TRIPARTITE & IGAD INFRASTRUCTURE CONFERENCE

COMESA-EAC-SADC TRIPARTITE and IGAD

Infrastructure Development Conference

Linking up Eastern and Southern Africa Sustainable Economic Development

Kenyatta International Conference Centre
Nairobi, Kenya
28 - 29 October 2010

Sponsored by Citadel Capital and select Citadel Capital platform companies including:

CITADEL CAPITAL
AFRICA RAILWAYS
ASEC CEMENT
TAQA Arabia
TANMEYAH Micro Enterprise Services

COMESA-EAC-SADC TRIPARTITE and IGAD Infrastructure Development Conference

Kenyatta International Conference Centre
Nairobi, Kenya

28 - 29 October 2010

COMESA – EAC – SADC TRIPARTITE AND IGAD Infrastructure Development Conference

Linking up the ESA Region for Sustainable Economic Development & Best Practices in Private Sector Opportunities

NAIROBI (KENYA) 28 - 29 OCTOBER 2010

1. INTRODUCTION

The Eastern and Southern Africa (ESA) region comprises twenty seven countries grouped into several Regional Integration Organisations (RIOs) all working to improve the welfare of their people and bring them development through economic integration. This is being undertaken through cooperation by working together in various spheres of common interest which include trade promotion, infrastructure development, capacity building and promotion of peace and security.

Following the COMESA, EAC and SADC Tripartite Infrastructure Conference held in Lusaka, Zambia in April 2009, for the North South Corridor, a second Conference is being organized for five corridors serving the Eastern and Horn of Africa countries. In preparation for this major investment conference to be held in the first half of 2011, a preparatory meeting is scheduled to take place on 28 - 29 October 2010 in Nairobi, Kenya. The five corridors are Djibouti, Berbera, Lamu, Northern and Central. This conference is co-sponsored by the COMESA- EAC- SADC Tripartite and the Intergovernmental Authority on Development (IGAD)

2. SCOPE OF INTERVENTIONS

The purpose of the Nairobi Conference is to identify a set of priority projects in the five corridors where interventions involving infrastructure improvements and upgrading in Transport, ICT, Energy, water and sanitation. The Nairobi Conference will also identify trade facilitation initiatives that are necessary to reduce costs of cross-border trade and so reduce the cost of doing business in the ESA region.

The transport sector comprises surface transport which includes roads, railways, shipping, ports and inland water transport and projects have been identified that will improve connectivity by constructing “missing links”; rehabilitating existing infrastructure and implementing trade facilitation measures. The ICT sector comprises telecommunications, postal services, broadcasting and value added services. The projects include regional terrestrial fibre optic backbone links including backhauls to existing marine fibre links, implementation of regional virtual networks, upgrading and optimization of broadcasting facilities and capacity building for regulatory authorities and service providers. The energy sector comprises power and renewable energy resources and involves projects that will increase power generation, cross-border power grid interconnectors and capacity building for regulatory authorities and utilities in the energy sector.

3. CURRENT STATE OF PHYSICAL INFRASTRUCTURE AND SERVICES IN THE ESA REGION

The state of infrastructure along the corridors in the Eastern and Horn of Africa regions has been assessed in a number of comprehensive studies undertaken in the last two years. These studies include the ESA Transport and Communications Strategy and Priority Investment Plan (TCS/PIP), the East African Community Transport Strategy and Roads Sector Development Programme, the IGAD Joint Assessment Mission (JAM) for the Horn of Africa region, the Northern Corridor Infrastructure Master-plan, the four corridor diagnostic studies covering the Djibouti, Lamu, Northern and Central corridors and the scoping study being undertaken on the Northern and Central Corridors. These

studies have identified priority projects on these corridors and these projects will be presented in the Conference in outline.

3.1 Road Sub-sector

The largest volumes and values of trade in the ESA region are now transported by road, which has overtaken the rail sector, the primary mode of transport up to the mid 1970's. In spite of roads being the dominant mode of transport, the road network in the region faces many challenges which results in both high maintenance costs, which is financed by the public sector in the ESA region, and operating costs, which is financed by the private sector. High maintenance costs in roads infrastructure has resulted in delayed maintenance, rehabilitation and upgrading of key regional and national road links and the construction of missing links that in turn translates into high freight charges. This makes regional producers less competitive than they should be.

3.2 Rail Sub-sector

The rail networks on the Northern and Central Corridors were constructed at the turn of the 19th century and are all one-metre (or narrow) gauge lines. Minimal effort has been put into extending the networks and some branch lines have been closed owing to deterioration of the permanent ways. Rail infrastructure is in serious need of major new investment if it is to operate at its design capacity levels. Before this investment can take place there is need to address policy constraints restricting the ability of private and public sectors to invest in the railways. It is also necessary to determine the most appropriate methods of service provision by reworking concession agreements currently constraining the functioning of several railway networks in the region.

It is, therefore, necessary to assist countries to deal with policy issues which impose constraints to investments taking place in the railways and to then work with them to upgrade the railway infrastructure. In this regard, there is need to carry out the necessary studies to assess the status of railways and to determine the best options and undertake capital projects to upgrade the networks to attain contemporary international standards in the rail industry.

Projects have already been developed to upgrade railways along the Djibouti, Northern and Central corridors and there are on-going studies for the Lamu Corridor railway linking Kenya, Ethiopia and Sudan.

3.3 The Maritime Transport Sub-sector

In the maritime sector, there are on-going projects to increase capacity in Port Sudan, Djibouti, Mombasa and Dar Es Salaam ports. In Djibouti, projects have been developed to construct a liquefied gas terminal and enlarge the container terminal. For the port of Lamu design works are on-going for the construction of three berths to serve the new corridor linking Kenya, Ethiopia and Sudan and also provide for trans-shipment services and an EPZ. In the case of Mombasa, projects have been designed for the construction of a new maritime container terminal with a capacity of 500,000 TEUs, conversion of four conventional berths into container berths and the construction of a new oil terminal. In the port of Dar Es Salaam, the recently completed Tanzania Port Master Plan has proposed the expansion of the container terminal; dredging of the entrance channel, construction of inland container depots and near port logistics hubs. The study has also proposed the development of dedicated road and rail access. The Dar Es Salaam port master-plan estimates funding requirements of US$3.55million for studies and consultations and US$425 million for the construction of a new container terminal and dredging of the main entrance channel at the port.

Inland water transport projects identified include development of Lake Tanganyika, Lake Victoria Shire/Zambezi waterways. The Shire/Zambezi waterway will provide access to the Indian Ocean through a waterway to serve Malawi, Mozambique, Zambia and Zimbabwe.

3.4 Trade and Transport Facilitation Issues

Under trade and transport facilitation more effective use of existing and potential trade facilitation measures, (including establishment of one-stop border posts, harmonisation of customs documentation, implementation of regional axle load limits and Vehicle Overload Control programmes, improved safety standards and a Regional Customs Transit Guarantee system need to be implemented. In addition, the Carriers' License and Third Party Motor Insurance system will allow significant time and cost savings to be made. Many of these programmes are on-going, administered through the COMESA - EAC - SADC Tripartite to ensure a harmonised approach, but additional funding will need to be provided for in order to roll them out successfully.

3.5 ICT Sector

The ICT sector has seen a number of improvements in the last three years in most of the countries in the ESA region. Most of them including Egypt, Sudan Ethiopia, Djibouti, Kenya, Uganda, Rwanda Burundi Zambia, Zimbabwe have already rolled out or are in the process of rolling out their national fibre optic backbones which largely coincide with the proposed COMTEL backbone which was initially envisaged to provide a regional fibre optic backbone. What remains is to link the national backbones to facilitate seamless connectivity.

With regard to international connectivity, three marine fibre optic cables have already landed in the coastal countries of Tanzania, Kenya, Djibouti, Sudan. Backhauls have also been constructed or are under construction to link the non-coastal countries to these marine cables.

3.6 Energy Sector

The power sub-sector is currently characterized by inadequate generation capacity and poor grid interconnections in the countries served by the five corridors. There are planned generation projects in Ethiopia, Sudan, DR Congo, Kenya, Uganda and Tanzania. Power grid interconnectors have also been designated to facilitate cross-border transmission of power. The Southern Africa Power Pool (SAPP) is functional and providing benefits to its members in the Southern part of the ESA region. The East African Power Pool (EAPP) is a more recent institution and has been set up to facilitate power trade for the countries in the Eastern and Horn of Africa regions and to eventually link to SAPP.

4. CONFERENCE ARRANGEMENTS

At the Conference presentations will be made on the state of infrastructure and services along the five corridors and profiles of the priority projects identified for implementation in transport, ICT and energy. The primary objective is to familiarize investors, funding agencies and cooperating partners with a broad view of needs and opportunities in the region. The Conference is also a preparatory event for a major investment conference to be held in the first half of 2011.

On the second day of the Conference, there will be match making event for Small and Medium Enterprises (SMEs) bringing together companies from the ESA region on and those from the European Union (EU), Brazil, India and the rest of Africa to facilitate the forging of partnerships. The SMEs will also benefit from the large infrastructure projects as they will have opportunities to take part in their implementation through proving consultancies and other services.

Table of Contents

Table of Contents

Table of Contents

Transport Projects Profiles

DJIBOUTI CORRIDOR

Project 1: Carrefour d'Arta – Guelile

Title of Project	Rehabilitation of the Carrefour d'Arta – Guelile Road
Corridor	Djibouti
Route	Djibouti - Addis Ababa
Objectives	Undertake feasibility and design study followed by implementation
Expected Results	Link between Ethiopia and Djibouti providing access to landlocked Ethiopia to port services in Djibouti
Length	45 Kilometers
Status	Pre-feasibility study completed in 2003
Estimated Cost	US$ 50 Million
On-going related activities in the Member States	Ethiopia Master Plan study to be provided by Ethiopia
Implementation Arrangements	Ethiopia and Djibouti will liaise, prepare Terms of Reference and launch contract for services with funding to be defined
Period of Implementation	Feasibility Study and design to be completed by end of 2010

Project 2: Upgrading of the Mizar-Dima-Raad -Kapoeta Road

Title of Project	Upgrading of the Mizar-Dima-Raad -Kapoeta Road
Corridor	Djibouti
Route	Djibouti- Addis Ababa – Mizar- Raad- Kapoeta
Objectives	Undertake feasibility and design study followed by implementation
Expected Results	Link between Ethiopia and Djibouti providing access to Southern Sudan to port services in Djibouti
Length	260 Kilometers
Status	Design ongoing
Estimated Cost	US$ 260 Million
On-going related activities in the Member States	Upgrading of the Kapoeta –Juba Road under planning by Sudan
Implementation Arrangements	Ethiopia and Sudan will liaise on the development of this project
Period of Implementation	Design to be completed by end of 2011

Project 3: Reconstruction of the Djibouti/Addis Railway

Title of Project	Design and Contracting for Reconstruction of the Djibouti/Addis Railway to standard gauge
Corridor	Djibouti
Route	Djibouti - Addis Ababa
Objectives	Undertake detailed engineering designs and reaching financial closure for implementation either by PPP or BOT
Expected Results	Link between Ethiopia and Djibouti providing access to landlocked Ethiopia to port services in Djibouti
Length	800 Kilometers initially
Status	Ethiopia has already prepared a national railway masterplan
Estimated Cost	Approx US$ 50 Million
On-going related activities in the Member States	Both Kenya and Sudan have decided to develop a standard gauge railway network on the Lamu Corridor to link the three countries through Juba and Addis Ababa
Implementation Arrangements	Ethiopia Djibouti have worked together to prepare the master plan and will coordinate during implementation
Period of Implementation	N/A

BERBERA CORRIDOR

Project 1: Rehabilitation of the Berbera - Hargeisa Road

Title of Project	Rehabilitation of the Berbera – Hargeisa Road
Corridor	Berbera
Route	Berbera – Hargeisa Jijiga Addis Ababa
Objectives	Undertake feasibility and design study followed by implementation.
Expected Results	Regional link between Ethiopia and Somalia providing access to landlocked Ethiopia to port services in Berbera
Length	158 Kilometers
Status	Pre-feasibility study completed
Estimated Cost	US $ 7.5 Million for feasibility and design
On-going related activities in the Member States	To be added from Ethiopia Master Plan study to be provided by Ethiopia
Implementation Arrangements	Ethiopia and Somaliland Roads Authorities will liaise, prepare Terms of Reference and launch contract for services with funding to be defined
Period of Implementation	N/A

Project 2: Upgrade of Hargeisa - Togochaale Road

Title of Project	Upgrade of the Hargeisa Togochaale Road
Corridor	Berbera
Route	Berbera –Hargeisa Jijiga Addis Ababa
Objectives	Undertake feasibility and design study followed by implementation
Expected Results	Regional link between Ethiopia and Somalia to provide access to landlocked Ethiopia to port services in Berbera
Length	83 Kilometers
Status	PF Study undertaken
Estimated Cost	US$ 90 Million
On-going related activities in the Member States	Ethiopia has already completed segment from Jijiga to the border at Togochaale
Implementation Arrangements	Somaliland to liaise with Ethiopia during the design and construction
Period of Implementation	N/A

TUNDUMA – ADDIS ABBABA CORRIDOR

Project 1: Turbi - Moyale Road

Title of Project	Turbi – Moyale Road
Corridor	Tunduma / Addis Ababa / Lamu
Project Description	Construction of the segment Turbi-Moyale to upgrade it to bitumen standard
Route	Arusha Isiolo, Marsabit , Moyale, Addis Ababa
Objectives	Secure funding to undertake the construction of the road segment to complete the link between Kenya and Ethiopia through a paved road
Expected Results	Regional link between Ethiopia and Kenya to provide access for landlocked Ethiopia to port services in Mombasa
Length	160 Kilometers
Status	Feasibility and design studies completed. Works tender to be prepared
Estimated Cost	US$ 160 Million
On-going related activities in the Member States	• Part of Corridor 5 under the East African Road Network Project (Tunduma– Iringa – Dodoma – Arusha (TZ) – Namanga – Nairobi – Nyeri – Nanyuki – Isiolo – Marsabit – Moyale – Addis Ababa). The Isiolo Merile segment is under construction while funding has been allocated for the Merile River/Marsabit and Turbi by the European Commission and AfDB • On the Ethiopian side the Moyale Agremariam segment is being rehabilitated with funding fro AfDB • It is also part of the Cape to Cairo Highway, the missing links in the Horn of Africa region include only these two road sections and feasibility/design studies have been completed.
Implementation Arrangements	Kenya will award works contracts with funding to be defined
Period of Implementation	2010-2012

LAMU CORRIDOR

Project 1: Development of the Lamu Corridor

Title of Project	Feasibility Study on the Development of the Lamu Corridor which includes rail, road, oil pipeline and ports facilities
Corridor	Lamu
Route	Lamu -Juba /Moyale - Addis Ababa
Objectives	Undertake feasibility and design study followed by implementation
Expected Results	Link Southern Sudan and Ethiopia and by rail to the port of Lamu in Kenya
Length	1,400 Kilometers rail (Lamu/Juba)
Status	Feasibility study on the Kenya side ongoing
Estimated Cost	N/A
On-going related activities in the Member States	Ethiopia has already prepared a national railway masterplan taking into account links to the Lamu port
Implementation Arrangements	Feasibility studies and further works to be coordinated among the three countries (Kenya, Ethiopia and Sudan) through a Project Implementation Unit (PMU)
Period of Implementation	Studies and design to be completed by end of 2012

Project 1: Rehabilitation of the Eldoret Lodwar - Lokchoggio Road

Title of Project	Rehabilitation of the Eldoret Lodwar –Lokchoggio Road
Corridor	Northern Corridor
Route	Mombasa, Eldoret, Lokchoggio, Juba
Objectives	Complete the regional link between Kenya and Sudan providing access for Southern Sudan to Mombasa port for the region
Expected Results	Detailed engineering designs and tender documents for the rehabilitation of the segment Eldoret- Lodwar- Lokchoggio
Length	653 Kilometers
Status	Feasibility study for rehabilitation and designs on some segments already undertaken
Estimated Cost	N/A
On-going related activities in the Member States	Under Corridor 3 of the East African Road Network Project (Biharamulo-Mwanza-Musoma-Sirari-Kisumu-Kitale-Lodwar-Lokichokio) the sections will eventually link Sudan with the Northern Corridor and therefore Mombasa port
Implementation Arrangements	The implementation of this task is the responsibility of the Government of Kenya and regular consultations need to be made with Sudan
Period of Implementation	2010 - 2014

Project 2: Lokchoggio- Kapoeta - Juba Road

Title of Project	Lokichoggio– Kapoeta – Juba (Kenya-Sudan)
Corridor	Northern Corridor
Route	Mombasa, Eldoret, Lokchoggio, Juba
Objectives	Complete outstanding studies on Logkchoggio - Kapoeta – Juba
Expected Results	Engineering designs and tender document
Length	335 Kilometers
Status	Feasibility studies and engineering designs exist but need to be updated
Estimated Cost	US$ 30 Million
On-going related activities in the Member States	• Under Corridor 3 of the East African Road Network Project (Biharamulo-Mwanza-Musoma-Sirari-Kisumu-Kitale-Lodwar-Lokichokio) the sections will eventually link Sudan with the Northern Corridor and therefore Mombasa port. • In Sudan preliminary design works had been undertaken in the 1980's prior to commencement of national conflict
Implementation Arrangements	The implementation of this task is the responsibility of the Government of Sudan and regular consultations need to be made with Kenya
Period of Implementation	2010-2014

Project 3: Gulu – Atiak Numule- Juba Road

Title of Project	Upgrading of the Gulu – Atiak Numule- Juba Road (Uganda-Sudan)
Corridor	Northern Corridor
Route	Mombasa, Kampala Gulu Nimule Juba
Objectives	Upgrading of the Gulu-Atiak Nimule segment of the Road
Expected Results	Establishment of a paved regional link between Uganda and Sudan providing access to Mombasa port for the region
Length	104 Kilometers
Status	Feasibility studies and engineering designs already completed
Estimated Cost	US$ 110 million
On-going related activities in the Member States	• The Nimule –Juba segment is under construction through funding from the Government of the United States of America • Rehabilitation of the Gulu- Kampala road is also programmed with funding from the Government of Uganda
Implementation Arrangements	The implementation of this task is the responsibility of the Government of Uganda and regular consultations need to be made with Sudan
Period of Implementation	2010-2012

Project 4: Upgrading of Juba to Malakal Road - Sudan

Title of Project	Upgrading of Juba to Malakal Road (Sudan)
Corridor	Northern Corridor
Route	Mombasa, Juba, Malakal
Objectives	Undertake detailed engineering designs and upgrading of Juba- Malakal gravel road
Expected Results	Establishment of a paved regional link between Uganda and Sudan providing access to Mombasa port for the region
Length	600 Kilometers
Status	Feasibility studies and engineering designs for some segments already completed
Estimated Cost	US$ 639.8 million
On-going related activities in the Member States	The Nimule – Juba segment is under construction through funding from the Government of the United States of America
Implementation Arrangements	The implementation of this task is the responsibility of the Government of Sudan and regular consultations need to be made with Kenya and Uganda
Period of Implementation	2010 - 2015

Project 5: Upgrading of Kaya - Juba Sudan

Title of project	Upgrading of Kaya - Juba Road (Sudan)
Corridor	Northern Corridor
Route	Mombasa, Kampala Gulu, Kaya Juba
Objectives	Undertake detailed engineering designs and upgrading of Juba - Malakal gravel road
Length	228 Kilometers
Status	Feasibility studies and engineering designs for some segments already completed
Expected results	Establishment of a paved regional link between Uganda and Sudan providing access to Mombasa port for the region
Estimated Cost	N/A
On-going related activities in the Member States	The Nimule –Juba segment is under construction through funding from the Government of the United States of America
Implementation Arrangements	The implementation of this task is the responsibility of the Government of Sudan and regular consultations need to be made with Kenya and Uganda
Period of Implementation	2010 - 2015

Project 6: Reconstruction of the Kenya - Uganda Railway

Title of project	Reconstruction of the Kenya Uganda Railways to standard gauge
Corridor	Northern Corridor
Route	Mombasa, Kampala, Kasese / Pakwach
Objectives	Preparation of and feasibility studies detailed and engineering design followed by implementation of the link
Length	N/A
Status	Feasibility studies ongoing
Expected results	Establishment of a regional rail link between Kenya, Uganda and Sudan providing access to Mombasa port for the region
Estimated Cost	N/A
On-going related activities in the Member States	The five EAC member states and Djibouti, Ethiopia and Sudan have agreed to adopt the standard gauge for future rail developments
Implementation Arrangements	Kenya and Uganda authorities establish a joint committee to ensure a coordinated approach to implementation
Period of Implementation	N/A

Project 7: Gulu - Juba - Wau Railway link (Uganda -Sudan)

Title of project	Gulu - Juba - Wau Railway link (Uganda- Sudan)
Corridor	Northern Corridor
Route	Mombasa, Kampala Gulu Nimule Juba
Length	900 Kilometers
Objectives	Preparation of a management/concession study, followed by infrastructure development and related studies (Prefeasibility studies and design) followed by implementation of the link
Expected results	Establishment of a regional rail link between Kenya, Uganda and Sudan providing access to Mombasa port for the region
Status	No work has been undertaken yet
Estimated Cost	N/A
On-going related activities in the Member States	Kenya and Uganda preparing for the reconstruction of their rail networks on the standard gauge dimensions
Implementation Arrangements	Sudan and Uganda authorities establish a joint committee to ensure a coordinated approach to implementation
Period of Implementation	N/A

Project 1: Isaka – Kigali /Keza Gitega – Musongati Railway

Title of project	Construction Isaka – Kigali / Keza Gitega –Musongati Railway to standard gauge
Corridor	Central
Route	Isaka, Kigali - Musongsati
Length	735 Kilometers
Objectives	Undertake feasibility and design study followed by implementation.
Expected results	Link between Isaka, Bujumbura and Kigali providing access to Dar es Salaam port for landlocked Burundi and Rwanda
Status	Feasibility study completed
Estimated Cost	Total cost estimated at US$ 1,545 million and cost which US$ 22.05 million are for immediate priority for feasibility and design.
On-going related activities in the Member States	Studies also undertaken for the Dar es Salaam Isaka and the expansion of the Dar es Salaam port facilities
Implementation Arrangements	Jointly by the three member states namely: Tanzania, Rwanda and Burundi
Period of Implementation	2010 - 2015

Project 2 : Masaka – Kyotera Road

Title of project	Rehabilitation of the Masaka Kyotera Road
Corridor	Central
Route	Dar es Salaam, Isaka
Length	42 Kilometers
Objectives	Undertake rehabilitation works
Expected results	Link between Dar es Salaam and Kampala providing access to landlocked Uganda
Status	Pre-feasibility and feasibility studies and design already undertaken
Estimated Cost	34.34 EUR million of which 0.95 EUR million are of immediate priority for feasibility study and design
On-going related activities in the Member States	Construction of the remaining road segments to Dar es Salaam port already completed or ongoing
Implementation Arrangements	Public sector
Period of Implementation	2010 - 2012

Project 3 : Kigoma – Manyoni Road

Title of project	Upgrading of the existing Kigoma Manyoni road
Corridor	Central
Route	Dar es Salaam - Tabora - Kigoma
Length	639 Kilometers
Objectives	Undertake feasibility and design study followed by implementation
Expected results	Link between Tabora and Kigoma providing access to DRC and Burundi through Kigoma port
Status	Feasibility study and design already completed
Estimated Cost	Total cost of 670.95 EUR
On-going related activities in the Member States	Construction of the remaining road segments to Dar es Salaam port already completed or ongoing
Implementation Arrangements	Public sector
Period of Implementation	

Project 4 : Nzega - Tabora

Title of project	Upgrading of the exsting Nzega Tabora road
Corridor	Central
Route	Dar es Salaam - Tabora - Nzega
Length	116 Kilometers
Objectives	Construction of the road implementation.
Expected results	Link between Tabora and Nzega providing access to landlocked Burundi
Status	Studies and design already completed
Estimated Cost	Total cost US$122.67 million for construction
On-going related activities in the Member States	Construction of the remaining road segments to Dar es Salaam port already completed or ongoing
Implementation Arrangements	Public sector
Period of Implementation	2010 - 2014

Project 5: Development of Port Bell

Title of project	Development of Port Infrastructure at Port Bell
Corridor	Central / Northern
Route	Dar es Salaam - Mwanza - Port Bell
Length	N/A
Objectives	Port Infrastructure development
Expected results	Development of port infrastructure for port efficiency and improved port handling capacity
Status	Port Bell currently used for ferry services from Mwanza and Kisumu
Estimated Cost	US$ 0.70 studies and design
On-going related activities in the Member States	Construction of the remaining road segments to Dar es Salaam port already completed or ongoing
Implementation Arrangements	PPP
Period of Implementation	2010 - 2012

Project 6: Dar Es Salaam Port upgrading

Title of project	Dredging and widening of Dar es Salaam Port entrance channel and upgrading of container handling equipment
Corridor	Dar es Salaam
Route	Port Area
Length	N/A
Objectives	Upgrading of the Port handling capacity.
Expected results	Port rehabilitation and upgrading of capacity
Status	
Estimated Cost	US$ 0.80 Million required for pre-feasibility and feasibility studies
On-going related activities in the Member States	Tanzania Ports Authority has already prepared a port masterplan for Dar es Salaam port
Implementation Arrangements	Dredging of the entrance channel by public sector while upgrading of container handling equipment can be on PPP arrangements
Period of Implementation	2010 - 2014

Project 7: Construction of Kigamboni Bridge

Title of project	Construction of Kigamboni Bridge
Corridor	Central
Route	Dar es Salaam port
Length	
Objectives	Construction of the bridge
Expected results	Bridge constructed
Status	
Estimated Cost	US$ 1.0 million for pre - feasibility and feasibility studies
On-going related activities in the Member States	Tanzania Ports Authority has already prepared a port masterplan for Dar es Salaam port
Implementation Arrangements	Potential for PPP
Period of Implementation	2010 - 2014

ICT Projects Profiles

Profile of Selected ICT Projects

Project 1: Installation of fibre-optic cable from Kinshasa (DRC) - Kamina (DRC) - Kigali (Rwanda) - Bujumbura (Burundi) and from Kamina (DRC) - Lubumbashi (DRC) - Ndola (Zambia) cross borders route

Title of Project	Installation of fibre-optic cable from Kinshasa (DRC) - Kamina (DRC) - Kigali (Rwanda) - Bujumbura (Burundi) and from Kamina (DRC) - Lubumbashi (DRC) - Ndola (Zambia) cross borders route
Participating Countries	Burundi, D R Congo, Rwanda and Zambia
Objectives	• To reduce average ICT services cost, It will also save transit charges which normally benefits western and American ICT operators • To stimulate investment for ICT sector and other economic sectors and to build knowledge and information society and contribute substantially to regional integration
Project Description	It is a new optical fibre cable over 3360 km to link Zambia and Zimbabwe. It is intended to provide ICT services namely voice, data and video
Expected Results	The expected results are to provide reliable, affordable, sustainable and cost effective ICT services, create employment, contribute to poverty reduction through building information society, and facilitate e-commerce, e-transaction and other e-services. It will reduce the cost of doing business within the region
Estimated Cost	The total estimated cost is US$ 53,760,000
Ongoing related activities in COMESA Region	Many optical cross borders links will be operational in the near future like : • Kenya-Uganda • Kenya-Tanzania
Action Required or Implementation arrangement	The project shall be developed by telecommunications operators (incumbent). Establish a committee from the operators to prepare and sign the required MOU and regulatory instruments
Period of implementation	It shall take three years to be implemented
Status	Planning
Financing Sought	Yet to be sought
Remarks	A grant from the African Development Bank, Development Bank of Southern Africa or World Bank may mobilize to start the feasibility study. The grant enabled the two Governments engage Transaction Advisor to provide financial, technical, and regulatory advisory services on the project. The project can also be considered in the North-South Corridor

Project 2: Installation of fibre-optic cable from Khartoum - Asmara - Djibouti cross border route

Title of Project	Installation of fibre-optic cable from Khartoum - Asmara - Djibouti cross border route
Participating Countries	Djibouti, Eritrea and Khartoum
Objectives	• To reduce average ICT services cost, It will also save transit charges which normally benefits western and American ICT operators • To stimulate investment for ICT sector and other economic sectors and to build knowledge and information society and contribute substantially to regional integration
Project Description	It is a new optical fibre cable over 1492 km to link Djibouti, Eritrea and Khartoum. It is intended to provide ICT services namely voice, data and video
Expected Results	The expected results are to provide reliable, affordable, sustainable and cost effective ICT services, create employment, contribute to poverty reduction through building information society, and facilitate e-commerce, e-transaction and other e-services. It will reduce the cost of doing business within the region
Estimated Cost	The total estimated cost is US$ 23,872,000
Ongoing related activities in COMESA Region	Many optical cross borders links will be operational in the near future like : • Kenya-Uganda • Kenya-Tanzania
Action Required or Implementation arrangement	The project shall be developed by telecommunications operators (incumbent). The governments of the three countries have to establish a committee to prepare and sign the required MOU and regulatory instruments
Period of implementation	It shall take three years to be implemented
Status	Planning
Financing Sought	Yet to be sought
Remarks	A grant from the African Development Bank, Development Bank of Southern Africa or World Bank may mobilize to start the feasibility study. The grant enabled the two Governments engage Transaction Advisor to provide financial, technical, and regulatory advisory services on the project

Project 3: Installation of fibre-optic cable from Lusaka-Chipata (Zambia) to Lilongwe-Mchinji (Malawi) cross border route

Title of Project	Installation of fibre-optic cable from Lusaka-Chipata (Zambia) to Lilongwe-Mchinji (Malawi) cross border route
Participating Countries	Malawi and Zambia
Objectives	• To reduce average ICT services cost, It will also save transit charges which normally benefits western and American ICT operators • To stimulate investment for ICT sector and other economic sectors and to build knowledge and information society and contribute substantially to regional integration
Project Description	It is a new optical fibre cable over 875 km to link Zambia and Malawi. It is intended to provide ICT services namely voice, data and video
Expected Results	The expected results are to provide reliable, affordable, sustainable and cost effective ICT services, create employment, contribute to poverty reduction through building information society, and facilitate e-commerce, e-transaction and other e-services. It will reduce the cost of doing business within the region
Estimated Cost	The total estimated cost is US$ 14,000,000
Ongoing related activities in COMESA Region	Many optical cross borders links will be operational in the near future like : • Kenya-Uganda • Kenya-Tanzania
Action Required or Implementation arrangement	The project shall be developed by telecommunications operators (incumbent). Establish a committee from the two operators to prepare and sign the required MOU and regulatory instruments
Period of implementation	It shall take two years to be implemented
Status	Planning
Financing Sought	Yet to be sought
Remarks	A grant from the African Development Bank, Development Bank of Southern Africa or World Bank may mobilize to start the feasibility study. The grant enabled the two Governments engage Transaction Advisor to provide financial, technical, and regulatory advisory services on the project. The project can also be considered in the North-South Corridor

Project 4: Installation of fibre-optic cable from Djibouti - Addis Ababa – Nairobi cross border route

Title of Project	Installation of fibre-optic cable from Djibouti - Addis Ababa – Nairobi cross border route
Participating Countries	Djibouti, Ethiopia and Kenya
Objectives	• To reduce average ICT services cost, It will also save transit charges which normally benefits western and American ICT operators • To stimulate investment for ICT sector and other economic sectors and to build knowledge and information society and contribute substantially to regional integration
Project Description	It is an optical fibre cable over 1700 km to link Djibouti, Ethiopia and Kenya. Djibouti and Ethiopia already started constructing their parts. Kenya is at planning stage
Expected Results	The expected results are to provide reliable, affordable, sustainable and cost effective ICT services, create employment, contribute to poverty reduction through building information society, and facilitate e-commerce, e-transaction and other e-services. It will reduce the cost of doing business within the region
Estimated Cost	The total estimated cost is US$ 27, 200,000
Ongoing related activities in COMESA Region	Many optical cross borders links will be operational in the near future like : • Kenya-Uganda • Kenya-Tanzania
Action Required or Implementation arrangement	The project shall be developed by telecommunications operators (incumbent). The governments of the three countries have to establish a committee to prepare and sign the required MOU and regulatory instruments
Period of implementation	It shall take three years to be implemented
Status	Planning
Financing Sought	Yet to be sought
Remarks	A grant from the African Development Bank, Development Bank of Southern Africa or World Bank may mobilize to start the feasibility study. The grant enabled the two Governments engage Transaction Advisor to provide financial, technical, and regulatory advisory services on the project. The project can also be considered in the Djibouti Corridor

Project 5: COMTEL

Title of Project	COMTEL
Participating Countries	All COMESA Member States
Objectives	• To reduce average ICT services cost, It will also save transit charges which normally benefits western and American ICT operators • To stimulate investment for ICT sector and other economic sectors and to build knowledge and information society and contribute substantially to regional integration
Project Description	It is intended to construct traffic clearing houses and regional Internet Exchange points as well as constructing virtual regional network with operation and management centres
Expected Results	The expected results are to provide reliable, affordable, sustainable and cost effective ICT services, create employment, contribute to poverty reduction through building information society, and facilitate e-commerce, e-transaction and other e-services. It will reduce the cost of doing business within the region
Estimated Cost	The total estimated cost is US$ 10,000,000
Ongoing related activities in COMESA Region	• Member States such as Egypt-Sudan-Ethiopia-Djibouti and Kenya-Uganda have optical fibre cross borders connectivity which can be used by COMTEL for the virtual network • Kenya has Internet exchange point for the country as well as Zambia
Action Required or Implementation arrangement	The project shall be implmented by telecommunications operators (incumbent)
Period of implementation	It shall take three years to be implemented
Status	Planning
Financing Sought	Yet to be sought
Remarks	The project has feasibility study which has been conducted by Price WaterHouse and Cooper (PwC). A grant from the African Development Bank, Development Bank of Southern Africa or World Bank may mobilize to start the implementation. The grant enabled the two Governments engage Transaction Advisor to provide financial, technical, and regulatory advisory services on the project. The project can also be considered in the North-South Corridor

Project 6: Installation of fibre-optic cable from Dar Es Salaam to Lusaka cross border route

Title of Project	Installation of fibre-optic cable from Dar Es Salaam to Lusaka cross border route
Participating Countries	Tanzania and Zambia
Objectives	• To reduce average ICT services cost, It will also save transit charges which normally benefits western and American ICT operators • To stimulate investment for ICT sector and other economic sectors and to build knowledge and information society and contribute substantially to regional integration
Project Description	It is a new optical fibre cable over 1735 km to link Tanzania and Zambia. It is intended to provide ICT services namely voice, data and video
Expected Results	The expected results are to provide reliable, affordable, sustainable and cost effective ICT services, create employment, contribute to poverty reduction through building information society, and facilitate e-commerce, e-transaction and other e-services. It will reduce the cost of doing business within the region
Estimated Cost	The total estimated cost is US$ 27,760,000
Ongoing related activities in COMESA Region	Many optical cross borders links will be operational in the near future like : • Kenya-Uganda • Kenya-Tanzania
Action Required or Implementation arrangement	The project shall be developed by telecommunications operators (incumbent). The governments of the three countries have to establish a committee to prepare and sign the required MOU and regulatory instruments
Period of implementation	It shall take three years to be implemented
Status	Planning
Financing Sought	Yet to be sought
Remarks	A grant from the African Development Bank, Development Bank of Southern Africa or World Bank may mobilize to start the feasibility study. The grant enabled the two Governments engage Transaction Advisor to provide financial, technical, and regulatory advisory services on the project

Project 7: Installation of fibre-optic cable from Mbeya (Tanzania) - Lilongwe (Malawi) cross border route

Title of Project	Installation of fibre-optic cable from Mbeya (Tanzania) - Lilongwe (Malawi) cross border route
Participating Countries	Malawi - Tanzania
Objectives	To reduce average ICT services cost It will also save transit charges which normally benefits western and American ICT operators To stimulate investment for ICT sector and other economic sectors and to build knowledge and information society and contribute substantially to regional integration
Project Description	It is part of a new optical fibre cable covering 1,395 km intended to link Malawi to Zambia and Zimbabwe. It is intended to provide ICT services namely voice, data and video
Expected Results	The expected results are to provide reliable, affordable, sustainable and cost effective ICT services, create employment, contribute to poverty reduction through building information society, and facilitate e-commerce, e-transaction and other e-services. It will reduce the cost of doing business within the region
Estimated Cost	The total estimated cost is US$ 22,320,000
Ongoing related activities in COMESA Region	Many optical cross borders links will be operational in the near future like e.g. • Kenya-Uganda • Kenya-Tanzania
Action Required or Implementation arrangement	The project shall be developed by telecommunications operators (incumbent). Establish a committee from the two operators to prepare and sign the required MOU and regulatory instruments
Period of implementation	Project will take two years to be implemented
Status	Planning
Financing Sought	Funds to be sourced
Remarks	A grant from the African Development Bank, Development Bank of Southern Africa or World Bank may be mobilized to start the feasibility study. The grant enabled the two Governments engage Transaction Advisor to provide financial, technical, and regulatory advisory services on the project. The project can also be considered under the North-South Corridor programming

Energy Projects Profiles

Profile of Selected Energy Projects

Project 1: Zambia/Tanzania/Kenya power grid interconnection

Title of Project	Zambia/Tanzania/Kenya power grid interconnection
Participating Countries	Kenya, Tanzania and Zambia
Objectives	• To reduce average energy production costs, improve in the utilization of hydroelectric and thermal energy and more economic daily, weekly and seasonally load dispatch by optimizing differences in loading patterns • To reduce investment due to improved energy utilization, reduce standby reserves and improve economies of scale • More flexible maintenance scheduling and emergency support
Project Description	It is a new double circuit 400 Mega Watt HVAC power transmission lines over 1,600 km to link Zambia, Tanzania and Kenya. It is primary intended to supply power from Zambia to Tanzania and Kenya. It is also intended to link the Southern Africa Power Pool (SAPP) and the Eastern Africa Power Pool (EAPP0, thus improving regional security of supply
Expected Results	Reliable electricity services as well as reduced average energy production costs, improved utilization of hydroelectric and thermal energy within the region. Reduced investment cost due to improved energy utilization and improved economies of scale
Estimated Cost	The total estimated cost is US$ 776 million comprising: • US$ 380 million for the section in Zambia • US$ 309 million for the section in Tanzania • US$ 87 million for the section in Kenya
Ongoing related activities in COMESA Region	Many electric power interconnector will be operational between 2010, 2012 and 2013 like: • Uganda Rwanda commissioning 2013 • Rwanda-Burundi commissioning 2013 • Burundi-DRC commissioning 2013 • Sudan Ethiopia commissioning end 2010 • Ethiopia Kenya commissioning 2012/13 These interconnectors will complement Zambia/Tanzania/Kenya power grid interconnection in linking the Southern Africa Power Pool (SAPP) with the Eastern Africa Power Pool (EAPP)

Action Required or Implementation arrangement	The project shall be developed by public sector in the three countries (Zambia/ Tanzania/Kenya). This is partly to facilitate mobilization of concessionary funding and also to minimize the impact of private sector driven return requirements on the project cost and eventual tariffs to customers. A Project Management Unit (PMU) owned jointly by Zambia/Tanzania/Kenya Governments will be set up to manage the project during implementation and thereafter handover to a legal entity jointly owned by Zambia/Tanzania/Kenya Governments to coordinate the Project during commercial operation. The COMESA Secretariat is facilitating resource mobilization for the project
Period of implementation	It shall take three years
Status	• Transaction advisor has been engaged to provide financial, technical, and legal advisory services. Project Information Memorandum (PIM) has been approved by the 3 countries. To effectively manage the project Government of Tanzania, Kenya and Zambia have agreed to form a Project Management Unit (PMU) • The technical, financial, economic and environmental studies have been completed
Financing Sought	Yet to be sought
Remarks	Following the completion of the feasibility study, the African Development Bank and Development Bank of Southern Africa provided a NEPAD- Infrastructure Project Preparation Facility (IPPF) grant to support preparatory activities. The grant enabled the three Governments engage Transaction Advisor to provide financial, technical, and legal advisory services on he project

Project 2: Ethiopia/Kenya power Interconnection

Title of Project	Ethiopia/Kenya power Interconnection
Participating Countries	Kenya and Ethiopia
Objectives	• To reduce average energy production costs, improve in the utilization of hydroelectric and thermal energy and more economic daily, weekly and seasonally load dispatch by optimizing differences in loading patterns • To reduce investment due to improved energy utilization, reduce standby reserves and improve economies of scale • More flexible maintenance scheduling and emergency support
Project Description	The total length of the transmission line is about 1200 km depending on the landing point on the Kenya side. It will be 500KV direct current (DC) line. It will be constructed from Wolita Sodo in Ethiopia to Longonot in Kenya. The commissioning date for this link is 2012/13 according to the feasibility study completed in 2008.That would constitute the first phase of the project with transfer capacity of 1000MW.The second phase which upgrades the transfer capacity to 2000 MW is sought to come online by 2020
Expected Results	Reliable electricity services as well as reduced average energy production costs, improved utilization of hydroelectric and thermal energy within the region. Reduced investment cost due to improved energy utilization and improved economies of scale
Estimated Cost	The total estimated cost of the project is US$ 1,531 million comprising: • US$ 957 million for phase I • US$ 574 million for phase II
Ongoing related activities in COMESA Region	Many electric power interconnector will be operational between 2010, 2012 and 2013 like: • Uganda Rwanda commissioning 2013 • Rwanda-Burundi commissioning 2013 • Burundi-DRC commissioning 2013 • Sudan Ethiopia commissioning end 2010 These interconnectors will complement Ethiopia/Kenya power grid interconnection in linking the Southern Africa Power Pool (SAPP) with the Eastern Africa Power Pool (EAPP)

Action Required or Implementation arrangement	The project shall be developed by the public sector in the two countries (Ethiopia/Kenya). It is envisaged that a Project Management Unit (PMU) owned jointly by Ethiopia/Kenya Governments will be set up to manage the project during implementation and thereafter handover to a legal entity jointly owned by Ethiopia/Kenya Governments to coordinate the Project during commercial operation. The COMESA Secretariat is facilitating resource mobilization for the project
Period of implementation	Three years. Phase I to be implemented between 2010 to 2013
Status	Detailed feasibility study has been completed. Design and Tender Document preparation to be completed in 6months from now
Financing Sought	Yet to be sought
Remarks	The cost estimation of the Overhead lines plays a paramount role in the overall Project price, so it was performed based on optimized design figures

Project 3: A liquefied natural gas (LNG) receiving terminal at port of Dorahleh, Djibouti

Title of Project	A liquefied natural gas (LNG) receiving terminal at port of Dorahleh, Djibouti
Participating Countries	Djibouti (Lead Country)
Objectives	• The overall objective of the feasibility study is to enable the government of Djibouti to make informed decisions on the use of natural gas as an alternative source of energy with the aim of lowering prices and to diversify the sources of energy for the purpose of assuring a continuous and stable supply of energy in the local and regional market. • The specific objective of the feasibility study is to undertake a detailed project which includes commercial, financial, technical, environmental, legal and institutional aspects of the project and the preparation of an Investor Information Memorandum for presentation to potential investors. • The objective of the natural gas receiving terminal at the port of Doraleh is to enable Djibouti to secure its energy needs and reduce the cost of doing business through addressing the supply side constraint
Project Description	• The natural gas receiving terminal at the port of Doraleh will enable Djibouti to secure its energy needs and reduce the cost of doing business through addressing the supply side constraint. It is envisaged that this receiving gas terminal would facilitate the provision of the fast expanding energy needs of the country. Currently, the energy needs of the country are mainly electricity for both domestic and industrial purposes and over the last five years these needs have grown remarkably due to increase in the economic activities of the country and improvement in the standard of livings of the population • It is envisaged that this project will also contribute to secure the growing energy needs of countries beyond Djibouti, namely some COMESA member States
Expected Results	• Enhancement of the competitiveness of Djibouti in intera-market and extra-market and to ensure that Djibouti can position itself as a Regional Hub. • Improvement in energy supply in Djibouti and the COMESA region in general as well reduced cost of energy
Estimated Cost	Feasibility studies estimated to cost USD 1 Million plus physical implementation cost which yet to be determined by the feasibility study

Ongoing related activities in COMESA Region	Not available
Action Required or Implementation arrangement	• It is expected that the Government of Djibouti to form a data (information) room which should include all available information from different government bodies in order to fast track and facilitate the feasibility study and provide access for the bidders to this room. • It is also envisaged that this project would be given a regional dimension through attracting other COMESA neighbouring countries and that the Government of Djibouti should involve them right from the beginning
Period of implementation	One year
Status	• Terms of Reference (TORs) for a feasibility study for the construction of a liquefied natural gas (LNG) receiving terminal at the port of Doraleh, Djibouti were prepared. • A detailed feasibility study to be undertaken which should include the following: ◆ Inception Report ◆ Local and Regional Demand / Forecast Report ◆ Detailed feasibility study report on the different alternative sources of energy ◆ Business Plan for the implementation of the liquefied natural gas receiving terminal ◆ Technical feasibility and required terminal capacity report ◆ Commercial and Financial Models ◆ Regulatory Framework ◆ Gas distribution network and marketing strategy ◆ Investor Information Memorandum ◆ Environmental Impact Assessment (EIA) report ◆ Social Impact Analysis
Financing Sought	Yet to be sought
Remarks	The cost indicated above is an indicative one, however, the cost estimates for the feasibility study shall be determined through the tendering process

Project 4: Inga 3, 2500 Mega Watts and Grand Inga, 39,000 Mega Watts

Title of Project	Inga 3, 2500 Mega Watts and Grand Inga, 39,000 Mega Watts
Participating Countries	COMESA countries and beyond
Objectives	Objectives of the project include the following: • To generate electrical power to improve economical and social development of the comesa region and beyond • To provide relatively cheap electrical power input for the region • To contribute to energy security of the region • To increase the access to electric power • To contribute to wealth creation and poverty reduction in the region
Project Description	• The projects are designed to tap the natural renewable hydroelectric energy from the Congo river networks located on the west coast of Southern Africa. SNEL, which is electricity utility of the Democratic Republic of Congo, had submitted Inga 3 power station site to generate 3500 mega watts for WESTCOR development. SNEL also owns and operates the two existing power stations, Inga 1 and Inga 2 • Western Power Corridor (WESTCOR) was formed in February 2003 by the national utility companies of South Africa's Eskom, the DRC's SNEL, Angola's Empresa Nacional de Electricidade, Namibia's NamPower and Botswana Power. • In a later development, the DRC rejected the regional development programme offered by WESTCOR and planned to develop Inga 3 on its own. In this regard, BHP Billiton was selected through a bidding process in 2009 to develop the Inga 3 plant with a generating capacity of 2,500MW. BHP Billiton will now substitute WESTCOR in carrying out the project • The power produced by Inga 3 will be supplied to BHP's proposed aluminum smelter which will require about 2000 mega watts. The rest of Inga 3 which is 500 mega watts will be supplied to the southern African power grid. Moreover, the size and constant flow rate of Congo River provides a huge hydroelectric potential particularly at the Inga site, which is assessed at 44000 mega watts • Four actions are ongoing for Inga side development. They are rehabilitation of Inga 1 and Inga 2, feasibility studies of Inga 3 and physical implementation of Inga 3, Inga hydro feasibility studies and regional interconnection feasibility
Expected Results	Generating the huge capacity of 2,500 mega watts in Inga 3 and about 39,000 mega watts for Grand Inga would significantly Increase the current install capacity of the COMESA region of approximately 38000 mega watts and would increase the capacity of the region to meet its growing power demands and with potential to export beyond the region

Profile of Selected Energy Projects

Estimated Cost	• The Inga 3 project is estimated to cost around US$ 3.5 billion • Feasibility studies for the Inga side which include Grand Inga estimated to around US$ 15 million project • The indicative cost of Grand Inga is US$ 55 billion
Ongoing related activities in COMESA Region	Some hydro projects in some COMESA countries like Ethiopia
Action Required or Implementation arrangement	It is envisaged that BHP intends to develop Inga 3 power project in collaboration with the DRC, through a public-private partnership
Status	• It is envisaged that the initial concept studies, related to the smelter and the Inga 3 power plant have been completed. BHP plans to carry out the feasibility study of the power plant from mid-2011 to mid-2013. The construction will start in 2014 • Inga hydro site feasibility studies are yet to be completed
Financing Sought	Yet to be sought
Remarks	The cost indicated above for Grand Inga is an indicative one, However, the estimated cost shall be determined upon the completion of the feasibility studies

Project 5: Geothermal Exploration in Kenya

Title of Project	Geothermal Exploration in Kenya
Participating Countries	Kenya and COMESA countries
Objectives	Objectives of the project include the following: • To generate electrical power from renewable sources to improve economical and social development of Kenya and the region • To contribute to energy security of Kenya and the region • To increase the access to electric power • To contribute to wealth creation and poverty reduction in Kenya and the region • To diversify the energy balance using more renewable sources of energy
Project Description	• Kenya has embarked on a generation expansion plan to install additional 1500 mega watts and 4000 mega watts of electric power from geothermal sources by the year 2018 and 2030 respectively in order to adequately utilize its huge geothermal potential which exceeds 7,000 mega watts. This requires ongoing appraisal drilling and mobilization of funds for physical implementation for product drilling and power plant development • In this regards, the planned geothermal development plans require more than 1000 wells to be drilled and about 30 large power stations of about 140 mega watts each to be built
Expected Results	The generating capacity of 1,500 to 4,000 mega watts would increase the current install capacity of Kenya of 1215 mega watts and would increase the capacity of the country to meet its growing power demands and hence to offset import power bills and to also to generate excess power for export to COMESA countries
Estimated Cost	It is envisaged that development of 4,000 mega watts of geothermal steam would require drilling about 1,000 deep wells at a total cost of about US$ 5 billion. 30 Power stations would be required at a total cost of about US$ 8 billion. Moreover, steam gathering systems at about US$ 1 billion are required, in addition to power transmission lines at about US$ 2 billion. Total cost is, therefore, estimated to be over US$16 billion
Ongoing related activities in COMESA Region	Ethiopia has got some geothermal activities
Action Required or Implementation arrangement	Undertaking can only be realised through a joint effort by both the public and private sectors (PPP)
Period of implementation	By the year 2018 and 2030

Profile of Selected Energy Projects

Status	Surface studies of most of the prospects of geothermal have been undertaken and an expansion plan to install additional mega watts electric power form geothermal has been developed
Financing Sought	Financing to be sought
Remarks	Geothermal is least cost source of energy which is also renewable

Project 6: Eritrea / Sudan Power System Interconnection

Title of Project	Eritrea / Sudan power system interconnection
Participating Countries	Eritrea and Sudan
Objectives	The objectives of the project include provision of transmission capacity to cater for grid interconnection between Sudan and Eritrea, provision of transmission infrastructure to cater for future grid interconnections to the Nile downstream countries, promotion of regional cooperation through sharing of power generation resources and facilitation of rural electrification and improve the standard of living for the populace in project areas
Project Description	The project consists in construction of a 340 km 220 kV transmission line from Sudan to Eritrea and related substations. The interconnection will link Kessela with towns of Tesseney, Barentu, Agordat, Keren and when feasible, to Asmara.Depending on the potential of excess power which Sudan can share, the transmission line could be 220 kV or higher and build according to standards acceptable to both countries
Expected Results	Reliable electricity services as well as reduced average energy production costs, improved utilization of hydroelectric and thermal energy within the region. Reduced investment cost due to improved energy utilization and improved economies of scale
Estimated Cost	To be determined by the feasibility study. The feasibility study will cost around US$ one million
Ongoing related activities in COMESA Region	Many electric power interconnector will be operational between 2010, 2012 and 2013 like: • Uganda - Rwanda commissioning 2013 • Rwanda - Burundi commissioning 2013 • Burundi - DRC commissioning 2013 • Sudan - Ethiopia commissioning end 2010 • Ethiopia - Kenya commissioning 2012/13
Action Required or Implementation arrangement	The Governments of Eritrea and Sudan to set up a Steering Committee (SC) and to establish project management teams at the two countries with qualifications and experience and appointment of a joint Project Coordinator
Period of implementation	It shall take 3 years including the feasibility studies
Status	The feasibility study is yet to be completed which will be financed by the AfDB

Project 7: Uganda / Sudan Power System Interconnection

Title of Project	Uganda / Sudan Power System Interconnection
Participating Countries	Uganda and Sudan
Objectives	The main objectives of the project include provision of transmission capacity of 200 MW to cater for grid interconnection between Uganda and Sudan, provision of transmission infrastructure to cater for future grid interconnections to the Nile downstream countries, promotion of regional cooperation through sharing of power generation resources and facilitation of rural electrification and improve the standard of living for the populace in project area
Project Description	The project is located in the Northern Region of Uganda and southern Region of Sudan traversing a total distance of 360 km from the proposed new Karuma Hydro Power Plant through Nimule to Juba. The project consists in construction of 220kV double circuit transmission line from Karuma HPP via Nimule (Uganda) to Juba (Southern Sudan) and related substations
Expected Results	Reliable electricity services as well as reduced average energy production costs, improved utilization of hydroelectric and thermal energy within the region. Reduced investment cost due to improved energy utilization and improved economies of scale
Estimated Cost	To be determined by the feasibility study. The feasibility study will cost around US$ one million
Ongoing related activities in COMESA Region	Many electric power interconnector will be operational between 2010, 2012 and 2013 like: • Uganda - Rwanda commissioning 2013 • Rwanda - Burundi commissioning 2013 • Burundi - DRC commissioning 2013 • Sudan - Ethiopia commissioning end 2010 • Ethiopia - Kenya commissioning 2012/13
action required or implementation arrangement	The Governments of Uganda and Sudan to set up a Steering Committee (SC) and to establish project management teams at the two countries with qualifications and experience and appointment of a joint Project Coordinator
Period of implementation	It shall take 3 years including the feasibility studies
Status	The feasibility study is yet to be completed which will be financed by the AfDB