



INSTITUTIONAL, REGULATORY AND COOPERATIVE FRAMEWORK MODEL FOR THE NILE BASIN POWER TRADE

ANNEX 3: DELIVERABLE 3 – “REGIONAL ORGANISATIONS WITHIN THE NILE BASIN”.

PREPARED FOR:



Prepared by:

MERCADOS ENERGY MARKETS INTERNATIONAL

Together with:

NORD POOL CONSULTING AND CEEST

October, 2007

MADRID
LONDON
MOSCOW
BUENOS AIRES
RIO DE JANEIRO

INSTITUTIONAL, REGULATORY AND COOPERATIVE FRAMEWORK MODEL FOR THE NILE BASIN POWER TRADE

TABLE OF CONTENTS

I LIST OF ACRONYMS	5
II FOREWORD	8
III BACKGROUND AND CONTEXT OF THIS PROJECT	8
IV INTRODUCTION	10
V EASTERN AFRICAN POWER POOL (EAPP)	11
1. INTRODUCTION	11
2. THE ORGANISATION OF THE EAPP	11
2.1. CONFERENCE OF MINISTERS	13
2.2. STEERING COMMITTEE	13
2.3. PERMANENT SECRETARIAT	14
2.4. TECHNICAL SUB – COMMITTEES	14
2.4.1. Sub committee on planning	14
2.4.2. Sub committee on operation	14
2.4.3. Sub committee on environment	14
3. PHILOSOPHY OF THE EAPP	14
4. MOST RELEVANT STUDIES BEING UNDERTAKEN	15
4.1. BASIC STUDIES	15
4.2. SPECIFIC PROJECTS	15
VI ENERGIE DES GRANDS LACS (EGL)	16
1. INTRODUCTION	16
2. THE ORGANIZATION OF EGL	16
3. THE EXPERIENCE OF SINELAC	17
4. FUTURE PROJECTS	18
VII EAST AFRICAN COMMUNITY (EAC)	19
1. INTRODUCTION	19
2. THE ORGANISATION OF EAC IN THE AREA OF ENERGY	19
3. ENERGY SECTOR STRATEGY	20
4. THE EAC IN THE REGIONAL ENERGY CONTEXT	21
4.1. EAC POWER POOL	21
VIII COMPARISON OF INSTITUTIONS	24
IX GEOGRAPHIC COVERAGE AREA OF THE DIFFERENT INSTITUTIONS	27
X COMESA AND THE EAPP	29
1. COMESA – GENERAL ASPECTS	29
2. COMESA AND EAPP	31

XI CONCLUSIONS 32

LIST OF FIGURES

Figure 1: EAPP General Organization	12
Figure 2: EAPP – Secretariat Organization	13
Figure 3: EGL General Organization.....	17
Figure 4: EAC General Organization	20
Figure 5: Structure foreseen for the EAC power pool	22

LIST OF TABLES

Table 1: Acronyms	7
Table 2: Comparison of Institutions.....	26
Table 3: Area coverage of Regional Institutions	28

I LIST OF ACRONYMS

ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
AFC	Available Flowgate Capability
ARR	Auction Revenue Rights
BA	Balancing Authority
CAT	Curtailement Adjustment Tool (in SPP)
CEB	Communauté Electrique du Benin
CEM	Common Energy Market
CIE	Compagnie Ivoirienne d'Electricité
CIS	Commonwealth of Independent States
CoAG	Council of Australian Governments
CR	Congetion Rights (SIEPAC)
CRIE	Regional Regulatory Agency (SIEPAC)
CVT	Variable Transmission Charges (SIEPAC)
DAM	Day Ahead Market
EAPP	Eastern African Power Pool
EAC	East African Community
ECOWAS	Economic Community of Western African States
EECI	Energie Electrique de la Côte d'Ivoire
EGL	Energie des Grands Lacs
EIS	Energy Imbalance Service
EOR	Independent system and market operator (SIEPAC)
EPC	Electricity Power Council (in CIS)
ESAA	Energy Supply Association of Australia
FCM	Forward Capacity Market
FERC	Federal Energy Regulatory Commission (US)
FTR	Financial Transmission Rights
GMS	Greater Mekong Sub Region
ICC	Information and Coordination Center (in WAPP)
ICE	Intercontinental Exchange (US)
ICT	Independent Coordinator of Transmission (SPP)

IDC	Interchange Distribution Calculator
IGA	Inter-Governmental Agreement on Power Trade in the Greater Mekong Sub-Region
IPP	Independent Power Producers/Project
IPSCIS	Interconnected Power System of Commonwealth of Independent States
JOA	Joint Operation Agreement
LIP	Locational Imbalance Prices (in SPP)
LMP	Locational Marginal Price
LOLE	Loss of Load Expectation
LSE	Load Serving Entities
LTTR	Long Term Transmission Rights
MCE	Ministerial Council on Energy (Australia)
MER	Regional Electricity Market of SIEPAC
MISO	Mid-West Independent System Operator
MO	Market Operator
MOI	Memorandum Of interest
NBI	Nile Basin Initiative
NBPTF	Nile Basin Power Trade Framework
NE - ISO	New England Independent System Operator
NEM	National Electricity Market (Australia)
NEMMCO	National Electricity Market Management Company
NERC	National Electricity Reliability Council
NSI	Net Scheduled Interchange
OMVS	Organisation pour la Mise en Valeur du fleuve Sénégal
PAC	Participant Advisory Committee (Australia)
PJM	Regional Market of Pennsylvania, New Jersey and Maryland
PMU	Project Management Unit
PPA	Power Purchase Agreement
PRSG	Planned Reserve Sharing Group (in MISO)
PTC	Power Technical Committee
PTOA	Regional Power Trade Operating Agreement (in GMS)
RPM	Reliability Pricing Model in PJM
RPTCC	Regional Power Trade Coordination Committee (in GMS)
RPTP	Regional Power Trade Project

RRO	Regional Reliability Organization
RSC	Regional State Committee (in SPP)
RTEPP	Regional Transmission Expansion Planning Process in PJM
RTN	Regional Transmission Network (in GMS)
RTO	Regional Transmission Organization (US)
RTR	Regional Transmission Grid (SIEPAC)
SADC	Southern African Development Community
SADCC	Southern African Development Co-ordination Conference
SAP	Subsidiary Action Program
SAPP	Southern African Power Pool
SCED	Security-Constrained Economic Dispatch
SCUC	Security-Constrained Unit Commitment
SERC	Southeastern Reliability Council (US)
SIEPAC	Central American Regional Electricity Market
SMD	Standard Market Design (NE-ISO)
SONABEL	Société Nationale Burkinabè d'Electricité
SPP	Southwest Power Pool
SRMC	Short Run Marginal Cost
STEM	Short Term Energy Market (in SAPP)
SVP	Shared Vision Program
TSO	Transmission System Operator
TUOS	Transmission Use of System
UES	Unified Energy System
UPS	Unified Power System (in CIS)
USSR	Union of Soviet Socialist Republics
VOLL	Value of Lost Load
VRA	Volta River Authority
WAPP	Western African Power Pool
WSPP	Western Systems Power Pool

Table 1: Acronyms

II FOREWORD

The purpose of this report, named “REGIONAL ORGANISATIONS WITHIN THE NILE BASIN”, is to present a review of the status and institutional structures of regional organisations within the Nile basin suggesting how these organisations can support the RPTP’s objectives.

This report is Deliverable 3 and corresponds to Activity 3: “*Review of other Power Trade Organisations*” of the project’s revised terms of reference, agreed during the inception mission in Dar es Salaam. According to these agreed terms of reference, the institutions to be analysed are: EAPP (Eastern African Power Pool), EAC (East African Community) and EGL (Energie des Grands Lacs).

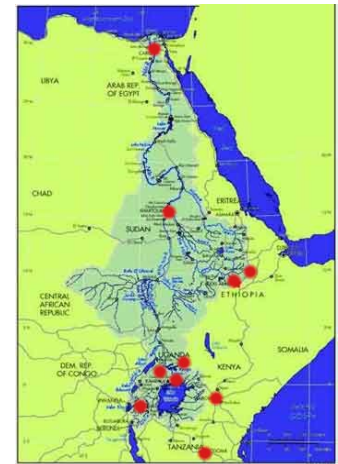
III BACKGROUND AND CONTEXT OF THIS PROJECT

The Nile Basin Initiative (NBI): Formally launched in February 1999 by the Council of Ministers of Water Affairs of the Nile Basin States, the NBI provides a forum for the countries of the Nile to move forward, towards a cooperative process in order to achieve tangible benefits in the Basin and to build a solid foundation of trust and confidence.

The NBI has two primary areas:

- Basin-wide projects - “Shared Vision Program” (SVP) to help create an enabling environment for action on the ground
- Sub-basin projects - “Subsidiary Action Program” (SAP), aimed at the delivery of actual development projects involving two or more countries

The Regional Power Trade Project (RPTP) is one of the thematic projects to be implemented basin-wide, to help establish a foundation for trans-boundary regional cooperation, and create an enabling environment conducive for investment and action on the ground, within an agreed basin-wide framework.



The RPTP aims to establish the institutional means for coordinating the development of regional power markets (such as a Power Pool) among the Nile Basin countries, through the creation of a power trade framework which can contribute to achieve poverty reduction, including expanding access to reliable and low-cost power supply, in an environmentally sustainable manner.

The broad benefits envisaged from the NBI are poverty alleviation through improved, sustainable management and development of the shared Nile waters, and enhanced regional stability through increased cooperation and integration among the Nile states.

Project activities are coordinated by the Project Management Unit (PMU) at the regional level and by the PTC members at the country level. Activities include the establishment and operation of a power trade framework, the conduct of a comprehensive basin-wide analysis of long-term power supply, demand and trade opportunities, the identification of potential development projects within the NBI SAPs, the preparation of a public participation plan and stakeholder analysis, and the development of knowledge management tools. These activities are carried out through studies, consultations, workshops, seminars and other modalities, for which the project may seek assistance from national and regional research and

training institutions, NGOs, consultants and other public or private organizations from the Nile basin region.

The current project: “CONSULTANCY TO DEVELOP AN INSTITUTIONAL, REGULATORY AND COOPERATIVE FRAMEWORK MODEL FOR THE NILE BASIN POWER TRADE” falls within the RPTP framework. The key project objectives include:

1. Assisting the RPTP and the NBI Power Technical Committee (PTC) in reviewing institutional arrangements adopted by regional power trade organisations, and submitting discussion papers to the RPTP, comparing and contrasting the different arrangements.
2. Conducting an information gathering tour so as to collect basic information of the countries in the region, which will permit to develop in the future recommendations and to perform an informed decision making process.
3. Proposing a model for developing Regional Power Trade at the Nile sub-basin and basin levels.
4. Drafting Memoranda and legal documents as required.

IV INTRODUCTION

This report analyses three regional African institutions from the point of view of cooperation possibilities towards the development of power trade in the Nile Basin region.

The selection of institutions was agreed during the inception mission of the project and includes:

- EAPP: Eastern African Power Pool
- EGL: Energie des Grands Lacs
- EAC: East African Community

The report will analyse the institutions' objectives, current organisation, activities and the possibilities of them participating actively and dynamically in the development of trade in the Nile basin region.

Additionally, the role of COMESA and its relationship with EAPP are analysed, according to what was requested during the Preparatory Power Trade Study Workshop held in Nairobi in October, 2007.

V EASTERN AFRICAN POWER POOL (EAPP)

1. INTRODUCTION

The EAPP covers the following countries: **Ethiopia, Kenya, Sudan, Uganda, Tanzania, Congo DRC, Rwanda, Burundi and Egypt**. The central offices are in:

Africa Avenue, Ras Dashen Building 5th floor,
Addis Ababa,
ETHIOPIA.

The EAPP was formed by an agreement between the member countries, through an inter-governmental Memorandum of Understanding as well as an inter - utility Memorandum of Understanding. EAPP is processing a legal instrument for a binding agreement between the countries and the utilities.

It must be mentioned that Tanzania and Uganda have not yet signed the corresponding MOU.

2. THE ORGANISATION OF THE EAPP

Although the organisational structure of the EAPP is not yet fully filled, the organisational chart is defined. The highest authority in the EAPP is the "Conference of Ministers" and is followed by the Steering Committee. The Conference of Ministers is the political body that takes high level decisions and provides policy guidelines. The following figure shows the general organisation. In the scheme, full lines indicate organs that are already in place and dotted lines those that have not yet been established.

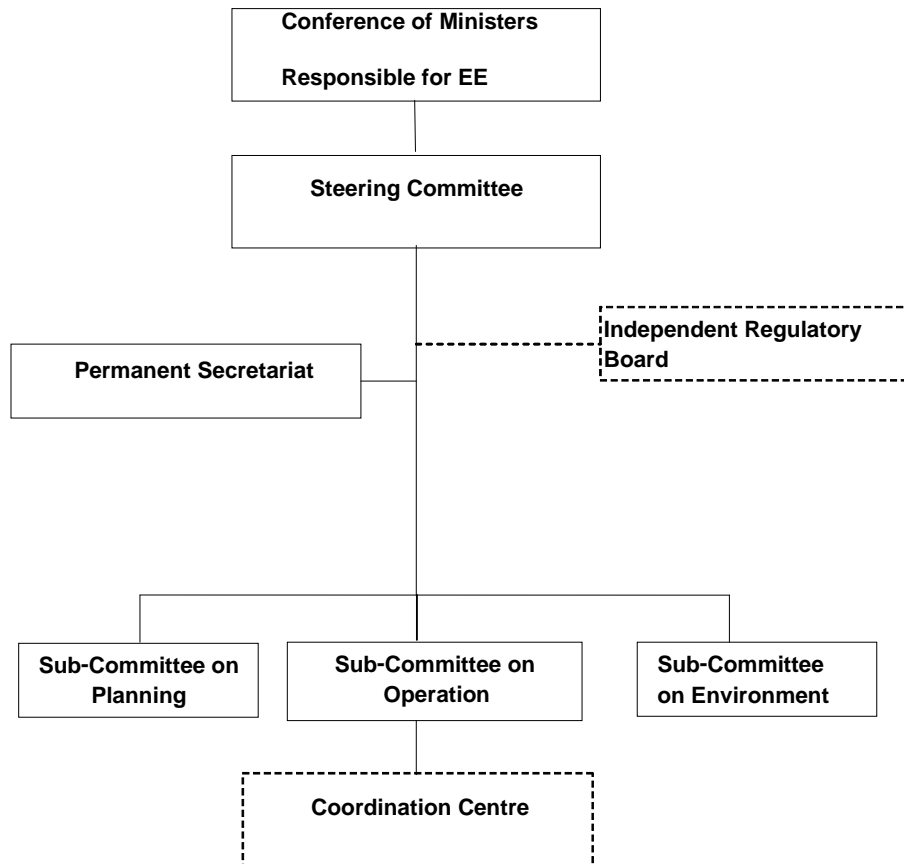


Figure 1: EAPP General Organization

According to the Intergovernmental Memorandum of Understanding (2005) that launched the EAPP, the integration of the organisation's different bodies is as follows:

The Conference of Ministers: consists of the Ministers responsible for electricity in each regional member country.

The Steering Committee: consists of the Chief Executive Officers of EAPP active members.

The Independent Regulatory Board: consists of nominees of national regulatory boards in the member countries.

Additionally, there is a structure decided for the Permanent Secretariat, which is also partially complete. The next figure shows the organisation of the "Permanent Secretariat".

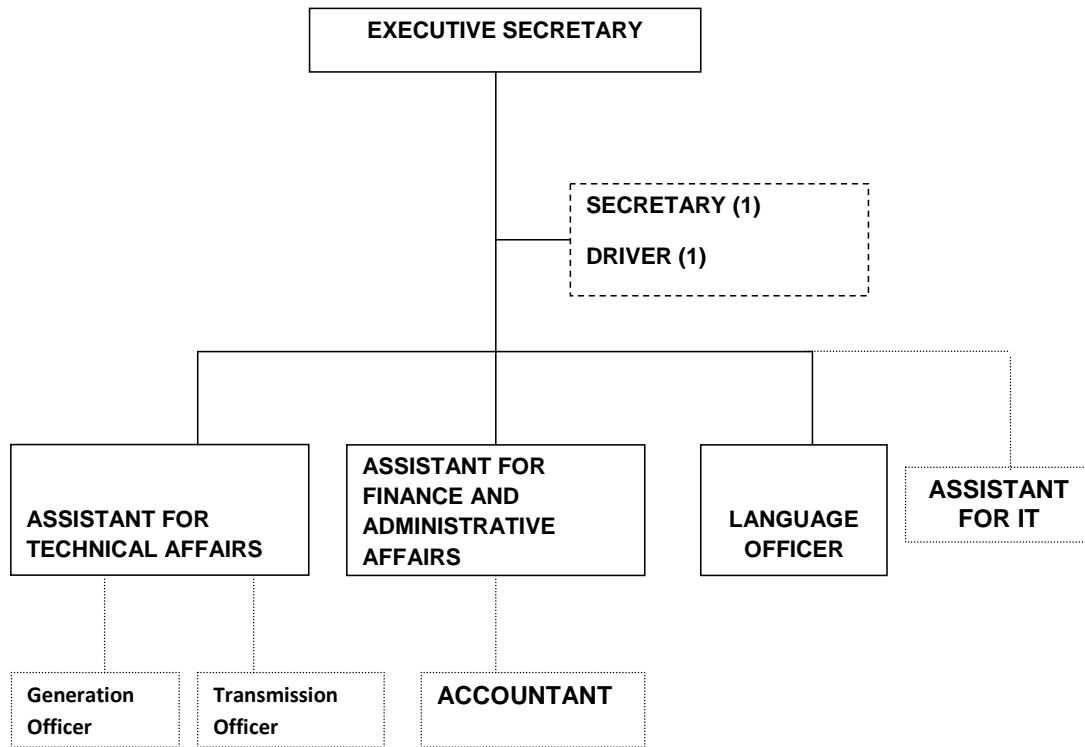


Figure 2: EAPP – Secretariat Organization

2.1. CONFERENCE OF MINISTERS

Key responsibilities of the Conference of Ministers are (but not limited to):

1. Sign and amend the Inter Governmental MOU.
2. Approve common electrical energy policy.
3. Approve regional power development master plan.
4. Provide strategic guidance and oversee the Steering Committee
5. Approve the members of the independent Regulatory Board.
6. Others

2.2. STEERING COMMITTEE

Key responsibilities of the Steering Committee are (but not limited to):

1. Define common electrical energy policy (CEEP).
2. Define and ensure implementation of schemes related to CEEP, especially in the area of tariffs, planning and standardisation.
3. Approve plans, programs and reports of sub – committees.
4. Propose options to the Conference of Ministers to develop the region's power systems.
5. Approve budgets.

6. Approve training programs
7. Set up ad – hoc sub committees as needed.
8. Harmonise and approve rates for access to networks
9. Others

2.3. PERMANENT SECRETARIAT

Key responsibilities of the Permanent Secretariat are (but not limited to):

1. Manage and update regional database
2. Seek ways and means to mobilise funds for activities.
3. Follow up of power interconnection projects
4. Ensure coordination of the technical sub – committees' activities.
5. Ensure liaison relationship between EAPP and other regional organisations.
6. Keep records of minutes of EAPP organs.
7. Others

2.4. TECHNICAL SUB – COMMITTEES

2.4.1. SUB COMMITTEE ON PLANNING

Responsible for the coordination of master plans and development programs for member utilities.

2.4.2. SUB COMMITTEE ON OPERATION

Responsible for the definition of the operation and maintenance rules for power plants and networks involved in EAPP.

2.4.3. SUB COMMITTEE ON ENVIRONMENT

Responsible for the environmental impact assessment and mitigation measures on the electrical installations within the EAPP.

3. PHILOSOPHY OF THE EAPP

The EAPP brings together the member countries and utilities in negotiating the cooperation agreements. It is not a supranational body that decides for the countries; rather, it is the means to achieve agreements among the countries on different issues.

EAPP works basically through “projects”; these projects are approved at the level of Ministers and then the actual implementation is overseen by the Steering Committee.

The actual execution of the projects is carried out by the utilities.

The EAPP is funded by contributions from the member utilities.

4. MOST RELEVANT STUDIES BEING UNDERTAKEN

4.1. BASIC STUDIES

The following are the basic studies that are being undertaken:

- Study to develop a binding legal agreement for the members.
- Basic documents for the Power Pool
- Strategic plan
- Future market development study for the region
- Draft standard commercial agreements
- Standard market rules.
- Power pool database: full access will be granted to the member utilities of the region, and some areas will be open to public
- Grid code will be developed in the future

4.2. SPECIFIC PROJECTS

There are also specific studies and follow up activities that are being undertaken, such as:

- Action plan and strategy undertaken in November 2006 and revised in June 2007.
- Kenya - Ethiopia interconnection
- Nile Basin Initiative activities
- Capacity building
- Capacity needs assessment
- Standardize the bilateral agreements to facilitate regional power trade

VI ENERGIE DES GRANDS LACS (EGL)

1. INTRODUCTION

EGL is a regional institution consisting of **Rwanda, Burundi and the Democratic Republic of the Congo (DRC)** whose objectives are to develop regional electricity projects for sharing its outputs among the associated countries. Institution address:

EGL

B.P. 1912 Bujumbura

BURUNDI

Tel: 257-22 225504 or 257 77 732789; Fax 257 22 224157

2. THE ORGANIZATION OF EGL

The general organization of the institution is shown in the following diagram. As it can be seen, the different positions are shared by the countries.

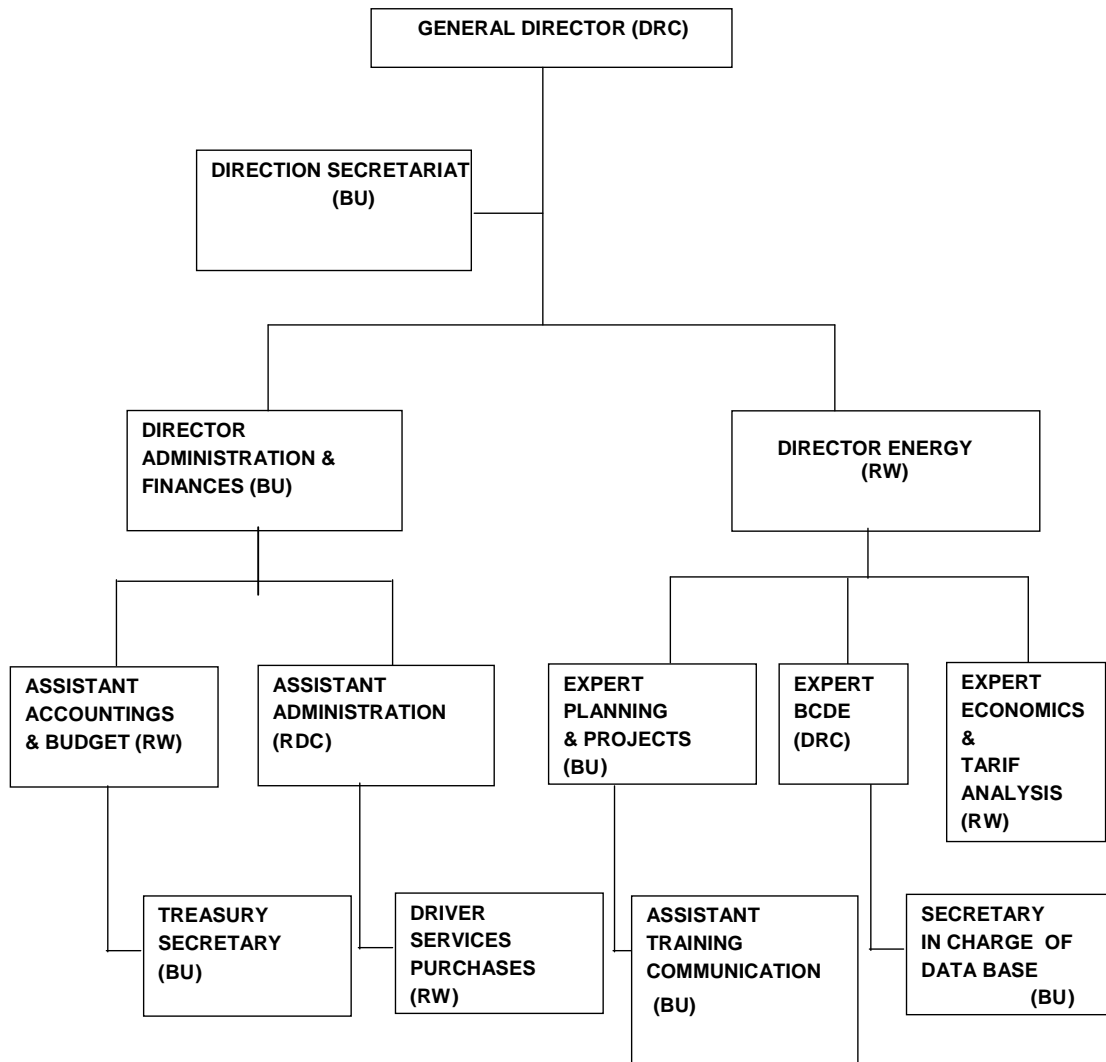


Figure 3: EGL General Organization

This organizational structure reflects the objective where the central idea is developing projects and sharing outputs. The idea of an electricity market involving the three countries is not presented.

3. THE EXPERIENCE OF SINELAC

Under a Convention signed in 1984, Burundi, DRC (then Zaire) and Rwanda agreed to jointly build and operate a hydroelectric power station: Ruzizi II.

Ruzizi II is common property of the three countries. It supplies electricity to REGIDESO (Burundi), ELECTROGAZ (Rwanda) and SNEL (RDC).

SINELAC operates the 36 MW plant.

The construction of the power plant was financed mainly by the International Development Association, the European Funds for Development (Fonds Européen

de Développement), and the Development Bank of the Great Lakes Countries (Banque de Développement des Pays des Grands Lacs).

SINELAC has had many operational problems, mainly due to the chronic insecurity in the region, the lack of adequate resources, and the shareholder countries' lack of respect to their commitments.

However, SINELAC is an interesting example of cooperation and common exploitation of resources among the three countries.

4. FUTURE PROJECTS

EGL is currently planning the implementation of Ruzizi III power plant with 82MW, and financing for its implementation has been secured from the EU.

Another project to be implemented is Sisi 5 on Ruzizi river. This is a power plant of 205MW requiring a full feasibility study and engineering design.

Refurbishment of the Ruzizi river gates at lake Kivu will also be carried out for improved water resource management.

VII EAST AFRICAN COMMUNITY (EAC)

1. INTRODUCTION

The East African Community was established in 1999 by the Treaty for the Establishment of the East African Community which was signed by the Presidents of **the United Republic of Tanzania, the Republic of Kenya and the Republic of Uganda. Rwanda and Burundi** were incorporated in EAC in July 2007. Therefore, today EAC is an association of five countries. The Secretary General is based at:

Arusha International Conference Centre (AICC) Building
 Kilimanjaro Wing, 5th Floor
 P.O. Box 1096
 Arusha,
 TANZANIA

The EAC discharges its mandate through three organs established by the Treaty: the Secretariat, the East African Legislative Assembly and the East African Court of Justice. All three organs are functional.

The East African Community Secretariat implements its programmes through a five-year Development Strategy. The Strategy document spells out the policy guidelines, priority programmes and implementation schedules.

The EAC strategy emphasises economic co-operation and development, with a strong focus on the social dimension. The role of the private sector and civil society is considered as central and crucial to the regional integration and development into a veritable partnership with the public sector.

The areas of cooperation are namely trade, investments and industrial development; monetary and fiscal affairs; infrastructure and services; human resources, science and technology; agriculture and food security; environment and natural resources management; tourism and wildlife management; and health, social and cultural activities.

Energy and Infrastructure are among the major areas being promoted by the Community, as they are seen as key for facilitating social and economic development and the EAC countries' integration process.

The EAC is currently implementing a Customs Union that became effective in January 2005 which, when fully implemented by 2010, will eliminate charges on movement of goods within the region and establish a common external tariff for imports into the region.

At the same time, EAC is in the process of establishing a Common Market. The Common Market will facilitate free movement of goods and services, free movement of people and the right for establishing their residence within the region. Negotiations on a Common Market Protocol are ongoing and are expected to be concluded by mid 2009, and the Common Market to become effective from January 2010. Thereafter EAC will establish a Monetary Union with a common currency across the region and, ultimately, a Political Federation.

The proposed creation of an East African Community Power Pool (EACPP) is considered in this broad context.

2. THE ORGANISATION OF EAC IN THE AREA OF ENERGY

Decision making in the EAC is hierarchically made by the Summit of the Heads of State and/or Government, Council of Ministers, Sectoral Council on Energy and Sectoral Committee on Energy.

The specific structure for the energy sector is shown in the following diagram.

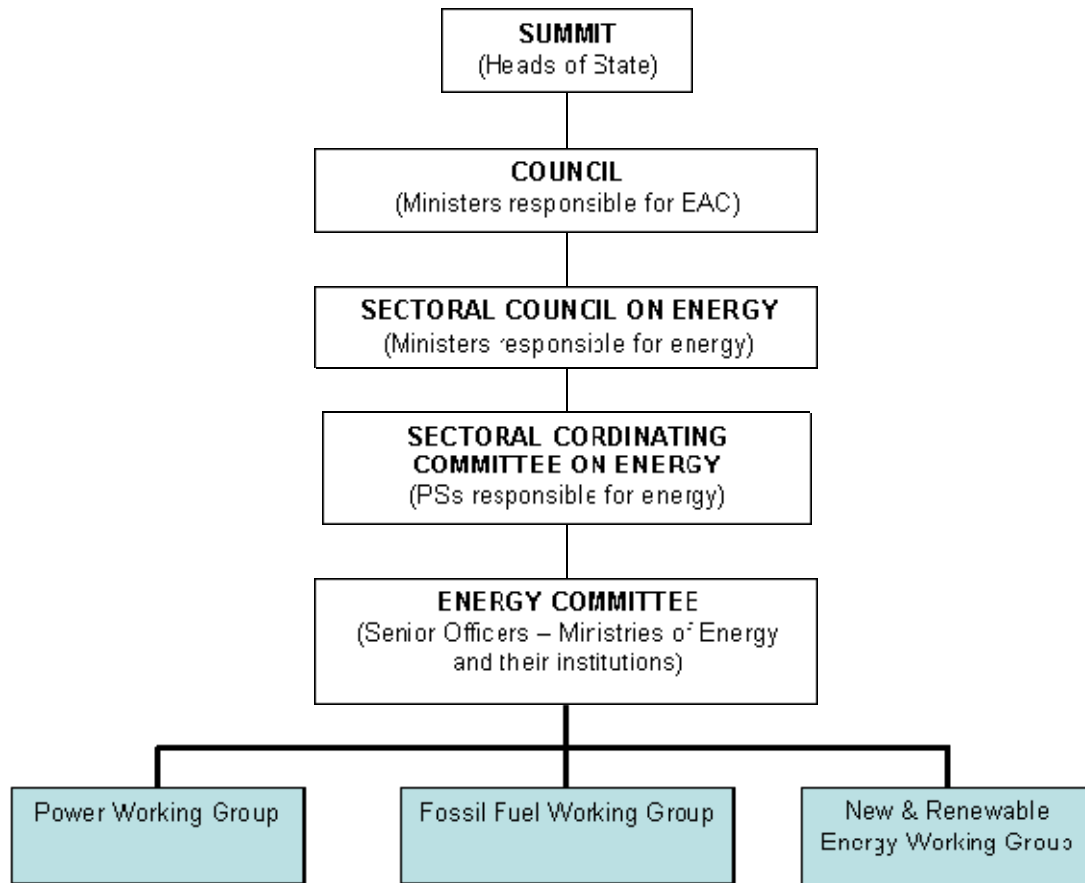


Figure 4: EAC General Organization

It should be noted that the Energy Committee is formed by the Power, Fossil Fuel and Renewable Energy Working Groups.

3. ENERGY SECTOR STRATEGY

The central idea of the energy sector strategy consists in increasing access to sufficient, reliable, affordable, and environmentally friendly energy sources in the region, which require the following interventions:

- Implement the East African Power Supply Master Plan;
- Promote energy mix system involving non-renewable and renewable energies;
- Implement the extension of gas pipeline from Dar es Salaam to Tanga, Zanzibar and Mombasa;
- Promote the existing gas resources for electricity production;
- Complete building of oil pipeline from Western Kenya to Kampala;
- Harmonize fossil fuel policies, procedures and regulations;

- Prepare Fossil Fuel Master Plan;
- Prepare a Renewable Energy Master Plan;
- Prepare an integrated Regional Energy Master Plan comprising hydroelectric power, petroleum, coal, gas, solar and other renewable sources of energy.

4. THE EAC IN THE REGIONAL ENERGY CONTEXT

The organization operates through the Ministries of Energy, as well as the energy utilities of the member countries. The Ministries of Energy and the energy utilities are active participants, while the energy regulatory authorities are passive participants, but it is expected that in the future they will be fully involved.

The EAC is an active participant in the NBI and has an MOU with it.

The EAC has the legal capacity to enforce decisions in the member countries; this capacity is borne in the treaty of the Establishment of the EAC. So, the decisions made by the EAC are legally binding and should be implemented in the countries by the respective ministries and utilities.

The EAC has no “regional policy” regarding the energy sector; each country has its own policy. However, the EAC developed the East Africa Power Master Plan in March 2005, which is now being implemented.

It also developed the “cross boarder electrification programme” whereby the boarder towns should get electricity where it is cheaper to do so, even if this means importing from the neighbouring country. A number of towns have benefited from this programme e.g. Sirari (Tanzania) from Isebania (Kenya) and Lunga Lunga (Kenya) from Tanzania. PPA negotiations for electrification of Namanga (Tanzania) from Kenya are ongoing, as are the plans for electrification of Mutukula (Tanzania) from Uganda.

The EAC power pool is one of the recommendations in the East African Power Master Plan. System planners in EAC have met and agreed on the planning tools to be used in the region, while preparation of a region wide system simulation case is ongoing.

4.1. EAC POWER POOL

During the First Meeting of the Standing Committee on the Implementation of the East African Power Master Plan, steps were made towards the establishment of a power pool.

The key decisions made during this meeting on the development of a power pool are related to:

1. Adoption of a general organisational structure which is shown in the following figure.

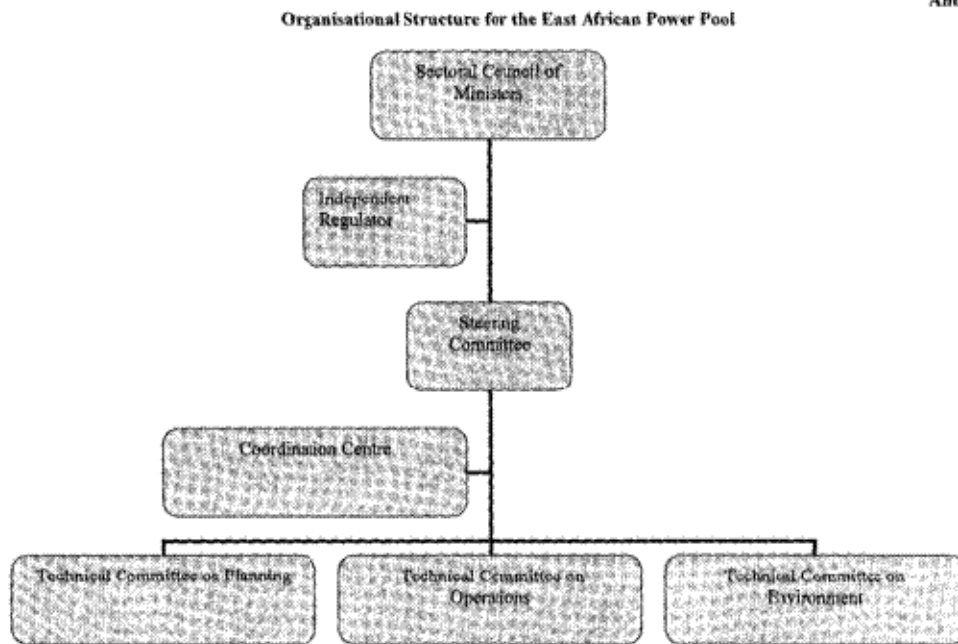


Figure 5: Structure foreseen for the EAC power pool

2. Prepare Intergovernmental and Inter – utility MOUs.
3. Prepare a protocol on power trade.
4. Establish a coordination centre with a permanent location and permanent staffing.
5. Establishing the following committees: planning, operations and environment.
6. The development of rules and regulations to govern the operations of the power pool would be carried out by the above mentioned committees and the Coordination Centre Manager.

Comments on the progress to establish a power pool in the EAC

1. An organisational structure has been decided but objectives, functions and activities of the different institutions still need to be established.
2. Regarding the defined committees, it is very important to specify their functions, characteristics, area of intervention, responsibilities, etc., since they will be the technical support for the development of the power pool.
3. The need for a permanent and independent Coordination Centre is not clear at the very beginning. It should be ensured that the “functions” of this coordination centre can not be carried out by one of the existing ones, until trading develops enough to justify an independent permanent centre. The establishment of an independent coordination centre represents a considerable investment.
4. The EAC Treaty provides a very important legal basis to develop the required rules and regulations and enforce them. Besides, the Court of Justice provides the natural environment for dispute resolution.
5. A key element that should be established as soon as possible, is the harmonisation of standards in order to make fluid trading possible even in its simplest form and from the very beginning.

6. The participation of the EAC pool in the development of transmission infrastructure needs to be specifically addressed, perhaps as a function of one of the foreseen committees.

VIII COMPARISON OF INSTITUTIONS

	EAPP	EGL	EAC
Countries	Egypt, Sudan, Ethiopia, Kenya, Uganda, Rwanda, Burundi, Tanzania, DRC (1)	DRC, Rwanda, Burundi	Tanzania, Kenya, Uganda, Rwanda, Burundi
Participants	Utilities, Countries	Countries	Countries and utilities. Regulators as passive participants.
Objective	Negotiation of cooperation agreements in the power sector	Development and operation of regional electricity projects shared by the member countries	Economic and social development of the region.
Institutionality	Inter governmental MOU Inter utility MOU Binding agreement in process	Convention signed by the member countries	East African Community Treaty
General organisation	Conference of Ministers Steering Committee Permanent Secretariat Sub - Committees	General Director Secretary to the Director Administrative and Financial Director Energy Director	Organisation of countries with the objective of achieving a Customs Union, Common Market, Monetary Union and in the long term a Political Federation. Key bodies in the organisation are: Summit: heads of state Council: Ministers Sectoral coordinating committee Specific committee (i.e. Energy Committee)

	EAPP	EGL	EAC
Intervention area	Organisation to foster cooperation among utilities. Initial steps to develop a regional power market later. Studies on market rules, grid code, data base for information sharing, specific interconnections, capacity building.	Development of specific projects in the power sector and operation of the project among the three member countries.	General socioeconomic development of the region. In power sector key areas are: <ul style="list-style-type: none"> a) East African Power Supply Master Plan b) Renewable Energy Master Plan c) Integrated Regional Energy Master Plan comprising integrating all sources of energy. Other Energy infrastructure development.
Comments	Initiative of utilities. Clear objective of development of a regional power market. Key issues to develop a regional market have been identified and are being addressed (institutionality, standards, rules, grid code, bilateral agreements). It already has an institutional framework and is trying to improve it.	Oriented to specific project development and operation. Good example of possible cooperation among a limited number of countries in a specific project. General structure seems too big for the project to be managed.	Initiative of the countries with a firm legal support (treaty among the countries). Wide field of intervention where energy sector and power sector is currently considered a key topic.
Possibility of participation in the development of the power trade framework for the NBI	Consists basically of the same countries as NBI; already has a legal basis which is trying to improve, has the same objectives.	It is more “commercially oriented” to project development. It could be the “seed” for the development of a sub – region.	It can provide a very firm institutional support (because of the treaty and capacity of enforcement). It deals with a wide range of issues and if energy is considered as a key topic, decisions could be fast tracked within its internal organisation.

	EAPP	EGL	EAC
Resolution of disputes	The Inter Governmental MOU establishes that the Independent Regulatory Board will have as one of its functions " <i>Settle any disputes which may arise between the members and related to the exchange and transactions within the EAPP</i> "		The East African Court of Justice established by the Treaty.

(1) Tanzania and Uganda have not signed the MOU yet.

Table 2: Comparison of Institutions

IX GEOGRAPHIC COVERAGE AREA OF THE DIFFERENT INSTITUTIONS

The following table indicates the different Regional Institutions and their member countries, so as to easily identify multiple memberships. The column “# of Institutions” indicates in how many Institutions the country is member. Lines corresponding to countries members of NBI are marked in light green.

	EAPP	EGL	EAC	COMESA	SAPP	CAPP	NBI	# of Institutions
Angola					•			
Botswana					•			
Burundi	•	•	•	•			•	5
Cameroon						•		
Central African Rep.						•		
Chad						•		
Comoros				•				
Congo Brazzaville						•		
Congo DRC	•	•		•	•	•	•	6
Djibouti				•				
Egypt	•			•			•	3
Equatorial Guinea						•		
Eritrea				•				
Ethiopia	•			•			•	3
Gabon						•		
Kenya	•		•	•			•	4
Lesotho					•			
Libya				•				
Madagascar				•				
Malawi				•	•			
Mauritius				•				
Mozambique					•			
Namibia					•			

	EAPP	EGL	EAC	COMESA	SAPP	CAPP	NBI	# of Institutions
Rwanda	•	•	•	•			•	5
Sao Tome & Principe						•		
Seychelles				•				
South Africa					•			
Sudan	•			•			•	3
Swaziland				•	•			
Tanzania	•		•		•		•	4
Uganda	•		•	•			•	4
Zambia				•	•			
Zimbabwe				•	•			

Table 3: Area coverage of Regional Institutions

X COMESA AND THE EAPP

1. COMESA – GENERAL ASPECTS

The Common Market for Eastern and Southern Africa (COMESA) is a regional integration grouping of African countries, encompassing 19 member States (**Burundi, Comoros, Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia and Zimbabwe**), a population of about 389 million people and a total area of 12 million km². The COMESA Secretariat is based in:

Ben Bella Road,
P.O. Box 30051,
Lusaka,
ZAMBIA

The central objective of the initiative is to establish a common market; detailed aims and objectives are:

- a) to attain sustainable growth and development of the Member States by promoting a more balanced and harmonious development of its production and marketing structures;
- b) to promote joint development in all fields of economic activity, and the joint adoption of macro-economic policies and programmes to raise the living standard of its people and to foster closer relations among its Member States;
- c) to co-operate in the creation of an enabling environment for foreign, cross border and domestic investment, including the joint promotion of research and adaptation of science and technology for development;
- d) to co-operate in the promotion of peace, security and stability among Member States, in order to enhance economic development in the region;
- e) to co-operate in strengthening the relations between the Common Market and the rest of the world, and the adoption of common positions in international fora; and
- f) to contribute towards the establishment, progress and realisation of the objectives of the African Economic Community.

In the meeting held in Abuja (Nigeria) in 1991, the member countries agreed to adhere to the following principles:

- a) equality and inter-dependence of the Member States;
- b) solidarity and collective self-reliance among Member States;
- c) inter-State co-operation, harmonisation of policies and integration of programmes among Member States;
- d) non-aggression between the Member States;
- e) recognition, promotion and protection of human and peoples' rights in accordance with the provisions of the African Charter on Human and Peoples' Rights;
- f) accountability, economic justice and popular participation in development;
- g) the recognition and observance of the rule of law;
- h) the promotion and maintenance of a democratic system of governance in each Member State;

- i) the maintenance of regional peace and stability through the promotion and strengthening of good neighbourliness; and
- j) the peaceful settlement of disputes among Member States, the active cooperation between neighbouring countries and the promotion of a peaceful environment as a pre-requisite for their economic development.

The organs previewed for the initiative are:

- a) the Authority;
- b) the Council;
- c) the Court of Justice;
- d) the Committee of Governors of Central Banks;
- e) the Intergovernmental Committee;
- f) the Technical Committees;
- g) the Secretariat; and
- h) the Consultative Committee.

Among all these organs, it is important to highlight the “Court of Justice” for the role it may play in resolution of disputes between countries in the case of power trade, since it is a court recognised by all countries pertaining to the initiative.

Technical Committees include an “Energy Committee”. Technical Committees are composed of Member States representatives, designated for that purpose.

Technical Committees will:

- a) be responsible for the preparation of a comprehensive implementation programme and a time-table prioritising the programmes with respect to each sector;
- b) monitor and keep under constant review the implementation of co-operation programmes with respect to each sector;
- c) for the purposes of paragraphs (a) and (b) of this Article, request the Secretary-General to undertake specific investigations;
- d) except for the Committee on Finance and Monetary Affairs which shall submit its reports and recommendations to the Committee of Governors of Central Banks, submit from time to time reports and recommendations to the Intergovernmental Committee, either on its own initiative or upon the request of the Council, concerning the implementation of the Treaty’s provisions

Regarding the energy sector, the Treaty establishes that the Member States recognise security of energy supply at competitive prices as a precondition for economic development, and that to ensure competitively priced energy supply to all Member States, requires both the development of local or renewable energy resources and the rational management of existing ones from external or domestic sources.

The areas of cooperation to achieve the objectives in the energy sector are:

- a) joint exploration and exploitation of hydro and fossil fuel;
- b) creation of more favourable investment climate to encourage public and private investment in this sub-sector;
- c) encouragement of joint utilisation of training and research utilities;
- d) exchange of information on energy systems and investment opportunities; and
- e) development of research programmes on renewable energy systems.

Regarding trading, Member States agree to cooperate in:

- a) joint procurement of products; and
- b) interconnecting national electricity grids.

It is also established that the Member States will work towards international agreements that are designed to improve the management of energy resources, develop new renewable energy resources and coordinate the exchange of information on energy resources.

The Treaty also has provisions regarding free trade, standardisation, cooperation in the development of science and technology, development of comprehensive information systems, development of private sector, investment promotion and protection all key elements to develop power trade.

The Treaty also provides for cooperation with other regional organisations.

In summary, COMESA is a high-level organisation which aims to achieve a common market among member countries. Its organisational structure includes a Court of Justice. The energy sector is specifically considered as well as trade, interconnection of national grids, standardisation, promoting private sector participation and development of information systems.

2. COMESA AND EAPP

In its strategic plan COMESA establishes the development and adoption of a medium to long term regional Energy Master Plan as one of its goals. It recognises the existence of three power pools; EAPP is one of these power pools (the others are the Southern Africa Power Pool and the Central African Power Pool).

COMESA adopts EAPP as a specialised agency. COMESA is set to particularly strengthen its participation in the three power pools, and provide leadership and assistance to the participating countries.

Adopting EAPP as specialised agency of COMESA has the following effects, among others:

1. EAPP is recognised in the region as a relevant institution, with the capacity of carrying out power integration activities. Moreover, it is chosen and appointed by COMESA as the institution in charge of these activities.
2. EAPP would count to carry out the activities with the support, not only of EAPP's MOUs, but with the Treaty that creates COMESA.
3. The Treaty establishing COMESA provides explicitly for all the key elements necessary to develop power trading: a regional institution or organisation of high level to foster and manage integration, the explicit will of fostering private sector participation, provisions to foster and protect investment, harmonisation of standards and cooperation and sharing information.
4. The Treaty also provides EAPP the means to coordinate with other regional initiatives (power pools) so that cooperation and integration may encompass a wide area of Africa in the future.
5. COMESA has a Court of Justice which is an important element for dispute resolution among member countries, even if agents from the private sector may prefer arbitration processes according to ICC procedures in places like Paris, London, etc.

It is worth mentioning however, that Tanzania is not a member of COMESA, but in COMESA the opportunity for other countries to join the initiative is open and the Treaty has provisions for this alternative.

XI CONCLUSIONS

This section summarises key aspects of the regional institutions analyzed; the integration and articulation of them with the NBI and the regional power trade project will be developed in the Final Report.

1. Three institutions were considered as agreed during the inception mission (EAPP, EGL and EAC) and later a fourth (COMESA) was added in its relationship with EAPP.
2. The institutions cover different and overlapping geographical areas and several countries are members of more than one institution. Table 3 shows the coverage area and the overlap among them.
3. The intervention area of the different institutions can be classified in three groups:
 - a. Institutions with a broad intervention area, basically socioeconomic development and cooperation including energy and power sector (EAC, COMESA).
 - b. Institution oriented to the development of a power regional market (EAPP).
 - c. Institution with a commercial and project development orientation (EGL – SINELAC).
4. Two institutions (EAC and COMESA) have a Treaty signed by the member countries as legal basis and a Court of Justice for dispute resolution. Both the Treaty and the Court of Justice are important elements, from the institutional point of view, for any integration process since they provide firm legal support and the possibility to enforce decisions. At the same time, these institutions have a “political” profile where regional integration, in the wide sense of the term, is the general and long term objective. In this sense, for example, the long term objective of EAC is achieving a federation of nations.
5. EAPP has a technical profile (even if the highest decision body is comprised of the ministers of the member countries), where the utilities play a key role. The objective of the institution is focused on the development of a regional power market.
6. EGL – SINELAC has a commercial profile, oriented to project development. It is a demonstration on how a group of countries can focus on a specific project and develop it for their benefit.
7. The development and implementation of a regional power market requires legal support, technical support and commercial orientation. The institutions analyzed can contribute in all these tiers, the challenge is how to articulate them and share roles. A positive aspect is that it is possible to assign roles among institutions without requiring modification in the institutions’ objectives and area of intervention; the negative aspect is that the institutions have different geographical areas of coverage and depending on the role defined, some adjustment may be necessary for countries not pertaining to a certain area. All these issues of articulating the roles of different regional institutions in an NBI power trade implementation strategy will be discussed in the final report.