted to the realities of	Medium	Project staff must develop close working relationships with key staff in EWSA.

EWSA Electricity Utility		Process of continuous learning and adaptation (flexibility) to assure added value of the intervention
Low project impact due to changing circumstances	Medium	Conduct periodic project reviews to reassesses assumptions made during formulation
Privatization of (part of) EWSA	Medium	Accept
Existing budgets for O&M are decreased	Low	Among other things, this interventions will focus its support for strategic M&E within EWSA on raising awareness on the (economical) importance of O&M
Management of EWSA and policy makers do not make use of strategic information produced in the Electricity Utility	Medium	The intervention will need to support and actively stimulate the use of this information for management and policy-making.
EWSA budget of HR and/or training decreases	Low	The intervention has a role to play in raising awareness on this subjects within EWSA

**Table 9:** Effectiveness Risks

### 3.6.4 Sustainability risks

Risks	Risk Level	Mitigation measures
CB initiatives not institutionally embedded in EWSA	Medium	Development of M&E, knowledge management and quality assurance strategy to ensure follow up of results Intervention foresees close collaboration between EWSA and PSCBS to develop adapted CB solutions
Knowledge transfer from TAs	Medium	TAs will work in existing teams and will actively involve EWSA staff in all aspects of the intervention.
O&M procedures established with support from the intervention are no longer updated	High	By foreseeing regular update moments during the intervention, the intervention will try to institutionalize this practice. Furthermore, by working also on the central level, the intervention wants to create incentives for continuous improvement at the deconcentrated level.
Limited sustainability due to weak coordination of CD efforts in the sector	Medium	Role of Support to Strategic Capacity Building 2013-2017 intervention to strengthen coordination in the energy sector

**Table 10:** Sustainability Risks

### 3.6.5 Fiduciary risks

The first element of fiduciary risk, i.e. that **funds are not used for the intended purpose**, is medium. Internal and external audits regarding the use of funds will be carried out, by the GoR (RPPA) and by Belgium. There will be frequent monitoring and evaluation (M&E) of project activities. All these measures put together will bring the risks to a satisfactory level. Furthermore, quality assurance will be closely monitored by a Steering Committee that has to endorse work plans and budgets.

The second type of fiduciary risk, that **funds are not properly recorded and accounted for** is higher, but acceptable. BTC financial management system, procedures and country guidelines combined with regular controls will limit that risk. The co-management modality and the presence of a technical assistant in charge of Administration / Finance / Procurement are considered as strong mitigating measures.

## 4 RESOURCES OF THE INTERVENTION

### 4.1 Financial resources

#### 4.1.1 Rwandan contribution

The Rwandan contribution consists in the following elements:

- Secondment of a Director of Intervention and a Project Coordinator for the whole duration of the project (salary and expenses)
- Possibility to request support from the CBF, SCBI, CS Training Budget and other Rwandan appropriate instruments and actors as a complement to the intervention
- Provision of office premises (with Internet connection, water and electricity services and security) for the project in Kigali and in the selected pilot district(s).
- Full commitment of the partners to the success of the project

Regarding this contribution, it is important to note that as agreed upon in the General Development Cooperation convention signed on the 18th of May 2004 between both governments, any tax, including VAT on the supplies and equipment, works and services is covered by the Government of Rwanda

The Rwandan contribution for this intervention is estimated at 170.000 € .

#### 4.1.2 Belgian contribution

The Belgian contribution for this project is 5 million Euros. The detailed budget per year is presented in a table in Annex 7.3.

Tentative budget	In EUR
Output 1 (Field)	1.538.000
Output 2 (central)	1.053.000
Output 3 (HR)	1.345.000
<b>Sub Total</b>	<b>3.936.000</b>
Contingency	233.800
General Means	830.200
<b>Total</b>	<b>5.000.000</b>

Table 11: High level budget

#### Contingency (5% of activities):

An amount for contingency of 233.800 Euro is set to compensate the exchange rate fluctuations and to allow flexibility in the project implementation.



## 4.2 Human resources

### 4.2.1 Principles

- Technical Assistance (TA) programmes in Rwanda should prioritise transformational over transactional activities. All TA should be first and foremost transformational, with at least 75% of all Technical assistants' time to be devoted to capacity building activities <sup>8</sup>
- All technical assistance provided will be concerned primarily with the transfer of capacity to the GoR by building skills and capabilities of local staff and/or developing systems and procedures which will be codified in an accessible manner <sup>9</sup>
- Preference for long-term embedded coaching and mentoring rather than “fly in – fly out” TA
- TA should not only be technically proficient but also have clear capacity building skills
- Possibility to share additional international resources (eg: RAFi) between the different interventions within the Energy sector if found appropriate by the partners

### 4.2.2 Project staff

The list of the **project staff** is indicated in the following table (see also organizational structure in chapter 5):

Position	Quantity x Duration	Remarks	Budget / Line	
<b>EWSA Director of Intervention</b>	1 x 48 months	<b>Assigned and financed by EWSA</b> Direct counterpart of the BTC funded Change co-Manager, Responsibilities of this person are described in chapters 5 and 7	EWSA	<b>EWSA Project Management</b>
<b>EWSA Project Coordinator</b>	1 x 48 months	<b>Assigned and financed by EWSA</b> Direct counterpart of the BTC funded RAF Responsibilities are described in chapters 5 and 7	EWSA	

<sup>8</sup> Rwanda Aid Policy Manual of Procedures May 2011

<sup>9</sup> ICP Belgium Rwanda 2011-2014

Position	Quantity x Duration	Remarks	Budget / Line	
<b>Change co-Manager</b>	1 x 48 months (30 months + possible extension of 18 months after MTR)	BTC International Technical Assistant (ITA) (ToR in annex 7) Part of the Project Management Unit MTR will define if this profile needs to be extended (in years 3 and 4) <sup>10</sup> Under <b>BTC employee contract</b> <b>Funded by the intervention</b>	20% on Output 1 40% on Output 2 40% on Output 3	<b>BTC Project Management</b>
<b>Electricity Utility O&amp;M Engineer</b>	1 x 48 months	BTC International Technical Assistant (ITA) (ToR in annex 7) Part of the Project Management Unit Under <b>BTC employee contract</b> <b>Funded by the intervention</b>	100 % on Output 1	
<b>RAF: Responsible for Administration, Finance and procurement<sup>11</sup></b>	1 x 48 months	BTC National Technical Assistant (NTA) (ToR in annex 7) Part of the Project Management Unit Under <b>BTC employee contract</b> , <b>Funded by the intervention</b>	100% on General Means	<b>Support Functions</b>
<b>Procurement Officer</b>	1 x 48 months	Under <b>BTC employee contract</b> , <b>Funded by the intervention</b>	100% on General Means	
<b>Project Accountant /Secretary</b>	1 x 48 months	Under <b>BTC employee contract</b> , <b>Funded by the intervention</b>	100% on General Means	
<b>Driver</b>	2 x 48 months	Under <b>BTC employee contract</b> , <b>Funded by the intervention</b>	100% on General Means	

Table 12: Project Staff

### 4.2.3 Project technical assistance

As mentioned in chapter 2, the CD **approaches and activities**, including the **Technical assistance** made available for the project, must remain flexible. The functions presented below are based on the present situation. However, the actual needs will be analyzed in detail and confirmed during the

<sup>10</sup> The necessary budget to extend this position in years 3 and 4 is included in the budget lines "Targeted Technical Assistance, Consultancies and Advisory Services"

<sup>11</sup> When at least two out of the four interventions in the energy sector are launched, and if found relevant and adding value by the partners, this RAF position could be reinforced / coached by an international RAF(i), shared between the different interventions. It is currently estimated (and budgeted) that the CD Energy's contribution to this international profile would be 25% of a Full Time Equivalent (FTE). If not found appropriate or necessary, this budget can be reallocated by the PSC.

baseline study done at the beginning of the intervention. Moreover, these needs will also be regularly reviewed and adapted in the annual strategic planning process.

The proposed **medium term technical assistance** that can be **funded** by the intervention is indicated in the following table:

Position	Quantity x Duration	Remarks	Budget / Line	
P&O Expert	1 x 24 months		100 % on Output 3	Medium term Technical assistance
Planning, Monitoring and Evaluation Coach (M&E Expert)	1 x 24 months		100 % on Output 2	

Table 13: Technical Assistance

The figure below gives a general overview of Human Resources

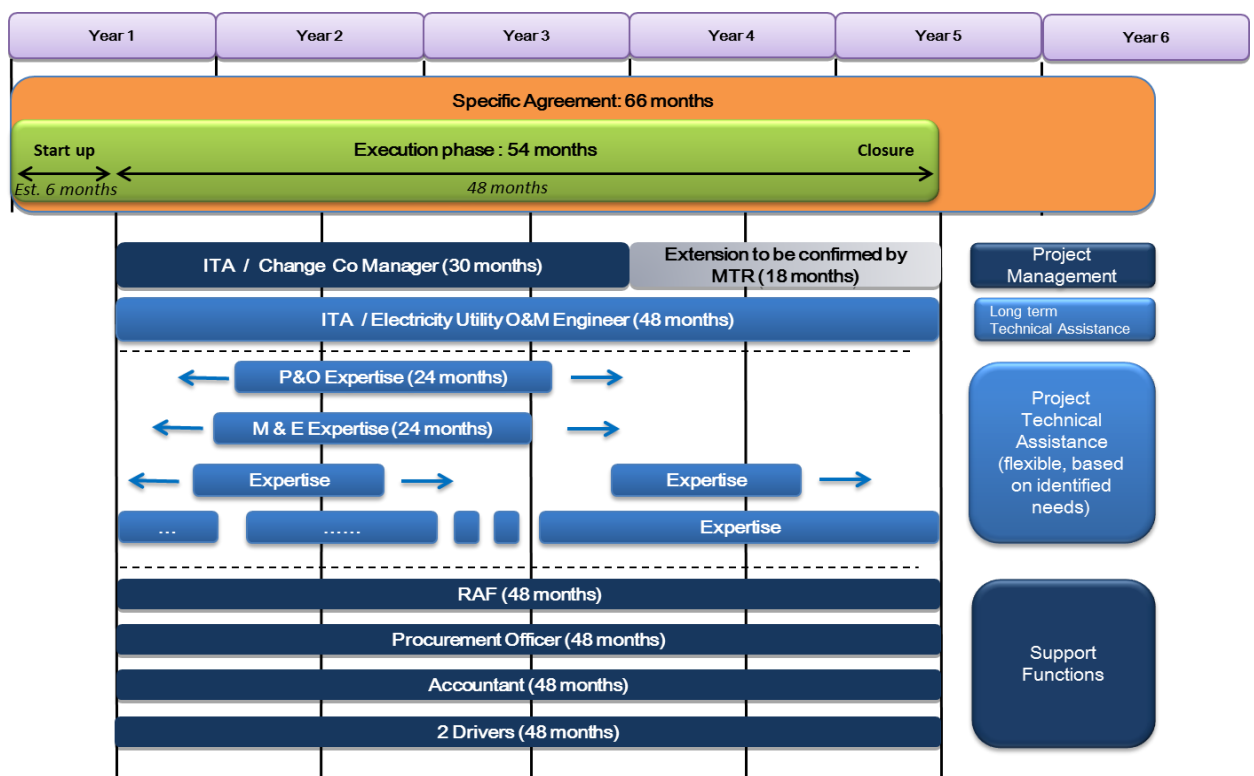


Figure 15: Summary of Human Resources funded by the project

## **4.3 Other resources**

### **4.3.1 Services**

- Targeted consultancies and Advisory services
- Cars maintenance, including fuel and insurance
- Concept and feasibility study for the new training center
- Consultancy for capitalisation exercises

### **4.3.2 Furniture and equipment**

- Limited ICT investments will cover software and consumables.
- Purchase of 2 cars + running costs
- Tools and equipment for maintenance premises
- Didactical equipment for the EWSA Training Center
- Equipment of the Electricity part of the Bureau Central de Maintenance when transferred under the EWSA Utility responsibility
- ICT online P,M&E system
- Communications

### **4.3.3 Works**

- Rehabilitation of maintenance premises
- Safety and security works in the selected pilot district(s)

## 5 IMPLEMENTATION MODALITIES

### 5.1 Introduction

This chapter describes how the project will be managed, from start-up until closure, in all its management areas (strategic steering, technical content management (scope), procurement management, financial management, human resources management, quality management and audit) and is intended to enable stakeholders directly involved in the project to:

- Understand which **management system** applies to which project management area. There are two possibilities:
  - Use of the Rwandan system (or of an harmonized donor system recognized by Rwanda as its system),
  - Use of the BTC system.
- Be aware of their **responsibilities** and of those of the other stakeholders in the various project management areas. There are three modes:
  - **Rwandan responsibility:** the Rwandan partner is responsible. For the finance and procurement management areas, the term “national execution” is used.
  - **Joint responsibility:** both the Rwandan partner and BTC are responsible. For the finance and procurement management areas, the term “co-management” is used.
  - **BTC responsibility:** BTC is responsible. For the finance and procurement management areas, the term “régie or direct management” is used.

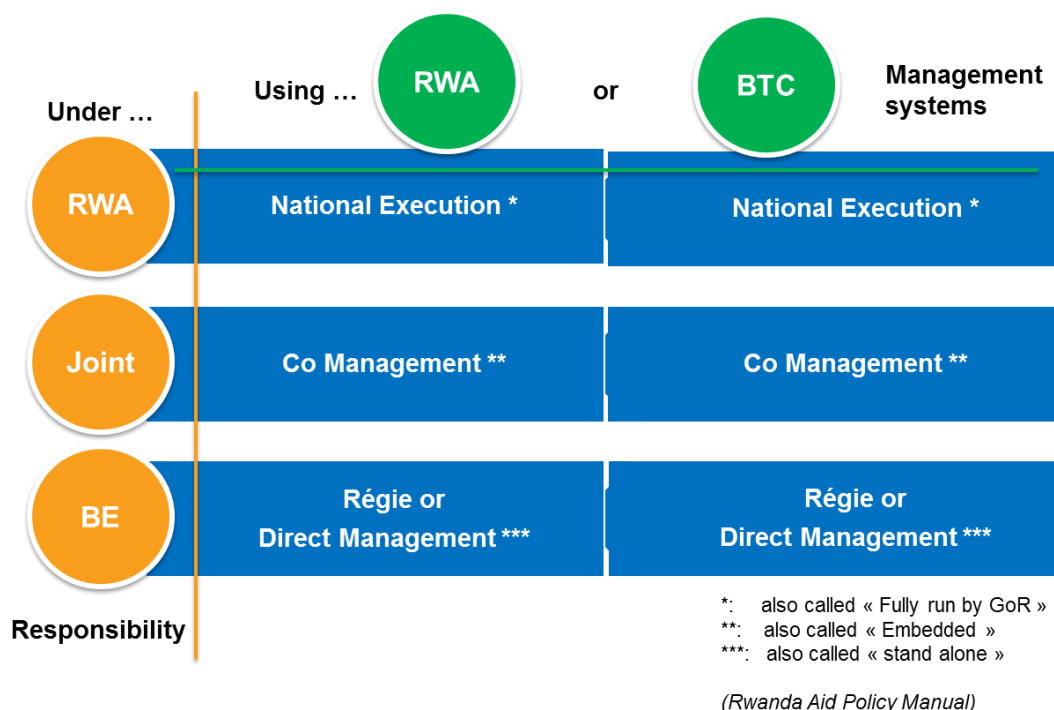


Figure 16: Types of implementation modalities

These possibilities in terms of system and responsibility mode can be related to the three modus operandi for the project support as introduced in the Rwanda Aid Policy Manual of Procedures:

- A “**Fully run by GoR**” project is a project where the Rwandan system is used under Rwandan responsibility (this situation is called “**national execution**” in Belgian terminology).
- An “**embedded**” project is a project where there is a **joint responsibility**, regardless of the system used (from Rwanda or from BTC).
- A “**stand-alone**” project is a project run under **BTC responsibility**, usually using the BTC system.

In line with the Paris Declaration, the Aid Agenda of Accra, the Rwanda Vision 2020, this project, like all BTC projects, will combine various modus operandi, depending on the management area. The aim is to come as close as possible to a “fully run by GoR” situation, while taking into account risks and constraints, as assessed by the organizational assessment made end of 2011 and by the formulation mission.

The selected responsibility mode for this intervention is “**joint responsibility**” for all management areas. Some specific processes like technical backstopping, audits, MTR, ETR, capitalization services, etc. will remain under Belgian responsibility.

No matter the choices made in terms of systems and responsibility modes, partnership, collaboration, transparency and mutual information will apply in managing the project.

## 5.2 Project duration and lifecycle

### 5.2.1 Execution phase of the intervention

The duration of the Specific Agreement (SA) is five years and a half (66 months) while the actual execution phase of the intervention is 4 years and a half (54 months). The execution phase starts when the SA is signed and includes a start-up phase (estimation: 6 months) and a closure phase. All project activities must be terminated at the end of the 4 years and a half execution period.

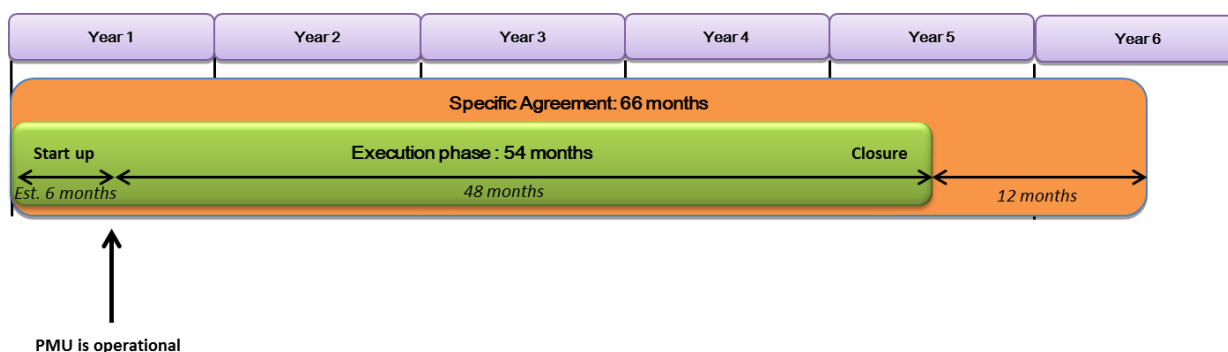


Figure 17: Timeline

The effective start date of the intervention is the date of signature of the specific agreement.

After the signature of the specific agreement, the project enters its effective **start-up phase**, of about 6 months, during which project human resources will be hired, bank accounts will be opened, first cash call will be made, preparation of baseline activities and first year planning will be done, culminating in the production of the start-up project report<sup>12</sup>.

<sup>12</sup> In order to guarantee a quick start of the intervention and a proper closure, a support by the BTC programme Officer in

The execution ends with a **closure phase** of about 6 months to ensure proper technical and administrative closing and hand-over. Project final report is produced after the end of the execution period.

Consolidation activities are planned at various moments during the project life cycle and during the closure phase.

## 5.2.2 Chronogram

The chronogram provided in this TFF will only cover the first year of implementation. This is mainly due to two reasons:

- First of all, an important **amount of flexibility** is required for this capacity development intervention. In fact, as described in chapter 3, work on the different outputs will start with a functional review of supported function in the Electricity Utility. Based on these functional reviews, the intervention strategy will be refined and, if necessary, adapted. In this context, it is not useful to provide a chronogram for the period beyond the first year.
- Secondly, work on the different outputs and components will start in the second year and will most likely **last until the end** of the intervention. Given the amount of detail provided in this TFF, this would make for a chronogram with **continuous activity on all components**. Again, in this context, it is not useful to provide a chronogram for the period beyond the first year.

Below, the **chronogram for the first year** of implementation is provided.

Outputs and activities	Year 1			
	Q1	Q2	Q3	Q4
<b>Start-up phase of the intervention</b>				
Installation of PMU (including logistics)	■	■		
Selection of pilot district	■	■	■	
Baseline study and installation of M&E system for the intervention		■	■	■
<b>Activities under output 1</b>				
Functional review of existing O&M practices and performance in EWSA Electricity Utility in the pilot district			■	■
<b>Activities under output 2</b>				
Functional review of existing management and support functions at EWSA Electricity Utility central level		■	■	■
<b>Planning</b>				
Operational planning year 2		■	■	■

Table 14: Chronogram for the first year of implementation

## 5.3 Project organization and anchorage

### 5.3.1 Organizational structure and institutional anchorage

The intervention is willing to integrate its support functions into a Single Project Implementation Unit (SPIU). At the time of the drafting of the present TFF, there are signs that a SPIU would be installed for the Energy Division of EWSA. As soon as the SPIU is in place, the PMU support staff will be integrated in that SPIU and the project organizational structure (including each individual function

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charge of this thematic is budgeted (equivalent 4 months PO ad interim during start-up and closure phases (1/3 time over 2 x 6 months). This budget will be used if necessary. It will also be planned and mutually agreed. If not useful, the PSC will decide of its destination. Specific ToRs for these assignments will be jointly developed by BTC and EWSA. This support will not include decisions related to the scope of the intervention but will be limited to logistical and administrative matters.

funded and not funded by the project) and anchorage will be updated.

As the project aims at changing deeply and sustainably the functioning of the EWSA Electricity Utility organization, the intervention will be anchored to the EWSA Electricity Utility Direction.

### 5.3.2 Project Steering Committee (PSC)

#### 5.3.2.1 Role

The PSC is the highest level of decision in the project. It is in charge of the strategic steering of the intervention. The main responsibilities of the PSC are:

- Defining the project strategy, validating main changes in the intervention strategy and ensuring their alignment to the also evolving overall EWSA strategy (strategic planning, annual planning and budgeting),
- Assessing the development results obtained by the project (strategic quality assurance and control) and approve project reports and planning, including the Rwandan contribution to the intervention
- Managing strategic changes on overall and specific objectives, on total project budget and/or on duration) and other important changes like budget line and intermediate results changes, changes on implementation modalities as well as the adaptation of the project organization and anchorage to the new structure of EWSA,
- Solving problems that cannot be solved at the operational level and management level in the PMU,
- Enhancing harmonization among donors.

#### 5.3.2.2 Composition

The **voting members** of the PSC are:

- The EWSA General Director, or his delegate, is the chair of the PSC
- The BTC Resident Representative, or his delegate, is the co-chair of the PSC
- The PSCBS' Executive Secretary, or her delegate
- A representative of the MININFRA,
- A representative of the MINECOFIN,
- A representative of the MINAFFET

**Non-voting members** of the PSC are:

- The EWSA Deputy Director General - Energy
- Representatives of the other Belgian financed bilateral projects in the Energy sector

The members of the Project Management Unit participate as regular observers and informants. The Change co-manager acts as the secretary of the PSC.

#### 5.3.2.3 Operating rules of the PSC

The PSC meets every six months by invitation of the chairperson and at any other time deemed necessary. The invitation must be received by the members at least 7 days before the meeting. The invitation includes an agenda, suggested decisions and supporting documents. A PSC meeting will be postponed if less than 2/3 of its members are present.



Decisions are taken by consensus. Observers and informants have no voting power.

Decisions of each meeting of the PSC are recorded in minutes signed by the present voting members.

The PSC may invite external experts or stakeholders as resource people for a particular meeting.

### **5.3.3 Project Management Unit (PMU)**

#### **5.3.3.1 Role**

The PMU is the operational level in the project. It takes operational decisions and manages project activities on a day to day basis in order to fully implement the project strategy, in time and within budget, as approved by the PSC. The main responsibilities of the PMU are to:

- Develop, propose and implement the project strategy and corresponding operational plans
- Prepare quarterly and annual reports for the stakeholders,
- Coordinate and provide quality assurance and quality control in the processes of procuring the capacity building services and any other services, goods or works requested by the project (content management), as well as proper monitoring and evaluation of the intervention.
- Ensure proper management and apply stringent accountability arrangements for the management of the financial resources allocated to the project,
- Ensure that procurement processes and procedures used by the project are conform to the applicable procurement guidelines,
- Ensure proper human resources management practices conforming to the applicable guidelines,

The PMU will be located in the EWSA premises

The responsibilities of the PMU are further developed in the following paragraphs.

#### **5.3.3.2 Composition**

It is proposed to split the PMU's joint-responsibility function into two components:

- a) Technical content (scope) and quality management of the intervention
- b) Administration, Financial Management, procurement, HR, Risk management, etc

This proposal is based on the lessons learned from previous interventions where the BTC Co-manager was overwhelmed by administration, procurement and financial management-related activities and had little time left to really work in his area of expertise. By reinforcing the intervention with a Responsible for Administration, Finance and Procurement (RAF), the intervention makes the best use (value for money) of the proposed expertise.

Given the selected implementation modality (co-management) where both the Rwandan partner and BTC have to be represented, the following structure mirroring the roles and responsibilities in the two different components (Scope / Admin-Fin-Procurement) is proposed:

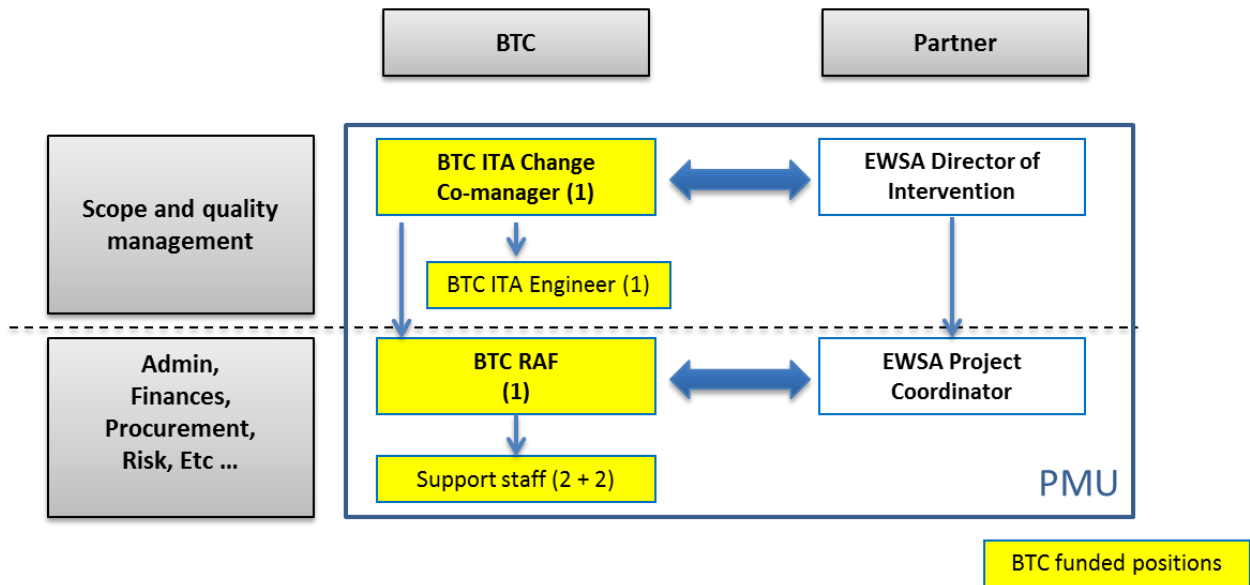


Figure 18: PMU setup

The members of the PMU are:

- An EWSA appointed **Director of Intervention (DI)**, acting as a sponsor / senior change manager and as an authorizing officer for the Rwandan side for all matters executed in joint responsibility. The Electricity Utility Operations Director will most probably be designated as the DI.
- An EWSA appointed **Project Coordinator**, acting as a day-to-day project manager
- A BTC appointed **Change co-manager**, overseeing and guiding overall change brought about by the intervention by ensuring global coherence, focus and coordination. This person will be acting as authorizing officer for the Belgian side. The Change Co-manager coordinates the PMU.
- A BTC appointed **Responsible for Administration and Finance and Procurement (RAF)**, in charge of all administrative, procurement and financial matters executed in joint responsibility.
- A BTC appointed **Electricity Utility O&M Engineer**, in charge of accompanying the change process in the selected pilot district(s) and for assuring coherence with activities on the central level.
- Some **support staff**: an accountant and a procurement officer, plus two drivers

### 5.3.3.3 Operating rules of the PMU

The PMU meets at least once a month and at any other time deemed necessary.

Meetings of the PMU are prepared, organized, followed-up and chaired by the Change Co-Manager, by default. However other clear arrangements can be decided by the PMU.

For matters executed in joint responsibility, decisions are taken by consensus between the EWSA Director of Intervention and the BTC Change Co-manager.

Decisions of each meeting of PMU are recorded in minutes.

## 5.4 Technical content (scope) management

Technical content management (or scope management) encompasses the processes that transform the project strategy into activities that must be properly defined, executed and monitored. It also includes possible backstopping by BTC HQ.

### 5.4.1 Operations definition, execution and monitoring

System:	Not defined, as these processes are not really formalized
Responsibility:	Joint responsibility

The definition and writing of the specifications (terms of reference) and the technical follow-up (including provisional and final technical acceptance) for all services, goods or works to be procured by the project and the definition, execution and follow-up of the activities lead by the project team itself, are a joint responsibility of the DI and the change co-manager, except if expressly stated otherwise here under.

The DI and the change co-manager are supported by the other members of the project team, by other EWSA staff and by PSCBS, depending on the activity.

### 5.4.2 Operations coordination

System:	Not defined, as these processes are not formalized
Responsibility:	Joint responsibility

The PMU meets formally at least once a month, in order to review project progress, identify issues and risks and proactively take actions.

### 5.4.3 Technical backstopping

System:	BTC system
Responsibility:	BTC responsibility or joint responsibility

Technical backstopping is the possibility for the project or the PSC to ask the support of experts at the level of BTC HQ.

A backstopping mission can also be decided by BTC representation or BTC HQ.

Backstopping findings and recommendations are presented to the PSC.

## 5.5 Procurement management

Procurement processes shall be implemented according to the Rwandan Law on Public Procurement and the EWSA Manual of Procedures<sup>13</sup>. In addition, specific BTC requirements apply, as described in BTC project execution Guidelines for Rwanda.

<sup>13</sup> Currently under review by the EWSA Board, based on a KPMG conducted exercise. Draft requested but not received yet

### 5.5.1 Procurement planning

System:	RWA system <u>and</u> BTC system
Responsibility:	Rwandan responsibility for the RWA system Joint responsibility for the BTC system

BTC requires a quarterly procurement plan for all project procurement processes.

Procurement planning is performed by the BTC RAF and the EWSA Project Coordinator, with the support of the procurement services of EWSA and of the Procurement officer financed by the project.

The DI and the BTC Change Manager both approve the quarterly procurement plan in joint responsibility.

### 5.5.2 Procurement execution

System:	RWA system by default, BTC system for some clearly defined activities (see below)
Responsibility:	Joint responsibility when the RWA system is used BTC responsibility when the BTC system is used

In addition to the Rwandan system, “no objection” by BTC is required at 2 key moments during the tendering process: before launching and before awarding. The contract must be signed by Rwanda with the BTC visum for non-objection.

**Table 15:** The authorizing power, depending on thresholds, for launching and awarding is distributed as indicated here under.

RWA	BTC	Threshold (X Equivalent EUR):
EWSA Project Coordinator	For commitments: Change co-manager For payments: RAF	$X \leq 25.000$
“Chief budget officer”	Resident Representative	$25.000 < X \leq 67.000$
“Chief budget officer”	Resident representative, after review by local independent lawyer appointed by BTC	$67.000 < X \leq 200.000$
“Chief budget officer”	Resident representative, after review by local independent lawyer and by BTC HQ	$X > 200.000$

X is the amount of the tender, VTA included, in EUR or converted from FRW in EUR on the day of publication, using the EUR buying rate of exchange on the National Bank of Rwanda website.

#### Use of the BTC procurement system:

The tendering processes that will use the BTC procurement system under BTC responsibility are:

- Consulting services for supporting BTC backstopping, if required
- Audit services for project audit on behalf of BTC
- Consulting services for the mid-term review
- Consulting services for the end-term review
- Capitalization services (BTC framework contract)
- Other procurements validated by the PSC

## 5.6 Finance management

All finance management processes must use the BTC system, as described in the global and Rwandan BTC guidelines on project execution (administration and finance), most of them in joint responsibility.

### 5.6.1 Budget management

#### 5.6.1.1 Budget planning

System:	BTC system <u>and</u> RWA system
Responsibility:	Joint responsibility for the BTC system Rwandan responsibility for the RWA system

The budget attached to the TFF sets out the budgetary limits within which the intervention must be executed. It also indicates expected disbursements per (BTC financial) year.

Budget planning processes have to be implemented both in the BTC system and in the Rwandan system in order for Rwanda to be able to track project progress in its own financial system. This must be executed under its own responsibility.

#### 5.6.1.2 Budget follow-up and review

System:	BTC system <u>and</u> RWA system
Responsibility:	Joint responsibility for the BTC system Rwandan responsibility for the RWA system

The project expenses cannot exceed the total budget of the intervention and the budget per responsibility mode may not be exceeded.

Any change to the budget must be approved by the PSC on the basis of a proposal that is drawn up by the PMU, according to the BTC rules in this respect.

The use of the budgetary reserve requires a budget change proposal to be validated by the PSC.

Quarterly reports on budget execution are produced by the RAF, as part of the financial reporting.

## 5.6.2 Accounting, financial planning and reporting

### 5.6.2.1 Accounting

System:	BTC system
Responsibility:	Joint responsibility

Accounting is done on a monthly basis according to BTC rules and regulations and its own financial system.

Accounting tasks are performed by the project accountant. The DI and the BTC Change Manager both approve the monthly accounting in joint responsibility. After approval, the monthly accounting must be transmitted to the BTC representation every month.

### 5.6.2.2 Financial planning

System:	BTC system
Responsibility:	Joint responsibility

The PMU elaborates quarterly a financial plan, according to BTC rules and regulations and its own financial system, to inform the PSC. Financial planning is based on the quarterly action and procurement plans.

Financial planning tasks are performed by the project accountant, based on the operations planning. The DI and the BTC Change Manager both approve the quarterly financial plan in joint responsibility. This plan must be forwarded to the BTC representation.

### 5.6.2.3 Financial reporting

System:	BTC system <u>and</u> RWA system
Responsibility:	Joint responsibility for the BTC system Rwandan responsibility for the Rwandan system

Financial reporting processes have to be implemented using the BTC system and could additionally be adapted to the Rwandan system, in order for Rwanda to be able to track project progress in its own financial reporting system.

## 5.6.3 Cash management

### 5.6.3.1 Managing intervention accounts and payments

System:	BTC system
Responsibility:	Joint responsibility or BTC responsibility

Supporting documents for all payments must be kept in the project office.

Accounts in joint responsibility:

As soon as the specific agreement has been signed, an account in EUR (main account) and one operational account in Rwandan Franc will be opened at the National Bank of Rwanda (NBR).

Payments from these accounts require a double authorization (BTC and RWA), according to the following specifications:

Authorizing officer for RWA:	Authorizing officer for BTC:	Threshold (EUR):	Type of account
Project Coordinator	RAF	< 25.000	Operational
Chief budget officer	Manager Administration & Finance (BTC MAF) Resident Representative <i>following BTC mandates</i>	> 25.000 <sup>14</sup>	Main

For logistical reasons, other accounts in joint responsibility may be opened with the approval of the “chief budget officer” and the resident representative.

Account in BTC responsibility:

For local expenses under BTC responsibility, a project account will be opened at BTC, with double BTC authorization.

### 5.6.3.2 Managing cash and transfers

System:	BTC system
Responsibility:	Joint responsibility or BTC responsibility

First transfer on the main account:

Once the signed specific agreement has been notified to BTC, a first cash call can be sent by the PMU to the BTC representation, per responsibility mode. The requested amount must correspond to the needs for the first three months of implementation.

Following transfers on the main account:

The main account is replenished quarterly according to BTC rules and regulations and its own financial system. The project must submit a cash call per responsibility mode to the BTC representation at the beginning of the month preceding the following quarter.

Cash management tasks are performed by the project accountant. The Project coordinator and the RAF both sign the quarterly cash calls in joint responsibility. The first cash call can be signed by the BTC Program Officer if the RAF has not been appointed yet.

### 5.6.4 Assets and inventory management

System:	BTC system for PMU's assets Rwandan system for assets officially transferred
Responsibility:	Joint responsibility for PMU's assets

<sup>14</sup> According to BTC systems

According to the project's objectives, the PMU can acquire infrastructure, equipment and goods to support the partner organization. Assets acquired by the PMU for its own use must be registered in an inventory updated on a quarterly basis according to BTC rules and regulations and its own administrative system. Their use is strictly limited to the activities of the project. At the end of the project, PMU's assets can be transferred to a partner institution after decision by the PSC. It must be formalized by an official transfer statement signed by all parties.

Transfer of equipment, infrastructure and goods to a partner institution has to follow rules and procedures from Rwanda in terms of inventory management.

### 5.6.5 Expenses before the signature of the specific agreement

The following expenses can be incurred by BTC before the signature of the specific agreement, in order to speed up the start of the project:

- Investment costs: IT equipment and vehicles;
- Costs for the recruitment of the international and national staff for:
  - project management
  - administrative and financial management
  - support functions

**Table 16:** Expenses before the signature of the specific agreement

Activity	Amount in Euros	Period and Comments
Recruitment costs	10,000	National & International staff
Capital Investment	60,000	Vehicles
	15,000	ICT equipment
Total	<b>85,000</b>	

### 5.6.6 Financial closure

#### 5.6.6.1 Financial balance

From six months before the end of the project execution phase, the PMU must elaborate each month a financial balance forecast according to BTC procedures.

#### 5.6.6.2 Destination of balances at the end of project operations

According to the modalities of the Specific Agreement, balance allocation is decided by mutual agreement between Rwanda and Belgium during the last PSC.

#### 5.6.6.3 Expenses beyond the end date of the specific agreement

No commitment can be made in the last six months of validity of the specific agreement without prior approval of the PSC and on exclusive condition that activities close before the end of the specific



agreement. After the end date of the specific agreement, no expenditure will be authorised except if it is related to commitments signed before the end of the Specific Agreement and mentioned in the minutes of a PSC. Operational expenditures after the end of the Specific Agreement will not be accepted.

## 5.7 Human resources management

The intervention will fund the following employee positions:

### BTC Project Management Staff

- Change Co-Manager
- Electricity Utility O&M Engineer

### Support Staff

- Responsible for Administration and Finance (RAF)
- Project Accountant / Secretary
- Procurement Officer
- 2 Drivers

The EWSA Director of Intervention and Project Coordinator are not funded by the project as they are provided by GoR. These positions are crucial for the success of the project.

The following modalities apply:

System:	BTC system for BTC Staff RWA system for the other Staff
Responsibility:	Rwandan responsibility for EWSA employees and BTC responsibility for BTC employees, with many aspects of joint responsibility as detailed below.

Positions	EWSA Project director	EWSA Project Coordinator	BTC Change co-manager	BTC RAF	BTC Electricity Utility Engineer	Support Staff
HR processes						
ToR (job description and profile)	Joint (in the TFF)	Joint (in the TFF)	Joint (in the TFF)	Joint (in the TFF)	Joint (in the TFF)	Joint (in the TFF)
Short listing	N/A	Joint	Joint	Joint	Joint	Joint
Assessment	N/A	Joint	Joint	Joint	Joint	Joint
Contracting	EWSA	EWSA	BTC HQ	BTC RWA BTC HQ if RAF(i)	BTC HQ	BTC RWA

Orientation	Joint	Joint	Joint	Joint	Joint	Joint
Probation and performance appraisal	Joint	Joint	Joint	Joint	Joint	Joint
Training	EWSA	Joint	Joint	BTC	Joint	BTC
Missions and leave	EWSA	Joint	Joint	Joint	Joint	Joint
Payroll	EWSA	EWSA	BTC HQ	BTC RWA	BTC HQ	BTC RWA
Salary scale and staff regulations	EWSA	EWSA	BTC HQ	BTC RWA	BTC HQ	BTC RWA
Early termination of contract	Joint	Joint	Joint	Joint	Joint	Joint

**Table 17:** Responsibility mode per HR management process and by position

Additional remarks:

All positions are open for men and women. Female candidates will be encouraged to apply.

If the ToR defined in this TFF must be revised before advertisement, the revised ToR need to be approved by the PSC.

The RAF and the Accountant/Secretary will be trained by BTC as they will use many aspects of the BTC management system, in addition to their duties in the Rwandan management system. No training other than on the use of the BTC systems is foreseen for the change co-manager, except on explicit request from the DI.

Project objectives are included in the performance contracts of both the EWSA project director and the EWSA project coordinator.

## 5.8 Quality management (monitoring and review)

Monitoring and Evaluation (M&E) is to support accountability requirements, continuous learning and strategic steering. For this purpose, BTC sets out a number of requirements.

### 5.8.1 Monitoring

The different processes are briefly explained below. For every Monitoring process, both the change co-manager and the DI (with the support of the PMU team) are responsible for the delivery and quality of monitoring.

#### 5.8.1.1 Baseline

System:	BTC system, making use of RWA frameworks systems whenever possible
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Responsibility:	Joint responsibility
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Establishing the baseline in the beginning of the project is a BTC system requirement. The project M&E framework will be aligned with existing frameworks and methodologies already used by EWSA or other stakeholders (e.g. PSCBS).

The generic ToR of the Baseline work plan are provided under Annex 7.5 and will be completed by the change co-manager at the beginning of the intervention.

The Baseline Report needs to be established at the beginning of the project (ideally within the 9 months after the first project steering committee (start-up PSC) and with the involvement of the change-co-manager). In case of late arrival of the change co-manager, the baseline report will be produced no later than 6 months after his/her arrival.

The Baseline Report will be approved in joint responsibility by the DI and the change co-manager. The Baseline Report will be presented to the Project Steering Committee (PSC). The PSC takes note of the Baseline Report and validates the way the intervention will be monitored.

### 5.8.1.2 Operational monitoring (including planning)

System:	BTC system
Responsibility:	Joint responsibility

Operational monitoring refers to both planning and follow-up of the intervention's management information (inputs, activities, outputs). It is an **internal** management process of the intervention team and is done every 3 months.

### 5.8.1.3 Results Monitoring

System:	BTC system
Responsibility:	Joint responsibility

Results Monitoring refers to an annual participatory reflection process in which intervention team reflects about the achievements, challenges, etc. of the past year, and looks for ways forward in the year(s) to come. The PSC approves or disapproves recommendations made by the intervention team (see chapter 3) .

### 5.8.1.4 Final Monitoring

System:	BTC system
Responsibility:	Joint responsibility

The purpose of final monitoring is to ensure that the key elements on the intervention's performance and on the development process are transferred to the partner organisation, the donor and BTC and captured in their "institutional memory". This enables the closure of the intervention (legal obligation for back-donor of BTC), the hand-over to the partner organisation and the capitalisation of lessons learned. It can be considered as a summary of what different stakeholders might want to know at closure or some years after closure of the intervention.

### 5.8.2 Evaluation: Mid-term review and end-term review<sup>15</sup>

System:	BTC system
Responsibility:	BTC responsibility

Reviews are organised twice in a lifetime of an intervention: at mid and end of term. BTC-HQ is responsible for organising the reviews. The ToR of the reviews and their implementation are managed by BTC Brussels, with strong involvement of all stakeholders (see chapter 3). The role of the PSC is to approve or disapprove the recommendations made in the reviews.

### 5.8.3 Capitalization

System:	BTC system
Responsibility:	Joint responsibility

A specific budget line is introduced to allow for capitalization and communication activities during the lifecycle of the project.

## 5.9 Audits

### 5.9.1 Project audits by BTC

System:	BTC system
Responsibility:	BTC responsibility

Audits will be organised by BTC during the project implementation period. A qualified external financial auditor selected and contracted by BTC, will execute the auditing. BTC will elaborate the Terms of Reference and select the audit firm. The audit will include the following items:

- verification of the existence and the respect of procedures;
- verification if the accounts of the project reflect reality

The auditor's reports will be presented to the PSC. If necessary, the project team will elaborate an action plan in order to improve the project procedures and to prove that corrective measures have been taken.

Terms of Reference of BTC audits are a BTC responsibility and will be shared with EWSA for information.

### 5.9.2 Project Audits by External Control Bodies

System:	BTC system or RWA system
Responsibility:	BTC responsibility or RWA responsibility or Joint responsibility

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Each year, BTC accounts are audited by the Belgian government auditors, who have the right to audit any project implemented by BTC. BTC internal audit chief officer is also free to decide to audit any project implemented by BTC.

The Rwandan authorities, either EWSA or its parent ministry MININFRA or the Office of the Auditor General for State Finances of Rwanda can also decide to audit the project. In this instance, the Director of Intervention is the primary respondent to the auditor's requests. An annual audit is recommended from the Ministry of Finance.

Project audits reports are mutually shared and presented to the PSC.

In case the project is audited by the Auditor General Office of Rwanda, it will be clear at the beginning of the audit which systems are to be used. It should be avoided to audit the project compliance to the Rwandan system where the TFF clearly states that the BTC system must be used.

Moreover the scope of control will focus on the co-management budget whereas the direct management budget will remain under full responsibility of BTC and therefore governed by the jurisdiction of its external control bodies (Belgian Government auditors). If necessary, information on amounts spent in "direct management" can be provided.

## 5.10 Modification of the TFF

The present TFF may be amended by mutual consent of the parties.

It is essential to install an attitude of expecting and encouraging a practice of regular modifications based on the insights gained during the implementation. The task of the project management unit and the PSC is to assess the quality of the argumentation for the suggested changes and to request further explanation if necessary

Careful consideration must be given not to change the present TFF in a way that would unnecessarily change the outcome of the intervention as originally agreed between the parties. A formal agreement by the Belgian government is needed for the following changes:

- Modification of the duration of the Specific Agreement;
- Modification of the total Belgian financial contribution;
- Modification of the Specific Objective of the intervention.

The request of the above modifications has to be approved and motivated by the Steering Committee. The exchange of letters requesting these modifications shall be initiated by the Rwandese party and shall be addressed to the Belgian Embassy. The following changes to the TFF will have to be approved by the Steering Committee:

- The execution modalities;
- The program results and activities and their respective budgets;
- The composition and responsibilities of the Steering Committee;
- The mechanism to change the TFF.

All other changes to the TFF should be approved by the chairman of the PSC and the BTC resident representative. The adapted version of the TFF shall be communicated to the BTC headquarters and to the Attaché for International Cooperation (DGD) in Kigali.

## 6 CROSS CUTTING THEMES

Given the context in the EWSA Electricity Utility, some cross cutting issues under the Belgian Co-operation development law are more and others less connected to the nature of this intervention. Children rights and Social Economy will not be addressed through this intervention because there is no specific entry point given the mandate of EWSA. Therefore, the intervention will focus mainly on gender and on environment.

### 6.1 Gender

In the present intervention, gender relations will be promoted while taking into account the boundaries of the given context. In fact, women are hardly represented in technical units within the Electricity Utility and, as is the case in many other organizations, this is both due to the way the organization relates to women and to the interest of women in taking up a technical profession. However, instead of focussing immediately on attracting more women through targeted recruitment, the focus of the present intervention will be on strengthening the women already active in the Electricity Utility to increase their influence in the organization. The assumption is that by doing so, female staff will participate more in planning and programming, so that the needs and interests of different target groups, not only women, will be taken into account when structures are established, plans are designed and assessments are made. This in turn will contribute to a more favourable environment that could lead to a future increase in the recruitment of women. A direct approach (working on recruitment) would, at this stage, probably create unnecessary frictions in the organization without a real impact on the position of women in the organization.

In general, the different steps in order to initiate this 'empowerment' process are:

1. Establish contacts with the Gender Monitoring Office (GMO), align with the National gender Policy
2. Conduct analysis, screen staff and desegregate data on staff of partner institutions
3. Identify potential women for professional promotion
4. Set targets for the duration of the progress
5. Formulate training needs for those women with high professional potential
6. Build capacities (train, create focus groups and promote networking among women)
7. Monitor and assess together with the GMO;
8. Register feedback from women in responsible functions;

The intervention will address issues related to gender relations in the following ways:

1. Strive for parity in in the PMU and provide sensitizing activities for PMU staff on gender issues
2. Integrate gender in all TDR for trainings, consultations, studies, analysis, ... in order to have as a first perspective the needs and the interests of the different targets groups
3. Work on staff retention with a specific focus on retention of female staff.
4. Integrate gender disaggregation in all statistics, data collection and analysis, including in the indicators of the baseline

## 6.2 Environment

Environment issues are only to some extent related to the functioning of the EWSA Electricity Utility. In fact, the challenge of protecting the environment is most important during the construction of new electricity generation, transmission and distribution infrastructure. At that stage but as early as possible, Environmental Impact Assessments (EIA) are conducted and mitigating measures are decided upon. It is therefore important for EWSA to rely on good quality EIS and to be able to ensure appropriate follow up and critical review. Capacity building (CB) related to EIA preparation and implementation will therefore be integrated in the overall CB programme of the project.

Concerning Operations and Maintenance as such, the link with the environment is even more concrete. During implementation of activities under output 1, issues related to environment will be actively taken into account:

- In the functional review of the deconcentrated O&M functions, environmental issues will be thoroughly analyzed. This includes considering in detail water and waste management, mobility, use of polluting chemicals and promoting best practices, it includes also analyzing the impacts of existing infrastructures on the environment and suggesting solutions to minimize these impacts, etc.
- Specific attention will be given to the implementation of measures related to environmental issues in O&M, including the measures proposed in the related EIA.
- The capitalization exercise under output 1 will also focus on the environment. The idea is to communicate and share experiences related to environmental issues in O&M to relevant stakeholders within and outside EWSA in order to take them into account when planning and implement O & M activities. This capitalization exercise will also be integrated in the capacity building strategy of the project.

## 7 ANNEXES

### 7.1 Logical framework

Logic of the intervention	Indicators	Sources of verification	Hypotheses/assumptions
<b>Global Objective (Impact):</b> <b>The Energy sector is able to provide sufficient, reliable and affordable energy for all Rwandans</b>	Price/kWh (break down for subsidies)	MININFRA database EWSA reporting	<ul style="list-style-type: none"> <li>Because of EWSA's increased ability to deliver reliable energy in a more cost-effective manner (operating ratio), prices for consumers will go down (taken into account subsidies)</li> <li>Prices for petroleum remain stable (i.e. do not have spectacular increases in prices so that production price do not rise)</li> </ul>
	Cost of electricity generation per MWh	EWSA reports (tbd)	
	Electricity imports	EWSA reports (tbd)	
<b>Specific Objective (Outcome):</b> <b>EWSA's Electricity Utility is able to provide, in a sustainable way, reliable energy to its customers</b>	Operating Ratio (national)	EWSA reports (tbd)	<ul style="list-style-type: none"> <li>Management and policy levels in the energy sector receive information that is relevant to them</li> <li>Management and policy levels in the energy sector have the position and willingness to use strategic information for decision-making</li> <li>Management and policy levels in the energy sector</li> <li>The importance of O&amp;M is recognised and means are allocated to it</li> <li>Better O&amp;M will lead to a sustainable improvement of infrastructures and a reduction of losses</li> </ul>
	Number of Transformer Failures per Year	EWSA reports (tbd)	
	Outages: duration of outages per year (differentiate for national level - pilot district level)	EWSA reports (tbd)	
	Outages: Number of Outages per year (differentiate for national level - pilot district level)	EWSA reports (tbd)	
	Operating expenses covered by revenues (%)	EWSA reports (tbd)	
	Losses, transmission (%) (differentiate for national level - pilot district level)	EWSA reports (tbd)	
	Average Operating Expenses per kWh (/kWh)	EWSA reports (tbd)	
<b>Result 1 (Output 1):</b> <b>Operations and maintenance of electricity infrastructure in the pilot district are strengthened in order to</b>	Delivery of outputs		



<b>contribute to the overall reliability of electricity infrastructure in Rwanda</b>			
	Working procedures for all sub-areas of O&M are in place for - all generation infrastructures in pilot district(s) - all transmission infrastructures in pilot district(s) - all distribution infrastructures in pilot district(s)	Project administration data	<ul style="list-style-type: none"> <li>O&amp;M procedures are of good quality</li> <li>O&amp;M procedures are accepted and are being applied</li> <li>O&amp;M procedures evolve, based on experience</li> </ul>
	Reporting systems are in place to follow-up on the functioning - from deconcentrated level to central level - of: - all generation infrastructures in pilot district(s) - all transmission infrastructures in pilot district(s) - all distribution infrastructures in pilot district(s)	Project administration data	<ul style="list-style-type: none"> <li>Reporting systems are of good quality and produce relevant information</li> <li>Reporting systems improve planning processes</li> </ul>
	Change process & early performance indicators - examples		
	O&M procedures are used and respected	Project administration data	<ul style="list-style-type: none"> <li>O&amp;M procedures are of good quality</li> <li>O&amp;M procedures are accepted and are being applied</li> <li>A good follow-mechanism is in place</li> <li>A change in culture is taking place as a results of renewed O&amp;M processes</li> </ul>
	Preventive management is done	Project administration data	
	Reporting to central level also includes recommendations & analysis	Project administration data	
	Staff make suggestions for the improvement of O&M	Project administration data	
<b>Result 2 (Output 2): Management and support functions at the Electricity Utility central level are strengthened in order to increase the Utility's performance and enhance strategic management</b>	Delivery of outputs		
	A set of KPIs is identified and is being measured	Project administration data	<ul style="list-style-type: none"> <li>Relevant KPI's are developed and are being measured in a regular and timely manner</li> <li>The right people get the right kind of</li> </ul>
	Procedures for Logistics and procurement established in EWSA Utility	Project administration data	

	Sound, regular reporting to the different management levels exists	Project administration data	information, information bottlenecks/overloads are resolved
	Change process & early performance indicators - examples		
	O&M is included in the new energy policy	Project administration data	<ul style="list-style-type: none"> <li>• Management levels are being provided with user friendly, strategic information.</li> <li>• Management levels use information as input for decision-making</li> <li>• The importance of O&amp;M becomes apparent through reporting</li> <li>• A Utility Support Unit is actually installed. The right amount of resources are allocated to this unit.</li> </ul>
	Public Tenders for infrastructure take into account O&M (and training in O&M)	Project administration data	
	Lead time public procurement decreases	Project administration/EWSA	
	Information is used for strategic decision making	Project administration data	
	Public tenders are standardised	Project administration data	
<b>Result 3 (Output 3):</b> <b>EWSA's HR staffing and competence development functions are strengthened in order to contribute to the Utility's performance</b>	Delivery of outputs		
	Function profiles are available for the all relevant functions in EWSA electricity utility	Project administration data	<ul style="list-style-type: none"> <li>• Budgets for staffing remain stable (no spectacular budget cuts)</li> <li>• Better trained staff should lead to less staff turnover (higher staff satisfaction)</li> </ul>
	Training curricula are available for all relevant functions in EWSA electricity utility	Project administration data	
	Staff planning system is in place	Project administration data	
	Capacity building plan exists	Project administration data	
	Change process & early performance indicators - examples		

	A system to follow up on the quality of trainings is in place	Project administration data	<ul style="list-style-type: none"> <li>• The availability of training curricula will allow for the organisation of trainings</li> <li>• More and better trainings will lead to higher job satisfaction and the retention of staff/capacities</li> <li>• A good staff planning system will lead to better (evidence-based) staff budgeting</li> <li>• A follow-up system will enable improvements in training curricula</li> </ul>
	A system to follow up on the effect of trainings is in place	Project administration data	
	Methods and tools developed and used for EWSA Utility are being replicated for other departments	Project administration data	
	Annual budget takes into account staff planning	Project administration data	
	The CBF is used	Project administration data	
	Weighted mean deviation of % FTE in staff planning versus real	Tbd	
	Staffing of CD and training centre increases	Tbd	
	Number of events / trainings organised using the newly developed curricula (disaggregate for location (training centre - other))	Project administration data	
	Number of staff trained (disaggregate for gender)	Tbd	
	% of training budget used	Tbd	
	Training budget	Tbd	

	<b>Components and activities under Output 1</b>	<b>Means</b>	<b>Belgian Contribution</b>
<b>R 1</b>	<u>Output 1</u> : Operations and maintenance of electricity infrastructure in the pilot district are strengthened in order to contribute to the overall reliability of electricity infrastructure in Rwanda		Costs in Euros
<b>A 1.1</b>	<p><b>Component 1.1 Operations and maintenance of generation infrastructure in the pilot district are strengthened</b></p> <p>Example of activities under this component:</p> <ul style="list-style-type: none"> <li>• Functional review of key processes</li> <li>• Identify indicators for M&amp;O performance and develop systems to monitor them</li> <li>• Develop, together with O&amp;M staff adapted working procedures and implement them</li> </ul>	<ul style="list-style-type: none"> <li>• Consultancies</li> <li>• Equipment and material</li> <li>• Junior(s)</li> </ul>	310.000 €
<b>A 1.2</b>	<p><b>Component 1.2 Operations and maintenance of transmission and distribution infrastructure in the pilot district are strengthened</b></p> <p>Example of activities under this component:</p> <ul style="list-style-type: none"> <li>• Functional review of key processes</li> <li>• Identify indicators for M&amp;O performance and develop systems to monitor them</li> <li>• Develop, together with O&amp;M staff adapted working procedures and implement them</li> </ul>		304.000 €

<b>A 1.3</b>	<p><b>Component 1.3 Experiences in increasing performance in Operations and Maintenance in Electricity Generation, Transmission and Distribution are capitalized and communicated to relevant stakeholders.</b></p> <p>Example of activities under this component:</p> <ul style="list-style-type: none"> <li>• Continuous collection of information on lessons learned</li> <li>• Structured capitalization exercise</li> <li>• Publication and distribution of experiences</li> </ul>	<ul style="list-style-type: none"> <li>• Consultancies</li> <li>• Workshop/seminar</li> <li>• Budget for publications</li> </ul>	60.000 €
<b>A 1.4</b>	<p><b>Component 1.4: Long term technical Assistance</b></p>	<ul style="list-style-type: none"> <li>• Long Term technical Assistance</li> </ul>	864.000 €

	<b>Components and activities under Output 2</b>	<b>Means</b>	<b>Belgian Contribution</b>
<b>R 2</b>	<p><u>Output 2:</u> Management and support functions at the Electricity Utility central level are strengthened in order to increase the Utility's performance and enhance strategic management</p>		Costs in Euros
<b>A 2.1</b>	<p><b>Component 2.1 The organization of management and support functions at the Electricity Utility Central level is strengthened</b></p> <p>Example of activities under this component:</p> <ul style="list-style-type: none"> <li>• Functional review of key management and support processes</li> <li>• Development of adapted working procedures and their implementation</li> <li>• Develop procurement and financial and logistical management functions within Utility</li> </ul>	<ul style="list-style-type: none"> <li>• Consultancies</li> <li>• Workshops</li> <li>• Field visits</li> </ul>	225.000 €
<b>A 2.2</b>	<p><b>Component 2.2 The capacity of the EWSA Electricity Utility to report regularly and accurately on KPIs for operational management, strategic management and policy making is strengthened</b></p> <p>Example of activities under this component:</p> <ul style="list-style-type: none"> <li>• Identify operational and strategic KPIs in EWSA Utility</li> </ul>		180.000 €

	<ul style="list-style-type: none"> <li>• Develop a P, M&amp;E system to monitor KPI's</li> <li>• Contribute to GIS exercise in distribution</li> <li>• Refine existing analysis and reporting processes on KPIs for operational management, strategic management and policy-making purposes</li> </ul>		
<b>A 2.3</b>	<b>Component 2.3 Long term technical assistance</b>	<ul style="list-style-type: none"> <li>• Long Term technical Assistance</li> </ul>	648.000 €

	<b>Components and activities under Output 3</b>	<b>Means</b>	<b>Belgian Contribution</b>
<b>R 3</b>	<u>Output 3:</u> EWSA's HR staffing and competence development functions are strengthened in order to contribute to the Utility's performance		Costs in Euros
<b>A 3.1</b>	<p><b>Component 3.1 A comprehensive approach to competence development for EWSA is developed and implemented in the EWSA Utility</b></p> <p>Example of activities under this component:</p> <ul style="list-style-type: none"> <li>• Develop enhanced training policy.</li> <li>• Develop standardized function profiles and training curricula</li> <li>• Develop training database for management and Q monitoring</li> <li>• Elaborate a capacity building plan</li> </ul>	<ul style="list-style-type: none"> <li>• Medium Term TA</li> <li>• Consultancies</li> <li>• Junior(s)</li> <li>• Mentoring and coaching</li> <li>• Equipment and materials</li> <li>• Dedicated budget complementing CBF and EWSA training budget for local, regional and international training or industrial attachment</li> </ul>	412.000 €
<b>A 3.2</b>	<p><b>Component 3.2 EWSA short, medium and long term need for adequate training facilities is supported</b></p> <p>Example of activities under this component:</p> <ul style="list-style-type: none"> <li>• Provide technical equipment for EWSA training center</li> <li>• Develop partnerships with training centers and industry</li> <li>• Support preparations for new EWSA training center</li> </ul>		185.000 €
<b>A 3.3</b>	<p><b>Component 3.3 A comprehensive approach to staffing is developed for EWSA and implemented in the EWSA Utility</b></p> <p>Example of activities under this component:</p> <ul style="list-style-type: none"> <li>• Develop and test workload calculation methodology</li> <li>• Develop and test a new recruitment planning approach</li> </ul>		100.000 €
<b>A 3.4</b>	<b>Component 3.4: Long and Medium Term technical assistance</b>		<ul style="list-style-type: none"> <li>• Long Term technical Assistance</li> </ul>

## 7.2 Definition of indicators

Logic of the intervention	Indicators	Definition/Description
<b>Impact:</b> The Energy sector is able to provide sufficient, reliable and affordable energy for all Rwandans	Price/kWh (break down for subsidies)	Measures the price/kWh that is charged to costumers (break down price for subsidies)
	Cost of electricity generation per MWh	Measures the cost of producing 1 MWh of electricity
	Electricity imports	Measures the quantity of electricity import needed
<b>Outcome:</b> EWSA's Electricity Utility is able to provide, in a sustainable way, reliable energy to its customers	Operating Ratio (national)	Ratio of operating to installed capacity: measures actual capacity of the power system as compared with nominal capacity (%). Operating ration = Operating capacity (MW) / Installed capacity (MW)
	Number of Transformer Failures per Year	Reflects one of the most common reasons for outages and high O&M costs.
	Outages: duration of outages per year (differentiate for national level - pilot district level)	Measures the quality of power supply. These can be caused by generation or network failures (hours/year)
	Outages: Number of Outages per year (differentiate for national level - pilot district level)	Measures the quality of power supply. These can be caused by generation or network failures (number/year)
	Operating expenses covered by revenues (%)	Operating expenses divided by revenues billed, expressed as percentage
	Losses, transmission (%) (differentiate for national level - pilot district level)	Total load served minus Electricity delivered for distribution divided by Total load served (expressed as percentage). Thus, it is energy lost in transmission as percentage of energy transmitted
	Average Operating Expenses per kWh (/kWh)	Operating expenses divided by Total load served
<b>Output 1:</b>	Delivery of outputs	



<b>Operations and maintenance of electricity infrastructure in the pilot district are strengthened in order to contribute to the overall reliability of electricity infrastructure in Rwanda</b>	Working procedures for all sub-areas of O&M are in place for - all generation infrastructures in pilot districts - all transmission infrastructures in pilot districts - all distribution infrastructures in pilot districts	<i>Measures the fact that all infrastructures have up-to-date working procedures for O&amp;M</i>
	Reporting systems are in place to follow-up on the functioning - from deconcentrated level to central level - of: - all generation infrastructures in pilot districts - all transmission infrastructures in pilot districts - all distribution infrastructures in pilot districts	<i>Measures the fact that reporting systems between different levels are in place.</i>
	Change process & early performance indicators - examples	
	O&M procedures are used and respected	<i>These indicators (milestones/progress markers + performance indicators) need to be developed during the baseline and need to be reviewed annually. Every year, additional milestones/progress markers need to be developed</i>
	Preventive management is done	
	Reporting to central level also includes recommendations & analysis	
Staff make suggestions for the improvement of O&M		
<b>Output 2: Management and support functions at the Electricity Utility central level are strengthened in order to increase the Utility's</b>	Delivery of outputs	
	A set of KPIs is identified and is being measured	<i>Verifies the development of a functioning system of KPI measurement</i>
	Procedures for Logistics and procurement established in EWSA Utility	<i>Verifies the fact that procedures for procurement have been established</i>
	Sound, regular reporting to the different management levels exists	<i>Verifies the fact that a reporting system exists</i>
	Change process & early performance indicators - examples	
	O&M is included in the new energy policy	<i>These indicators (milestones/progress markers + performance indicators) need to be developed during the baseline and need to be reviewed annually. Every year, additional milestones/progress markers need to be</i>
	Public Tenders for infrastructure take into account O&M (and	

<b>performance and enhance strategic management</b>	training in O&M)	<i>developed. The use of information for strategic decision making is quite difficult to observe.</i>
	Lead time public procurement decreases	
	Information is used for strategic decision making	
	Public tenders are standardised	
<b>Output 3: EWSA's HR staffing and competence development functions are strengthened in order to contribute to the Utility's performance</b>	Delivery of outputs	
	Function profiles are available for the all relevant functions in EWSA electricity utility	<i>Verifies the availability of function profiles for all relevant functions</i>
	Training curricula are available for all relevant functions in EWSA electricity utility	<i>Verifies the availability of training curricula for all relevant functions</i>
	Staff planning system is in place	<i>Verifies the establishment of a functioning staff planning system</i>
	Capacity building plan exists	<i>Verifies the existence of a capacity building plan</i>
	Change process & early performance indicators - examples	
	A system to follow up on the quality of trainings is in place	<i>These indicators (milestones/progress markers + performance indicators) need to be developed during the baseline and need to be reviewed annually. Every year, additional milestones/progress markers need to be developed</i>
	A system to follow up on the effect of trainings is in place	
	Methods and tools developed and used for EWSA Utility are being replicated for other departments	
	Annual budget takes into account staff planning	
	The CBF is used	
	Weighted mean deviation of % FTE in staff planning versus real	
Staffing of CD and training centre increases		

	Number of events / trainings organised using the newly developed curricula (disaggregate for location (training centre - other))	
	Number of staff trained (disaggregate for gender)	
	% of training budget used	
	Training budget	

## 7.3 Detailed budget

TOTAL BUDGET		Mode d'exéc.	TOTAL BUDGET	%	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5		
<b>A</b>		<b>Outcome / Specific Objective (SO)</b> <b>EWSA's Electricity Utility is able to provide reliable energy to its customers in a sustainable way</b>			<b>3,936,000</b>	<b>79%</b>	<b>280,000</b>	<b>1,171,000</b>	<b>1,376,000</b>	<b>909,000</b>	<b>200,000</b>
<b>A 01</b>		<b>Output 1:</b> <b>Operations and Maintenance of electricity infrastructure in the pilot district are strengthened in order to contribute to the overall reliability of electricity infrastructure in Rwanda</b>			<b>1,538,000</b>	<b>31%</b>	<b>178,000</b>	<b>508,000</b>	<b>443,000</b>	<b>291,000</b>	<b>118,000</b>
A	01	01	O&M of Generation infrastructure in the pilot district are strengthened	Co-management	310,000		50,000	150,000	80,000	30,000	0
A	01	02	O&M of transmission and distribution infrastructure in the pilot district are strengthened	Co-management	304,000		20,000	132,000	127,000	25,000	0
A	01	03	Experiences in increasing performance in O&M are capitalized and communicated	Co-management	60,000		0	10,000	20,000	20,000	10,000
A	01	04	Long Term technical Assistance	Direct Management	864,000		108,000	216,000	216,000	216,000	108,000
<b>A 02</b>		<b>Output 2:</b> <b>Management and support functions at the Electricity Utility central level are strengthened in order to increase the Utility's performance and enhance strategic management</b>			<b>1,053,000</b>	<b>21%</b>	<b>66,000</b>	<b>297,000</b>	<b>412,000</b>	<b>242,000</b>	<b>36,000</b>
A	02	01	Organization and functioning of management and support functions at the Electricity Utility central level is strengthened	Co-management	225,000		30,000	95,000	75,000	25,000	0
A	02	02	The capacity of the EWSA Electricity Utility to report on KPIs is strengthened	Co-management	180,000		0	40,000	85,000	55,000	0
A	02	03	Long Term technical Assistance	Direct Management	648,000		36,000	162,000	252,000	162,000	36,000
<b>A 03</b>		<b>Output 3:</b> <b>EWSA's HR staffing and competence development functions are strengthened in order to contribute to the performance of the Electricity Utility</b>			<b>1,345,000</b>	<b>27%</b>	<b>36,000</b>	<b>366,000</b>	<b>521,000</b>	<b>376,000</b>	<b>46,000</b>
A	03	01	Competence development for EWSA is developed and implemented	Co-management	412,000		0	124,000	134,000	144,000	10,000
A	03	02	EWSA short, medium and long term need for adequate training facilities is supported.	Co-management	185,000		0	40,000	95,000	50,000	0
A	03	03	Staffing is developed for EWSA and implemented	Co-management	100,000		0	40,000	40,000	20,000	0
A	03	04	Long and Medium Term technical Assistance	Direct Management	648,000		36,000	162,000	252,000	162,000	36,000
<b>X</b>		<b>Contingency</b>			<b>233,800</b>	<b>5%</b>	<b>46,760</b>	<b>46,760</b>	<b>46,760</b>	<b>46,760</b>	<b>46,760</b>
<b>X 01</b>		<b>Contingency</b>			<b>233,800</b>						
X	01	01	Co-Management	Co-management	233,800		46,760	46,760	46,760	46,760	46,760
X	01	02	Direct Management								
<b>Z</b>		<b>General Means</b>			<b>830,200</b>	<b>17%</b>	<b>195,650</b>	<b>173,800</b>	<b>176,300</b>	<b>173,800</b>	<b>110,650</b>
<b>Z 01</b>		<b>Wages and salaries</b>			<b>508,800</b>	<b>10%</b>	<b>63,600</b>	<b>127,200</b>	<b>127,200</b>	<b>127,200</b>	<b>63,600</b>
Z	01	01	Project co-management	Direct Management	240,000		30,000	60,000	60,000	60,000	30,000
Z	01	02	Administrative and financial staff	Direct Management	220,800		27,600	55,200	55,200	55,200	27,600
Z	01	03	Other support staff	Direct Management	48,000		6,000	12,000	12,000	12,000	6,000
<b>Z 02</b>		<b>Investment</b>			<b>80,000</b>	<b>2%</b>	<b>80,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Z	02	01	IT and office equipment	Direct Management	20,000		20,000				
Z	02	02	Vehicules	Direct Management	60,000		60,000				
<b>Z 03</b>		<b>Operating Costs</b>			<b>96,400</b>	<b>2%</b>	<b>12,050</b>	<b>24,100</b>	<b>24,100</b>	<b>24,100</b>	<b>12,050</b>
Z	03	01	Fuel and maintenance	Direct Management	48,000		6,000	12,000	12,000	12,000	6,000
Z	03	02	internet & Co	Direct Management	9,600		1,200	2,400	2,400	2,400	1,200
Z	03	03	Telecommunication costs	Direct Management	8,400		1,050	2,100	2,100	2,100	1,050
Z	03	04	Office consumables	Direct Management	14,400		1,800	3,600	3,600	3,600	1,800
Z	03	05	Mission costs	Direct Management	16,000		2,000	4,000	4,000	4,000	2,000
<b>Z 04</b>		<b>Audit et Suivi et Evaluation</b>			<b>145,000</b>	<b>3%</b>	<b>40,000</b>	<b>22,500</b>	<b>25,000</b>	<b>22,500</b>	<b>35,000</b>
Z	04	01	M&E	Direct Management	80,000		30,000		20,000		30,000
Z	04	02	Technical backstopping BTC	Direct Management	30,000		10,000	5,000	5,000	5,000	5,000
Z	04	03	Audits	Direct Management	35,000			17,500		17,500	
<b>TOTAL</b>					<b>5,000,000</b>		<b>522,410</b>	<b>1,391,560</b>	<b>1,599,060</b>	<b>1,129,560</b>	<b>357,410</b>

Note: during the first year, full-time staff is only budgeted for 6 months since recruitment of staff and installation of the PMU usually takes around 6 months(cfr. § 5.2.1). Only 6 months are also foreseen in Year 5.

## 7.4 ToR long-term personnel

The long term personnel financed by the project will have several roles: some positions are clearly entitled with financial and administrative management where others will play a technical and advisory role exclusively.

All technical assistance provided will be concerned primarily with the transfer of capacity to the GoR by building skills and capabilities of local staff and/or developing systems and procedures which will be codified in an accessible manner.

Capacities to undertake activities in a participative, culturally sensitive and consultative manner, ensuring counter-parts actively participate and develop understanding and ownership are essential for all profiles mentioned hereafter

### 7.4.1 Project Management

#### 7.4.1.1 EWSA Director of Intervention

##### Key Responsibilities

EWSA will assign a Director of Intervention (DI) who will act as a change sponsor and as an authorizing officer for the Rwandan side for all matters executed in joint responsibility.

Responsibilities of the DI will include:

- Determine, together with the change co-manager, the overall direction of the change process within the Electricity Utility, in line with the strategic orientations given by the PSC.
- Determine and continuously refine, together with the change co-manager, the strategy for implementing the change process that is realistic given the organization's history of change, the 'change levers' available and the likely resistance to be encountered.
- Ensure realism in plans for the implementation of the change in the context of other on-going change activities in the Electricity Utility.
- Muster internal support for the change process through proactive communication on the importance and the advancement of the change process in the Electricity Utility, both to higher and lower levels of the organization.
- Positively reinforce steps forward in the change process in the Electricity Utility by using his/her own influence in the organization.

#### 7.4.1.2 EWSA Project Coordinator – 48 months (Funded by EWSA)

The project coordinator will be responsible for ensuring effective understanding of and achievement of project objectives, analysis of and reporting on EWSA Utility development needs, together with establishment of institutional mechanisms required for timely collection and dissemination of project performance information. He/she will also be responsible for planning, executing, and monitoring project implementation to predetermine timelines and budgets. Building and managing project team, reporting to the DI and ensuring quality control throughout the project lifecycle are central to this position.

### **Key Tasks/Responsibilities**

EWSA will recruit a project coordinator for 48 months to implement capacity development activities financed under this Belgian grant. She/he will perform the following tasks:

- Assume overall responsibility for the successful execution of the project and ensure project objectives are accomplished within prescribed timeframe, funding parameters and in compliance with national /donor standards.
- Ensure smooth technical, administrative and budgetary management of the project, including development of annual and quarterly work plans and project reports.
- Arrange and prepare for project audits
- Conduct assessments to ensure intervention is based on existent needs and that regular progress towards meeting identified gaps is assessed and documented.
- Identify required technical assistance in relation to project objectives, develop terms of reference, oversee contracted consultants ensuring that work output meets expected deliverables and contributes to EWSA organisational development.
- Document and ensure lessons are learned and during annual reviews inform the planning and implementation of the project leading to both improved process consultation and sustainable results.
- Oversee project budget execution and develop quality reports for management.
- Monitor and evaluate project environment, progress and effectiveness, recognize potential problems, risks, develop corrective measures.
- Establish operating procedures for the project in adherence to project goals.
- Prepare briefing documents; develop and update information materials to promote knowledge sharing of the project amongst all stakeholders.
- Regularly liaise with the Change Co-Manager and the DI to maintain awareness of project objectives and ensure support for implementation of project activities
- Overall management and care to project assets
- Organise stakeholder's meetings and facilitate discussions
- Communicate monitoring information to management and key stakeholders in a timely manner, so as to ensure that "lessons learned" are taken into account when drawing up future project plans and identifying corrective measures
- Put in place arrangements to facilitate sharing of project financial information with both internal teams and external partners and promote knowledge sharing within stakeholders
- Lead, coach and motivate project team members on a proactive basis
- Ensure timely data collection and analysis for the purpose of preparing quarterly and annual reports, which take stock of project progress and highlight actual and potential problems or challenges affecting project deliverables
- Ensure that the project M&E framework is in line with the project logframe and emerging

institutional developments and priorities

- Conduct and carry out project baseline, mid-term and project completion reports

**Profile:**

This post requires a development practitioner, with a relevant Postgraduate degree in Project Management and Administration or a related discipline.

Specifically the Project Coordinator shall have a:

- Proven experience in change management (minimum 5 years is an advantage)
- Knowledge of theoretical and practical aspects of project management
- Knowledge of project management techniques and tools
- Understanding of capacity building and its measurement of results
- Proven experience in people management
- Proven Experience in Strategic Planning
- Proven experience in risk management
- Proficient in project management software such as MS Project or KickStart

**Skills and Competencies**

- Strong analytical skills preferably with demonstrated ability to apply them in analysis of monitoring and evaluation data for the project.
- Strong understanding of results based management (RBM), together with Logical framework analysis.
- Experience in design and management of evaluation processes involving multiple stakeholders.
- Previous experience in managing similar projects
- Strong English, oral and written communication skills with working knowledge of French
- Strong IT skills, particularly Word, Excel, PowerPoint and Microsoft Project.
- Critical thinking and problem solving skills
- Planning and organising
- Decision-making and communication skills
- Influencing and leading
- Negotiation, delegation and teamwork
- Conflict management, stress tolerance and adaptability

**7.4.1.3 BTC International Change co-Manager – 48 months (30 + 18 months after MTR)**

BTC will appoint a TA/Change manager with significant international experience in Capacity Development. He/she will serve as the overall technical advisor of the project. He will be the BTC

representative within the project technical framework. He will act as a technical co-manager and support joint decision. The International Expert will be based within EWSA office in Kigali where the Project Management Unit (PMU) will be hosted.

*The MTR of the project will analyse the workload of the Change co-Manager and the need to maintain this function after the initial 30 months. Based on the conclusions of the MTR, the Steering Committee can decide to terminate the contract of the Change co-Manager earlier than foreseen.*

### **Main duties and responsibilities**

The Change co-Manager has final responsibility for the achievement of the objectives of the CD NRJ intervention. Areas of responsibility include (but are not limited to) the following areas:

- Accompany, support and guide the baseline study for the entire intervention
- Integration management with a focus on scope and quality management areas
- Support EWSA management in the organizational change through coaching and mentoring of involved staff.
- Provide strategic guidance and coaching to all actors involved in the intervention
- Provide technical advice/coaching related to capacity development
- Support the participatory planning process through active participation in the dialogue, advice on capacity building issues relevant to the project specific objective and expected results
- Provide technical input into the preparation of terms of reference for the various studies and capacity building activities subcontracted and support the implementing agency to ensure their adequate implementation
- Support and provide technical advice for recruitment of specific technical international and national expertise required for the project implementation
- Ensure coherence and coordination of project strategies and activities for areas related to capacity building together with the SCBI funded experts within EWSA.
- Support, develop and implement a project monitoring and evaluation plan.
- Support implementation of Capacity Development activities in other Belgian-Rwandan interventions (especially Geothermal Development and Access) in the electricity sub-sector

He will also, in close coordination with the Director of the Intervention

- Organise, coordinate and technically supervise the implementation of project activities (including the baseline) in accordance with the approved work plans
- Attend and prepare the Project Steering Committee (PSC) meetings on a regular basis
- Contribute to the operations reports to be submitted to the PSC
- Report quarterly to BTC representative
- Contribute to the preparation of financial and procurement planning and budgeted work plans
- Establish and maintain good working relationships with project participants, counterpart agencies, donors and other relevant organizations and government agencies
- Share information about the project with other organizations and agencies as needed.



- Liaise and co-ordinate project activities with other relevant technical assistance projects

The TA **profile** will include:

- Relevant University degree (politics, anthropology, sociology, psychology, public or business administration,)
- 10 years of experience in development cooperation including significant international experience is an advantage;
- 10 year proven experience in supporting change processes in public organizations in developing countries is an advantage ;
- Significant experience in Institutional Capacity Development and provision of advice to high level decision makers;
- Proven, effective facilitator skills and the ability to develop effective interpersonal relationships; teamwork, negotiate and manage conflict.
- Strong coaching and mentoring skills
- Excellent communication and report writing skills.
- Excellent planning, management and organisational skills
- A high level of computer literacy, including Word, Excel, Internet, E-mail, Power Point
- Excellent English

#### **7.4.1.4 BTC International Technical Assistant – Electricity Utility O&M Engineer – 48 months (Funded by the intervention)**

*The MTR of the project will analyse the workload of this ITA and the need to maintain this function after the initial 30 months. Based on the conclusions of the MTR, the Steering Committee can decide to terminate the contract of this ITA earlier than foreseen.*

##### **Main duties and responsibilities**

The responsibilities of the Technical Assistant, mainly responsible for the implementation of activities under output 1, include (but not necessarily are limited to) the following areas:

- Accompany, support and guide the Functional Review of Operations and Maintenance (O&M) processes in Electricity Generation, Transmission and Distribution in the selected pilot district(s).
- Review conclusions of the Functional Review(s) and develop, together with EWSA staff in the pilot district(s), strategies and approaches to improve O&M performance.
- Accompany/coach O&M teams in the pilot district(s) in the implementation of developed strategies and approaches. This includes giving technical advice, providing coaching and mentoring, etc.
- Develop, together with O&M teams, an M&E framework for operational monitoring of O&M performance at plant level. The Technical Assistant is responsible for assuring synergy with the work done at the central level concerning M&E.

- Assure synergy between activities in the pilot district(s) and activities at the central level in the area of HR, especially HR Development, workload calculation and staff planning.
- Provide technical input into the preparation of terms of reference for studies and capacity building activities executed by international and national experts.
- Support the implementation of these studies and CD activities to ensure that they effectively contribute to the improvement of O&M performance in the pilot district(s).
- Attend and prepare, together with the Change co-Manager, the Project Steering Committee (PSC) meetings on a regular basis
- Report quarterly to the Change co-Manager and the BTC representative
- Contribute to the preparation of financial and procurement planning and budgeted work plans for the intervention.
- Establish and maintain good working relationships with project participants, counterpart agencies, donors and other relevant organizations and government agencies
- Share information about the project with other organizations and agencies as needed.
- Support implementation of Capacity Development activities in other Belgian-Rwandan interventions (especially Geothermal Development and Access) in the electricity sub-sector

This expert will primarily work together with Heads of power plants, heads of mobile teams, technicians and operators in the selected district.

**Profile:**

- Tertiary engineering qualifications
- At least 5 years of experience in Industrial Operations and Maintenance, preferably related to the functioning of an Electricity Utility is an advantage.
- Experience in Reliability Centred Maintenance, Six Sigma, Value driven maintenance or any other relevant maintenance processes improvement approach
- Experience in maintenance audits and consultancy is an advantage
- Knowledge of Computerized Maintenance Management System(s) (CMMS) is a plus
- At least 2 years of experience in supporting change processes in public or private companies in developing countries is an advantage
- Solid understanding of governance, institutional strengthening, change management and capacity building principles, strategies and techniques
- Capacity to undertake activities in a participative, culturally sensitive and consultative manner, ensuring counter-parts actively participate and develop understanding and ownership
- High level interpersonal and communication skills and a demonstrated ability to communicate and negotiate effectively with a diverse range of groups
- Strong coaching and mentoring skills
- Demonstrated capacity to work independently as well as contribute positively in a team environment

- Sensitivity to gender and environment issues
- Excellent communication and report writing skills.
- Excellent planning, management and organisational skills
- A high level of computer literacy, including Word, Excel, Internet, E-mail, Power Point
- Excellent English (oral and written)
- Risk assessment capacities
- Excellent team player

#### **7.4.1.5 BTC RAF – 48 months (funded by the intervention)**

Under BTC local contract

He/she works under direct supervision of the Change co-Manager.

##### **Main duties and responsibilities**

As the person in charge of procurement, financial management and administration, he/she will:

- Control all procurement, financial management and administration issues: solve problems, help improve administration by developing tools, point out and correct errors and problems, report any major problem to the authorizing officers.
- Ensure a correct, smooth and efficient organization of the financial administration;
- Organize regular meetings with financial and administrative staff, and ensure good communication, information and cooperation within the financial administration team.
- Supervise compliance with legal and administrative procedures and guidelines; this implies the he/she studies, checks and reinforces financial guidelines and procedures of the Belgian Technical Co-operation and Ministry of Finance (for direct management) in addition to the Rwandan regulations (for co-management), including the Specific Agreement, the TFF, the BTC quality handbook and any guidelines provided from Brussels or Rwandan legal texts.
- Ensure all instructions received from the representation or BTC headquarters are correctly applied and followed and that the requests are met within the deadline.
- Update guidelines and system of all types of payments in project, esp. allowances.
- Update Administrative and Financial Manual, and ensure communication of new procedures to all admin/fin staff involved.
- Review (and approve) the periodic (monthly/quarterly/bi-annual) accountability returns from implementing partners to ensure that they follow the regulations referred to in the TFF and Project Financial and Operational Manual and meet international accepted standards of public accountability ; and provide comments and advice in improving these systems when required;
- Ensure that the projects narrative and financial reporting guidelines are adhered to including the specified Monitoring and Evaluation processes
- Support the procurement process, contract management and supervision processes

##### **Financial activity reporting**

- Final responsibility for timely production of FIT statements; provide guidance and supervision to the accountant who produces the FIT statements.
- Produce financial reports whenever requested following format laid out (e.g. for steering committees), or develops customized formats for ad hoc reports (in excel).
- Make electronic back-up of final versions of financial reports

#### **Budgeting and financial planning**

- Follow up and update of budget; Compare budget and planning with actual expenses; provide monthly overview of budget balance to co-management and technical teams
- Financial short-and long term planning: overall, yearly and quarterly (in co-operation with co-management and technical teams); monthly and weekly, in co-operation with accountant.
- Overall management of bank and cash accounts, making cash calls on basis of the financial planning.

#### **Auditing, monitoring, consulting, training**

- Audit and analyse project expenses monthly, report any inconsistencies or irregularities.
- Control supporting accounting documents on quality and completeness, and follow up on corrections by the accountant.
- Consult and monitor financial issues related to technical project components (e.g. accountability of beneficiaries and institutions)
- Prepare and provide training on financial management for stakeholders
- Preparing and assisting internal and/or external financial audit missions
- Any other tasks reasonably requested

#### **Profile:**

- University degree in finance, business administration or business economics;
- Minimum 5 year experience in financial management, project administration and procurement is an advantage;
- Management experience and experience with an international organization or NGO, 3 years minimum is an advantage;
- Very good hands-on knowledge of excel and word is a must. Other programs (Database, accounting programs) a strong advantage;
- Proficient in English and in French ?;
- Mature, good communicator and team player;
- Able to work under stressful conditions and not objecting to overtime and field missions.

## 7.4.2 Support Functions

### 7.4.2.1 Procurement Officer – 48 months

The Procurement Officer is under BTC local contract, financed by this intervention and is responsible for a variety of finance-related tasks including the ones listed below (this list is not exhaustive).

He/she works under direct supervision of the RAF.

Along with the RAF, the PMU staff and the EWSA Corporate Services, the procurement officer will coordinate and support project procurement activities:

- Prepare and update a detailed procurement plan and planning procurement actions in general.
- Carry out the process of procurement of goods, services and equipment;
- Ensure that all procurement procedures are in strict conformity with the relevant Procurement Guidelines of the GoR;
- Administer contracts for goods and services after signature;
- Assist the PMU on supervision of the contracts for equipment installation; as required.
- Arrange for Advertising in national and international newspapers and websites (General Procurement Notice, Specific Procurement Notice, and Request for expression of Interest etc).
- Prepare the Bidding Documents.
- Prepare responses to clarification and issues resulting from bidder's queries of the bidding documents.
- Prepare procurement documents.
- Issue documents to Bidders, where applicable.
- Organize Public Bid Opening, where applicable.
- Coordinate the Bid Evaluation Process, where applicable.
- Prepare Bid Evaluation Report
- Prepare contracts and amendments.
- Finalize procurement actions by assisting the designated technical staff in regions / districts in inspection and reception of equipment and goods, as necessary.
- Establish a monitoring system to ensure the completion of the procurement process according to the Procurement Plan.
- Maintains and updates the bid status log, contract log and insurance log;
- Maintains a tracking system for the receipt of documents required for contracts awards, maintains ongoing communication with end user to ensure timely receipt of equipment;
- Any other duties assigned by the RAF, Project Coordinator or Project Change Manager.

#### Desirable knowledge, abilities and skills

- A bachelor's degree in public or business administration, economics, management or a related

field, plus 3 years of experience in procurement and/or contracts management experience. Equivalent levels of education or experience may be substituted.

- Considerable knowledge of the principles, practices and techniques of procurement law.
- Some knowledge of writing simple bid specifications/scope of work/scope of services, effectively tabulating informal and formal bids.
- Ability to relieve a superior of a wide variety of administrative detail work.
- Ability to make work decisions based on interpretations of laws or regulations of a simple nature.
- Ability to maintain accurate and detailed procurement records and files.
- Ability to express ideas effectively orally and writing.
- Ability to use complex office equipment with sufficient training.
- Ability to meet and deal effectively with the public, administrative officials and vendors.

#### **7.4.2.2 Project Accountant – 48 months**

##### **Basic functions**

The Project accountant is under BTC local contract , financed by this intervention and is responsible for a variety of finance-related tasks including the ones listed below (this list is not exhaustive).

He/she works under direct supervision of the RAF and of both co-directors for all Co-management-related expenses.

He / She is responsible for a variety of finance-related tasks including the ones listed below:

##### **Main duties and responsibilities**

###### **Banking & cheque and cash management**

- Prepare, register and keep cheques
- Prepare staff payroll for bank transfers at the end of each month.
- Ensures all invoices from external parties (contractors, suppliers,...) are paid in due time, by bank transfer, cheque or cash and arrange those documents by date: her/his task of preparing bank transfer and cheque documents. And manage pipe line payment to external parties.
- Check and approve document requested by Secretary and further the request to Finance officer then finally to co-manager for final approval.
- Attend and record all bank transactions, maintain bank accounts, ensure monthly bank statements and account overviews
- Final responsibility for the cash management, and supervision of secretary in this task: this includes regular daily cash counts, verification of balance of cash book and cash-on-hand, assistance of cashier in solving imbalances, establishment and signature of cash count statements.
- Ensure liquidation of any internal advances and update advance outstanding by the end of each month and report to Finance officer.
- Responsible for sound cash planning & cash withdrawals, so as to avoid cash shortages or

large amounts cash in safe (security issue).

- Updates fixed asset register, follow up consultancies, contractor contract and stock of stationary.

#### **Financial activity reporting**

- Record all project expenses properly in FIT, following guidelines and within the deadlines the latest 15th of the following month.
- Produce FIT statements for control by the Project Management, make all necessary corrections and make all preparations for the monthly closing of the accounting.
- Supervise daily entry of expenses in the cashbook by cashier.
- Produce FIT statements for control by the PM, make all necessary corrections and make all preparations for the monthly closing of the accounting.
- Supervise daily entry of expenses in the cashbook by secretary.
- Check and control to ensure quality and completeness of justification and supporting accounting documents of all expenses following guidelines
- Ensure accounting coding and budgeting lines are corrects: this includes verification of financial reports, expenses and supporting documents.
- Keep track accounting data by putting reference as GT and AT on the specific documents on the monthly basic.
- Ensure monthly balance of FIT/Cashbooks/Cashboxes and bank statements are the same, and responsible for completion and approval of reconciliation statements if any.
- Responsible for transparent and consistent filing of all accounting, banking and cash management documents (that arranged by secretary).
- Organize that copy of all supporting Bank documents and check cash document copy by cashier, before sent to LAF on a monthly basis.

#### **Financial Administration**

- Check to ensure correct application of allowances.
- Assist the PM with a variety of tasks: e.g. cost calculations, filing finance-related documents, monthly and weekly financial planning, managing pipeline payments...etc.

#### **Budgeting and financial planning**

- Provides all necessary accounting data and information to the PM, for him to be able to follow up on budget and planning.
- Assist the PM in the elaboration of reports, budgets or plans.

#### **Profile:**

- Degree in accounting;
- Minimum 5 year experience accounting and project administration is an advantage;
- Experience with an international organization or NGO;

- Very good hands-on knowledge of excel and word is a must. Other programs (Database, accounting programs) a strong advantage;
- Fluent in English, French and Kinyarwanda
- Mature, good communicator and team player;
- Able to work under stressful conditions and not objecting to overtime and field missions.

### 7.4.3 Medium term experts

#### 7.4.3.1 Personnel and Organization (P&O) Expert – 24 months

##### Main duties and responsibilities

The responsibilities of the P&O Expert are related to output 3 of the intervention. They include (but are not necessarily limited to) the following areas:

- Review the conclusions of the Functional Review on HR processes and develop, together with EWSA HR staff, strategies and approaches to improve HR practices related to competence development, staff retention, workload forecasting and staffing.
- Develop, together with EWSA HR staff, new HR methodologies, approaches and instruments that can support the improvement of HR practices in EWSA.
- Prepare Terms of Reference for short term consultancies in support of the development of new HR methodologies, approaches and instruments
- Guide the work of the short term consultants in order to assure that the deliverables of the consultancies contribute to the overall improvement of HR practice in EWSA.
- Develop and implement Capacity Development activities to familiarise EWSA HR staff with new HR methodologies, approaches and instruments.
- Accompany HR teams, through coaching and mentoring, in the testing of newly developed HR methodologies, approaches and instruments in the Electricity Utility. This includes giving technical advice, providing coaching and mentoring, etc.
- Assure overall synergy (content and timing) between activities in the area of HR management and other project activities both in the pilot district and at the central level (Management and support functions).
- Attend and prepare, together with the Change co-Manager, the Project Steering Committee (PSC) meetings on a regular basis
- Report quarterly to the Change co-Manager and the BTC representative
- Contribute to the preparation of financial and procurement planning and budgeted work plans for the intervention.
- Establish and maintain good working relationships with project participants, counterpart agencies, donors and other relevant organizations and government agencies. Special attention will be given to synergies with the SCBI expert active in the EWSA HR Unit.



- Share information about the project with other organizations and agencies as needed.

**Profile:**

- Master degree in Human Resources Management, Public Administration or Social Sciences
- At least 10 years of experience in P&O management in the areas of competence development, staff retention, workload forecasting and staffing is an advantage
- At least 2 years of experience in supporting change processes in public or private companies in developing countries, preferable in Eastern Africa is an advantage.
- A solid understanding of modern P&O Management techniques
- A solid understanding of governance, institutional strengthening, change management and capacity building principles, strategies and techniques
- Capacity to undertake activities in a participative, culturally sensitive and consultative manner, ensuring counter-parts actively participate and develop understanding and ownership
- High level interpersonal and communication skills and a demonstrated ability to communicate and negotiate effectively with a diverse range of groups
- Demonstrated capacity to work independently as well as contribute positively in a team environment
- Strong coaching and mentoring skills
- Sensitivity to gender and environment issues
- Excellent communication and report writing skills.
- Excellent planning, management and organisational skills
- A high level of computer literacy, including Word, Excel, Internet, E-mail, Power Point
- Excellent English.

**7.4.3.2 Planning, Monitoring and Evaluation Coach (24 months)**

**Main duties and responsibilities**

The responsibilities of the M&E Expert are related to output 2 of the intervention. They include (but are not necessarily limited to) the following areas:

- Map out existing reporting structures within EWSA
- Assess available data in the energy sector
- Coach the development of Key Performance Indicators. KPIs need to be developed together with different stakeholders, both within and outside EWSA (MININFRA). These KPIs should contribute to the strategic management of EWSA and policy making.
- Support the development of measurement systems: measurement systems may need to be developed and systematised. Quality Assurance mechanisms need to be included where possible.
- Support the development of reporting systems. Reporting systems need to strengthen different management levels (and thus with planning at different levels) and should allow for

evidence-based decision making.

- Strengthen M&E skills of individuals at different levels: throughout all his/her activities, the M&E coach needs to have particular attention for the transfer of knowledge and skills to national counterparts.
- Coach the actual measurement and use of KPIs
- Support the P&O expert TA and the Electricity Utility Engineer TA in the development of indicators and reporting systems and formats.
- Support the Change co-manager in aspects that relate to M&E and strategic management.
- Report to the director of the intervention and the co-manager on a regular basis.

### **Profile**

- Relevant University degree (politics, sociology, psychology, public or business administration, etc. )
- Proven track record of at least 5 years in strategic management is an advantage;
- Minimum 5 years of experience in the development of KPIs and the development of measurement systems is an advantage. Experience in the energy sector has an added value
- Minimum 5 years of experience with process management is an advantage
- Experience within an international organization, 3 years minimum is an advantage;
- A high level of computer literacy, including standard office programs, working with databases, skilled STATA or SPSS user
- Proficient in English and in French;
- Excellent communicator and coach;
- Proven, effective facilitator skills and the ability to develop effective interpersonal relationships; teamwork, negotiate and manage conflict.
- Excellent communication and report writing skills.
- Excellent planning, management and organisational skills

## 7.5 ToR for missions at the start of the project

### 7.5.1 Generic TORs for the baseline study

BTC will provide generic terms of reference for the baseline study at the beginning of the project. They will be adapted and filled in by the change-co manager and the project director.

The baseline work plan will cover the following topics:

#### **Project File**

#### **Theory of Change**

[Here the project team will try to summarize it's vision on the intervention and the achievement of the intervention's objectives. This implies a description of the logic between activities, outputs, outcome and impact and needs to reflect the intervention's Theory of Change. If useful, this can be illustrated by schemes, photos, etc. Please see BTC M&E GUIDE for more details on this approach.]

#### **Monitoring Matrix**

[Showing what elements of the monitoring matrix are already complete at the time of the Baseline Workplan (and what elements need to be addressed in the Baseline)]

#### **Knowledge Gaps identified**

[In this chapter the intervention team will describe all issues that need to be addressed by the Baseline.]

#### **Monitoring Matrix**

[In this subchapter the intervention team describes all elements of the Monitoring matrix that need further development (see '3 Monitoring Matrix'). This can thus imply a reformulation of results, reformulating indicators, proposing new indicators, measuring Baseline values (thereby testing those indicators), proposing (intermediate) target values, defining responsibilities for data collection, defining the frequency and timing of measurement, finding SoV, assessing the difficulty of measuring different indicators, etc. If relevant, briefly describe the existing M&E systems at the level of the partner institution and the available data ]

#### **Risk analysis**

[In this subchapter, describe what risks were already identified, assessed and what treatments were already planned. Next, this subchapter indicates to what extent the work done is satisfactory and whether these earlier findings (risk identification, and/or assessment and/or treatment proposed) will be followed. If applicable, this chapter will elucidate whether a complementary risk identification and analysis (+ risk mitigation strategy) is required, and determine its scope.]

### Complementary Studies

[Possibly, the Baseline will also need to implement a number of complementary studies in order to arrive at a full Monitoring Plan. If this is the case, the intervention team should clearly delineate and explain what studies need to be done. Provide sufficient details on the precise content, scope, etc. Also indicate why it is important to do this study.]

### Approach

[In this chapter the project team can further elaborate how the different knowledge gaps are to be addressed. If the workplan is included in the TFF, the formulators here need to indicate how the Baseline process will take place. In case a study or multiple studies need be executed by an external consultant before the arrival of the project team, the formulators should elaborate how this will happen. The formulators need refer to the ToR needed for recruiting a consultant (in chapter 8 of this document, the responsibility for launching and managing the tender, the person responsible for quality assurance, etc. ]

### Division of Labour & Deliverables

[As different issues need to be addressed during the Baseline, it is quite probable that a division of labour needs to be established (should not be filled in if the whole Baseline is implemented internally): who is responsible for what deliverables and services?]

### Period and Duration

[should not be filled in if the whole Baseline is implemented internally]

### ToR(s) study(ies)

[only needs to be filled in when one or more studies are to be executed before the arrival of the project team]

### ToR(s) Consultants

[should not be filled in if the whole Baseline is implemented internally]

## **7.5.2 TOR for the Functional Review of O&M for Electricity Generation, Transmission and Distribution in the pilot district.**

### **Specific Tasks**

The consultant responsible for the Function Review of Operations and Maintenance (O&M) will perform the following tasks:

- Propose a methodology and a framework for the analysis of O&M in the selected pilot district. The proposed framework must already have been used in at least 3 other international companies.
- Identify existing processes related to O&M in the pilot district, based on the proposed framework. Identified processes should include, among others, O&M planning and scheduling, contractor management, spare parts management, repair and workshop management, etc.
- Identify existing teams, involved in O&M in the pilot district. (organizational structure) For

Electricity Transmission and Distribution, part of O&M is done by teams at the central level. The functioning of these teams also has to be taken into account. T

- Describe how each process related to O&M currently functions in practice and how it is related to the performance of O&M in the pilot district. Furthermore, the description should also include how different processes interact. Finally, the description must also include an overview of what actors/teams/profiles are responsible for which part of the process.
- Identify Strengths, weaknesses, opportunities and threats (SWOT) for each of the processes. Ideally, this should be done through a benchmark exercise with other Electricity Utilities, preferably in sub-Saharan Africa. As far as the Opportunities and Threats are concerned, the broader context, either within or outside EWSA should be taken into account.
- Identify current workload drivers and give an estimation of how the workload for each team is divided over the different processes. For this exercise, synergies with the support to the HR function within EWSA corporate services should be actively sought.
- Make recommendations, based on the SWOT, to improve O&M in the pilot district. These recommendations will distinguish between recommendations for the teams in the district, recommendations for EWSA central level and recommendations for the policy level.
- Identify, together with key EWSA staff, priority recommendations for teams in the district to be addressed immediately. This will be done during an interactive workshop, animated by the consultant and the Technical Assistant (Engineer).
- Identify, together with the Change co-Manager and key EWSA staff, priority recommendations for EWSA central level and for the policy level.
- Make propositions for an operational plan to address the priority recommendations.

### **7.5.3 TOR for the Functional Review of Management and Support process at EWSA Electricity Utility central level.**

#### **Specific Tasks**

The consultant responsible for the Function Review of Management and Support (M&S) functions at EWSA Electricity Utility central level will perform the following tasks:

- Propose a methodology and a framework for the analysis of M&S functions at EWSA Electricity Utility central level. The proposed framework must already have been used in at least 3 other international companies.
- Identify existing M&S processes at the central level, based on the proposed framework. Identified processes should include, among others, communication and reporting, strategic planning, monitoring and evaluation, financial management, logistic management, procurement and HR processes, especially the ones related to competence development, staff retention and staffing.
- Identify existing teams, involved in M&S processes at the central level. (organizational structure)
- Describe how each process related to M&S currently functions in practice and how it is related to the performance of the EWSA Electricity Utility and the EWSA Energy Department. Furthermore, the description should also include how different processes interact. Finally, the

description must also include an overview of what actors/teams/profiles are responsible for which part of the process.

- Identify Strengths, weaknesses, opportunities and threats (SWOT) for each of the processes. Ideally, this should be done through a benchmark exercise with other Electricity Utilities, preferably in sub-Saharan Africa. As far as the Opportunities and Threats are concerned, the broader context, either within or outside EWSA should be taken into account.
- Identify current workload drivers and give an estimation of how the workload for each team is divided over the different processes. For this exercise, synergies with the support to the HR function within EWSA corporate services should be actively sought.
- Make recommendations, based on the SWOT, to improve M&S at the central level. These recommendations will distinguish between recommendations for the individual teams at the central level, recommendations for EWSA Electricity Utility and Energy Department management.
- Identify, together with key EWSA staff, priority recommendations for teams at the central level to be addressed immediately. This will be done during an interactive workshop, animated by the consultant and the Change co-Manager.
- Make propositions for an operational plan to address the priority recommendations.