

PIDA PAP PROJECT SHEET	
SECTOR : ENERGY	
Name of Project	<i>GREAT MILLENNIUM RENAISSANCE DAM</i>
Project Number	PIDA / ENERGY / EASTERN / N° 1
Sector	Generation
Type	Implementation and operation
Parties Involved:	
REC Involved	COMESA/IGAD
Beneficiary countries	Ethiopia, Nile Basin Countries
Inter Governmental Organizations:	AUC/NPCA
Technical Organizations	Ethiopian Electric Company / Nile Basin, EAPP
Background	
Objectives	Supply domestic market and export electricity on EAPP market
Expected Results	Develop a 5250MW plant
Project Challenges	<ul style="list-style-type: none"> • Operation of the plant integrated in EEPCo. The new plant would increase the capacity of EEPCo six-fold (750 MW at present). EEPCo is unlikely to develop on time capacity to operate and manage commercially and financially a plant of the size of the Great Millennium dam. As a public sector entity, it will not have the capacity to manage the project debt service. • Completing mobilization of financing. Some US\$ 3 billion are still needed to complete the project financing plan. As the selection of contractors has not followed traditional IFI procedure and the issuance of local bonds for such a large amount will be a challenge and require creative financial engineering. • Coordinate project implementation with the development of a complementary transmission and distribution system capable of handling the additional production of the plant • Consensus building with neighboring countries, particularly Sudan and Egypt. The project is located on an international waterway, so its development needs to be acceptable to riparian countries. Although construction has started, terms of agreement with riparian countries need to be found.
Milestones	
Next Stage	<ul style="list-style-type: none"> • Explore with GOE the establishment of a SPV, possibly state owned or under mixed ownership to ring fence the project and ensure its commercial operation based on long term contracts, to isolate the finance of the project from EEC's and GOE's finances, to ensure high quality operation and maintenance of the plant (preventing occurrence of an Inga 1&2 situation); and to allow raising additional financing from donors, or from the market. • Isolate in the SPV the project components which are not already financed and structure financing for these components only with arrangements for long term leasing of the assets financed under Italian and Chinese supplier credits. • Assess the transmission and distribution needs to absorb the electricity from the plant and finalize under long term contractual arrangements development of, and access to, considerably upgraded transmission system. • Mobilize convening power of AUC and EAPP to act as facilitators between Ethiopia and riparian countries to negotiate the terms of a MOU with riparian countries concerning the plant as well as other future development affecting the Nile Basin.
Funding Requirements	
Implementation in Million USD	8 000

PIDA PAP PROJECT SHEET	
SECTOR : ENERGY	
Name of Project	<i>NORTH SOUTH POWER TRANSMISSION CORRIDOR</i>
Project Number	PIDA / ENERGY / SOUTHERN / N° 2
Sector	Transmission
Type	Feasibility/needs assessment
Parties Involved:	
REC Involved	COMESA/EAC/SADC/IGAD
Beneficiary countries	Kenya, Ethiopia, Tanzania, Malawi, Mozambique, Zambia, Zimbabwe, South Africa
Inter Governmental Organizations:	AUC/NPCA
Technical Organizations	SAPP
Background	
Objectives	Transport the energy generated by the GREAT MILLENNIUM RENAISSANCE DAM
Expected Results	8,000 km line from Egypt through Sudan, South Sudan, Ethiopia , Kenya, Malawi, Mozambique, Zambia, Zimbabwe to South Africa
Project Challenges	<ul style="list-style-type: none"> • The project involves more than six countries which need to cooperate and ensure that their section of the project is implemented on time. • There is no regional institution which will ensure that the entire line is technically available and properly maintained at any point in time (reliability of transmission service). • The project involves two Power Pools (EAPP and SAPP) which are presently disconnected
Milestones	
Next Stage	<ul style="list-style-type: none"> • EAPP and SAPP need to convene to establish a joint project development entity. • They need to decide on the development and operation of the line by an ad hoc multi-national project company with suitable safeguards to ensure its commercial operation to protect the project from the risk of under-performance of the utility of any of the countries crossed by the line. • Establish first a SPV between EAPP and SAPP, to be open to all participating countries in a second stage of development (preferably to seeking to establish directly an entity involving more than six countries). • Establish a working group between SAPP and EAPP to harmonize standards in anticipation of interconnection.
Funding Requirements	
Implementation in Million USD	6 000

PIDA PAP PROJECT SHEET SECTOR : ENERGY	
Name of Project	BATOKA GORGE
Project Number	PIDA / ENERGY / EASTERN/ N°11
Sector	Generation
Type	Program/project structuring and promotion to obtain financing
Parties Involved:	
REC Involved	COMESA/EAC
Beneficiary countries	Zambia/Zimbabwe Zambezi basin
Inter Governmental Organizations:	AUC/NPCA
Technical Organizations	EAPP/ Zambesi River Authority
Background	
Objectives	To increase generation capacity and reduce reliance on electricity imports. Once completed the Batoka Hydro scheme will leave Zimbabwe a net exporter of power in the region. The project will also improve the generation mix which is currently skewed in favour of fossil fired plants.
Expected Results	The project design involves construction of a 181 meter gravity dam and the installation of 800 MW (4 x 200 MW units) for both Zimbabwe and Zambia. Transmission lines, access roads and other facilities are also included in the project design
Project Challenges	<ul style="list-style-type: none"> • The Zambesi River Authority (ZRA), established in 1987 by Zambia and Zimbabwe, has a specific mandate to operate the downstream Kariba Dam and a broader one to manage the water resources of the Zambesi along the joint border. The national electricity enterprises of the two states own and operate their respective generating facilities at Kariba. • It is unclear whether ZRA has the mandate to raise financing or implement capital projects. ZRA has led the investigations into the Batoka Gorge Project. However a special purpose vehicle to raise financing and implement the project has not yet been created. • The creditworthiness of the main participating utilities, ZESA and ZESCO, is poor. Mitigation steps will need to address both these concerns through accelerating sector reforms in both countries to ensure creditworthiness of the utilities. • At a 2005 Investment Conference of the Southern African Power Pool, it was reported that there was interest from investors and financiers including AfDB, DBSA, Standard Bank and the Chinese Government. The fact that financial closure has not taken place suggests that project preparation is incomplete specifically in respect of a tariffs and financing report. • The Zimbabwe government has been experiencing severe financial distress and is listed as inactive at IDA. It is unlikely to be favorably viewed as a guarantor of any of the financing.
Milestones	
Next Stage	<ul style="list-style-type: none"> • The project lends itself to a PPP provided satisfactory off-take agreements can be concluded with the electricity enterprises in the two countries. • The project preparation should be completed, including the updating of the cost estimate, before further approaches to financiers are made. • An SPV for the project should be established or ZRA should be mandated to fulfill this role. • Heads of agreement on the off-take agreements should be drawn up as an incentive for financiers. • Deeper commitment and decisiveness by the two governments are needed to provide credibility to the project.
Funding Requirements	
Implementation in Million USD	2800

PIDA PAP PROJECT SHEET SECTOR : ENERGY	
Name of Project	RUZIZI III
Project Number	PIDA / ENERGY / EASTERN/ N°12
Sector	Generation
Type	Program/project structuring and promotion to obtain financing
Parties Involved:	
REC Involved	COMESA/EAC
Beneficiary countries	Rwanda/DRC
Inter Governmental Organizations:	AUC/NPCA
Technical Organizations	ECGPL
Background	
Objectives	Share power between Rwanda, Burundi and DRC promoted by CEPGL and develop local renewable energy as well as regulation of water basin
Expected Results	Hydroelectric plant with a capacity of 145 MW
Project Challenges	<ul style="list-style-type: none"> The project studies are promoted by "Électricité des Grands Lacs" (EGL), a regional organisation responsible for the elaboration of the strategy of energy development in the Great Lakes region. Its resources are not covering the identified needs for the project. The studies were launched to review the interconnection of South Kivu and North Kivu and their interface with the CEPGL interconnected network. A Basin Authority, whose statuses are also under finalization by the three States, seems necessary.
Milestones	
Next Stage	<ul style="list-style-type: none"> The project will be financed with a 70% debt : 30% equity ratio. National power utilities shall not participate in the equity. States may take part as minority shareholders (less than 30%), while private investors are expected to hold a large majority of the shares. International Financing Institutions may also participate in the equity. International Financing Institutions are supporting EGL the three States to foster the development of Ruzizi III. Ongoing studies are financed by the European Union and the European Investment Bank. The World Bank, the African Development Bank, as well as numerous bilateral development organizations, have expressed their interest: KfW (Germany), AFD (France), FMO (the Netherlands), CTB (Belgium), DBSA (South Africa), ADA (Austria), etc. The project is developed under a Public Private Partnership (PPP) model where the project company will operate the power plant as an Independent Power Producer. The PPP structure was retained as being the most efficient way to rapidly mobilize financial resources, and to ensure the sustainability of the operation in the long run. The Ministers for Energy of the three States have given EGL a specific mandate to implement the Ruzizi III HPP under a PPP structure, through a delegation of authority co-signed by the three Ministers. The next step in the preparation of Ruzizi III is the preparation of the selection of the preferred investors amongst the short listed consortia, through a transparent consultation organized by EGL.
Funding Requirements	
Implementation in Million USD	450

PIDA PAP PROJECT SHEET SECTOR : ENERGY	
Name of Project	RUSUMO FALLS
Project Number	PIDA / ENERGY / EASTERN/ N°13
Sector	Generation
Type	Program/project structuring and promotion to obtain financing
Parties Involved:	
REC Involved	COMESA/EAC
Beneficiary countries	Nile River Basin Countries
Inter Governmental Organizations:	AUC/NPCA
Technical Organizations	NELSAP
Background	
Objectives	Provide electricity relatively inexpensive in the region, contributing to the savings of foreign exchange and improving the balance of payments resulting from the fact that imported petroleum products would be replaced by the hydro
Expected Results	The Rusumo Falls project includes the following main components: 1. A dam and hydro-electric power station of about 61 MW on the Kagera River at Rusumo Falls; 2. Power lines connecting the power plant to the electricity grids of Burundi, Rwanda and Tanzania.
Project Challenges	<ul style="list-style-type: none"> • Lifting constraint on developing access due to shortage of capacity. • Flooding is estimated in the order of 400 km² , which would include 125 km² of existing lake, 250 km² of existing wetlands and 15 km² of valley slopes. The reduction of flood flows and levels could affect wetlands downstream, including in the Akagera National Park. • The creation of the reservoir would have a negligible effect on net evaporation.
Milestones	
Next Stage	<ul style="list-style-type: none"> • Sharing agreement between Burundi, Rwanda and Tanzania will also have to be negotiated, possibly within the framework of the Kagera River Basin Integrated Water Resources Management Project • Environmental impact studies are required to better assess its environmental issues, especially with regards to potential downstream effects and the impacts of the creation of a reservoir that include some 250 km² of wetlands • Its project design could be re-evaluated so as to minimize reservoir impacts on natural Habitats
Funding Requirements	
Implementation in Million USD	360

PIDA PAP PROJECT SHEET	
SECTOR : ENERGY	
Name of Project	UGANDA-KENYA PETROLEUM PRODUCTS PIPELINE
Project Number	PIDA / ENERGY / EASTERN/ N°14
Sector	Transport
Type	Implementation and operation
Parties Involved:	
REC Involved	COMESA/EAC
Beneficiary countries	Uganda, Kenya
Inter Governmental Organizations:	AUC/NPCA
Technical Organizations	
Background	
Objectives	The project's objective is to enhance the supply of petroleum products for Western Kenya and the neighbouring countries to meet the growing demand.
Expected Results	300km long pipeline for a lower cost mode of transport of petroleum products
Project Challenges	<ul style="list-style-type: none"> • A critical first step is to resolve the pending legal issues with the Libyan company, Tamoil, which was awarded a construction contract in 2007 and which has been brought to a halt. There are two unresolved issues: the financial capacity of Tamoil and whether the company can legally operate, given recent UN sanctions imposed on Libya. The EAC has been entrusted with the resolution of both these issues. Regulation to ensure that the project structure under PPP will not result in an abuse of monopolistic position for petroleum product transport • The start of large-scale oil production in Uganda scheduled for 2012 and the possibility of constructing a refinery inland is likely to lead to reconsideration of the project. Imports from Kenya may not be justified, while exports to neighbouring Rwanda, Burundi and Eastern RDC may warrant study.
Milestones	
Next Stage	<ul style="list-style-type: none"> • The EAC should help the Joint Commission to obtain an internationally valid legal opinion on the possibility to re-start the project with a more reliable partner. The EAC should review with the Joint Committee the PPP structure to ensure that the pipeline will be a regulated common carrier and ensure that the benefits of lower transport cost is passed-through to consumers and that the project leads to more competition on the Ugandan and Kenyan markets • The Joint Coordination Commission needs to get support from the EAC to recruit reputable advisors to restructure the project and select a credible private partner under transparent procedure.
Funding Requirements	
Implementation in Million USD	150

PIDA PAP PROJECT SHEET SECTOR : TRANSPORT	
Name of Project	<i>NORTHERN MULTI-MODAL CORRIDOR</i>
Project Number	PIDA / TRANSPORT / EASTERN / N° 5
Sector	Road Transport
Type	Feasibility/needs assessment Program/project structuring and promotion to obtain financing
Parties Involved:	
REC Involved	COMESA/EAC
Beneficiary countries	Kenya, Uganda, Rwanda, Burundi
Inter Governmental Organizations:	AUC/NPCA
Technical Organizations	NCTTCA
Background	
Overall and Specific Objectives	This project is designed to modernize the highest priority multi-modal ARTIN corridor in East Africa and increase the ease of access for people and goods across the borders between Kenya, Uganda, Rwanda, Burundi and DR Congo. It has three major components (a) corridor modernization, including modern design standards, smart corridor technology, and OSBPs, (b) road modernization and upgrading, and (c) railway modernization. Trade between all these countries would also be increased
Expected Results	<p>This project would design and implement a smart corridor system for both road and rail transport. The modernization project would also facilitate the creation of 4 one-stop border posts at the following locations:</p> <ul style="list-style-type: none"> • Cyangugu: OSBP Project - Rwanda/DRC • Malaba: OSBP Project - Kenya/Uganda • Katuna/Gatuna: OSBP Project - Uganda/Rwanda • Mpondwe: OSBP Project - Uganda/DRC <p>The road modernization component includes the joint development of modern corridor highway standards between all five countries (with EAC/Tripartite lead), and the construction of key highway sections totalling 130 km to these higher standards. This project also includes a road upgrading component which would also total 130 km in the corridor(out of 1,900 km total). The road upgrading and modernization activities are expected to be extended to the Goma-Kisangani and Nairobi-Moyali parts of the Corridor in a later phase.</p>
Project Challenges	<ul style="list-style-type: none"> • The main challenge would be that the five countries crossed by the corridor, accept that the Northern corridor be considered as a pilot corridor for introduction of PPP. Upgrading sections through PPP would require the setting up of toll systems that might prove difficult to be accepted. The five road administrations with the assistance of the EAC and of the AUC would need to review the full lay out of the corridor and accept to apply the same norms, standards and characteristics along the corridor. These standards should result in a homogeneous road with no crossing of cities, grade separated crossings over railways or main roads, similar signaling systems, etc. • Once the new layout of the corridor is finalized, the second challenge will be to find the required financing in particular from private companies that should be motivated by the projects. A key risk could be that these private companies are reluctant to enter into PPP for this type of project, or that countries fail to establish the policy environment in which public-private partnerships can thrive.
Milestones	
Next Stage	<ul style="list-style-type: none"> • Considering the numerous sections of the corridor to be either rehabilitated or upgraded, the consultant proposes to take this corridor as a pilot project and to try, as far as possible, to call on the private sector to conduct a large part of these civil works through PPP. This would require the introduction of sections of toll roads along the corridor. • The EAC, with the assistance of the UAC/NPCA, should fix the norms/standards and

characteristics of the road infrastructure along the entire corridor. Once these norms, standards and characteristics are agreed, each national road administration should review the existing condition of the road and propose a set of up-grading projects. These up-grading projects, together with the already proposed rehabilitation and up-grading projects should, after review by the EAC, form the new Northern corridor programme.

- At the same time, the EAC, through regional meetings with the member states, should establish the section of roads where the member states would accept the signing of PPP with private companies and the setting up of tolls. The EAC should also conduct studies to assess the level of experience and preparedness of the member states to attract PPP and make recommendations to establish an enabling environment in each state. Once all the activities above are completed, EAC should organize meetings/working sessions with private companies that might be potentially interested.
- Since this is a multi-modal corridor, the smart corridor system would have six modules: (i) single electronic window, (ii) cargo tracking, (iii) commercial vehicle tracking (including vehicle weight), (iv) container tracking, (v) freight train tracking and (vi) high-visibility corridor efficiency monitoring. This system would speed up regional integration, make African businesses more competitive and increase trade and tourism among all five countries. This system would be integrated with the railway management system which is run by the concessionaire for Rift Valley Railway (building on the information systems investments already planned by RVR). This would contribute to making the railway much more competitive with road, leading to a more efficient use of the multi-modal freight system.

Funding Requirements

Implementation in Million USD	1 000
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PIDA PAP PROJECT SHEET SECTOR : TRANSPORT	
Name of Project	<i>NORTH-SOUTH MULTI-MODAL CORRIDOR</i>
Project Number	PIDA / TRANSPORT / EASTERN/ N° 6
Sector	Road/Rail Transport
Type	Feasibility/needs assessment Program/project structuring and promotion to obtain financing
Parties Involved:	
REC Involved	COMESA/EAC/SADC
Beneficiary countries	RDC, Zambia, Zimbabwe, South Africa, Mozambique
Inter Governmental Organizations:	AUC/NPCA
Technical Organizations	SARA
Background	
Overall and Specific Objectives	This project is designed to modernize the highest priority multi-modal ARTIN corridor in Southern Africa and increase the ease of access for people and goods across the borders between South Africa, Botswana, Zimbabwe, Zambia, Malawi and DR Congo. It has four major components (a) corridor modernization, including modern design standards, smart corridor technology, and OSBPs, (b) road modernization and upgrading, (c) railway modernization, and (d) rail construction. Trade between all these countries would also be increased.
Expected Results	<p>This project would design and implement a smart corridor system for both road and rail transport. The modernization project would also facilitate the creation of 4 one-stop border posts at the following locations:</p> <ul style="list-style-type: none"> • Messina/Beit Bridge: OSBP Project – South Africa/Zimbabwe • Kasumbalesa: OSBP Project – Zambia/DR Congo • Martin's Drift: OSBP Project – South Africa/Botswana • Kazungula: OSBP and Bridge Project – Botswana/Zambia/Namibia <p>The road modernization component includes the joint development of modern corridor highway standards between all six countries (with SADC/Tripartite lead), and the construction of key highway sections totalling 560 km to these higher standards. This project also includes a road upgrading component which would also total 950 km in the corridor (out of 2,800 km total). The road upgrading and modernization activities are expected to be extended to other branches of the Corridor in a later phase.</p>
Project Challenges	<ul style="list-style-type: none"> • There is a need to build close cooperation with Transnet for North-South rail corridor development, including coordination of information systems. Establishing a smart corridor system and coordinated rail information systems will require cooperative agreements between countries, ministries and railway operators as well as one-stop border posts. This will be a challenge, but SADC is experienced in handling this type of coordination.
Milestones	
Next Stage	<ul style="list-style-type: none"> • For the rail components of this project, SADC and SARA should play a leading role in developing modern rail services in the region. • SADC should review the Consultants' traffic forecasts along ARTIN corridors and prepare alternative solutions depending on these forecasts and on the future location of port capacity development. • These solutions should be discussed with the member states, the national railways and railway concessionaires, and presented to potential private investors. SADC should also prepare scenarios in which investment could be split between the relevant states (infrastructure) and the private operators (communications, rolling stock, etc.). SADC should also attempt to find or develop local private interests for the management and financing of rail projects, through workshops, seminars, and possibly training sessions. In addition, implementation of clear priority rail projects for TAZARA, SNCC and Chingola-Solwezi should be undertaken with a regional rail modernization approach.

	<ul style="list-style-type: none"> • For the smart corridor information system component, SADC, with the assistance of the UAC/NPCA, should establish norms/standards and characteristics for a smart corridor information system along the entire corridor. After review by SADC, this system should be designed and implemented in the countries along the North-South corridor as a pilot project. SADC should contract for the design and implementation of the North-South corridor information system. Since this is a multi-modal corridor, the smart corridor system would have six modules: (i) single electronic window, (ii) cargo tracking, (iii) commercial vehicle tracking (including vehicle weight), (iv) container tracking, (v) freight train tracking and (vi) high-visibility corridor efficiency monitoring. This system would speed up regional integration, make African businesses more competitive and increase trade and tourism among all five countries. This system would be integrated with the railway management systems for Transnet and for the Zambian Railway (run by a concessionaire) and SNCC in DR Congo.. This would contribute to making these railways much more competitive with road, leading to a more efficient use of the multi-modal freight system. (NRZ would be integrated at a later date.) • At the same time for the PPP Pilot, SADC, through regional meetings with the member states, should agree on the sections of roads where the member states would accept the signing of PPPs with private companies in the context of toll roads. SADC should also assess the level of experience and preparedness of the member states to attract PPP and make recommendations as needed to establish an enabling environment in each state. Then a selection of a proposed pilot PPP location would be made (e.g., Kata-Kazungula, which is designated a PPP road upgrade). • Once all the activities above are completed, SADC should organize meetings/working sessions with private companies that might be potentially interested. The selected government and the concerned ministry should contract through PPP for upgrading of the pilot PPP road section and management and maintenance of a toll road.
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Funding Requirements	
Implementation in Million USD	2 325

PIDA PAP PROJECT SHEET SECTOR : TRANSPORT	
Name of Project	<i>DJIBOUTI-ADDIS CORRIDOR</i>
Project Number	PIDA / TRANSPORT / EASTERN/ N° 7
Sector	Road/Rail Transport
Type	Program/project structuring and promotion to obtain financing
Parties Involved:	
REC Involved	COMESA/IGAD
Beneficiary countries	Djibouti, Ethiopia
Inter Governmental Organizations:	AUC/NPCA
Technical Organizations	-
Background	
Overall and Specific Objectives	This project is designed to resuscitate the rail system in a high priority multi-modal ARTIN corridor in Eastern Africa and increase the flow of goods across the border between Djibouti and Ethiopia. This project would design and implement a smart corridor system for both road and rail transport. The rail modernization project would create a functioning railway system on a new alignment to replace the practically defunct existing rail system.
Expected Results	<p>Since this is a multi-modal corridor, the smart corridor system would have six modules: (i) single electronic window, (ii) cargo tracking, (iii) commercial vehicle tracking (including vehicle weight), (iv) container tracking, (v) freight train tracking and (vi) high-visibility corridor efficiency monitoring. This system would speed up regional integration (particularly if it is extended to South Sudan), make Ethiopian businesses more competitive and increase trade. This system would be integrated with the new railway management system, which would contribute to making the railway much more competitive with road, leading to a more efficient use of the multi-modal freight system.</p> <p>The rail construction component includes the joint development of modern rail corridor standards between Djibouti and Ethiopia, and the construction of railway sections totaling 710 km to these higher standards (it could also potentially use standard gauge rail).</p>
Project Challenges	<ul style="list-style-type: none"> • The challenges to construct a new rail lines are enormous, the largest ones being to get the required financing • The challenges to an OSBP programme to improve border crossings are similar to those encountered in other regions. Sometimes it may be difficult to reach agreement on the location of the single border post. For optimal efficiency, the customs and immigration authorities of all three countries will need to reach agreement on the best ways to manage freight and passenger traffic across borders. Also, there needs to be a full electronic exchange of cargo customs information across the border. Project implementation at the national level may require more than one financing agreement. The implementation of PPP arrangements will require improvements in the enabling environment for PPP in Ethiopia.
Milestones	
Next Stage	<ul style="list-style-type: none"> • The implementation of the railway project is already under way with financing agreements in place. The new Ethiopian Railway Corporation will be responsible for contracting and supervision of design and construction, with appropriate technical assistance. This will improve on the previous arrangements between Djibouti and Ethiopia for rail services. The introduction of a PPP arrangement for rail operations and management is also anticipated. • IGAD and EAC should take the lead in coordinating the international agreements and implementation plan for the OSBPs. To speed up the implementation of these border posts, the concerned states should sign memorandums of understanding with the relevant RECs to delegate the implementation of these projects. The management model for these OSBPs should draw on previous successful implementations of OSBPs in East Africa.

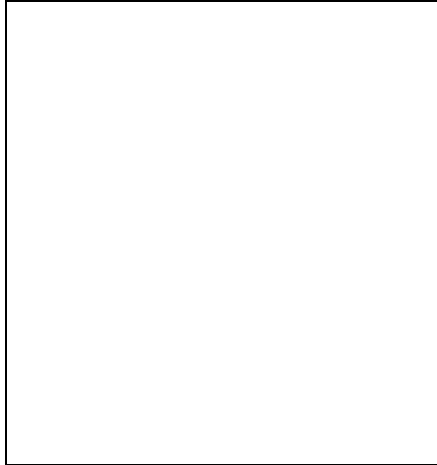


Cooperative agreements should be reached between neighboring states, including specific clauses about exchange of information, creation of OSBPs, and implementation of a corridor information system for freight transport. Also, specific inter-ministerial agreements should be established for each state among ministries and police responsible for border activities.

Funding Requirements

Implementation in Million USD | 1 000

PIDA PAP PROJECT SHEET SECTOR : TRANSPORT	
Name of Project	CENTRAL CORRIDOR
Project Number	PIDA / TRANSPORT / EASTERN / N° 8
Sector	Road/Rail Transport
Type	Feasibility/needs assessment Program/project structuring and promotion to obtain financing
Parties Involved:	
REC Involved	COMESA/EAC
Beneficiary countries	Tanzania, Uganda, Rwanda, Burundi and DR Congo
Inter Governmental Organizations:	AUC/NPCA
Technical Organizations	-
Background	
Overall and Specific Objectives	This project is designed to modernize the third priority ARTIN corridor in East Africa and increase the ease of access for people and goods across the borders between Tanzania, Uganda, Rwanda, Burundi and DR Congo. Trade between all these countries would also be increased.
Expected Results	<p>This project would design and implement a smart corridor system for both road and rail transport. The modernization project would also facilitate the creation of 7 one-stop border posts at the following locations:</p> <ul style="list-style-type: none"> • Rusumo: OSBP Project – Tanzania/Rwanda • Kabanga/Kobero: OSBP Project - Tanzania/Uganda • <p>The road modernization component includes the joint development of modern corridor highway standards between all five countries (with EAC/Tripartite lead), and the construction of key highway sections totalling 176 km to these higher standards. This project also includes a road upgrading component which would also total 330 km in the corridor (out of 1,600 km total).</p> <p>The project includes the modernization of the ports on lake Tanganyika and the modernization of the Tanzanian Railways.</p>
Project Challenges	<ul style="list-style-type: none"> • The main challenge would be that the five countries crossed by the corridor, accept that the Northern corridor be considered as a pilot corridor for introduction of PPP. Upgrading sections through PPP would require the setting up of toll systems that might prove difficult to be accepted. The five road administrations with the assistance of the EAC and of the AUC would need to review the full lay out of the corridor and accept to apply the same norms, standards and characteristics along the corridor. These standards should result in a homogeneous road with no crossing of cities, grade separated crossings over railways or main roads, similar signaling systems, etc. • Once the new layout of the corridor is finalized, the second challenge will be to find the required financing in particular from private companies that should be motivated by the projects. A key risk could be that these private companies are reluctant to enter into PPP for this type of project, or that countries fail to establish the policy environment in which public-private partnerships can thrive.
Milestones	
Next Stage	<ul style="list-style-type: none"> • Considering the numerous sections of the corridor to be either rehabilitated or upgraded, the consultant proposes to take this corridor as a pilot project and to try, as far as possible, to call on the private sector to conduct a large part of these civil works through PPP. This would require the introduction of sections of toll roads along the corridor. • The EAC, with the assistance of the UAC/NPCA, should fix the norms/standards and characteristics of the road infrastructure along the entire corridor. Once these norms, standards and characteristics are agreed, each national road administration should review the existing condition of the road and propose a set of up-grading projects. These up-



grading projects, together with the already proposed rehabilitation and up-grading projects should, after review by the EAC, form the new Central corridor programme.

- At the same time, the EAC, through regional meetings with the member states, should establish the section of roads where the member states would accept the signing of PPP with private companies and the setting up of tolls. The EAC should also conduct studies to assess the level of experience and preparedness of the member states to attract PPP and make recommendations to establish an enabling environment in each state. Once all the activities above are completed, EAC should organize meetings/working sessions with private companies that might be potentially interested.
- Although this is a multi-modal corridor, the smart corridor system would focus on five road-related modules and implement the rail module later: (i) single electronic window, (ii) cargo tracking, (iii) commercial vehicle tracking (including vehicle weight), (iv) container tracking, and (v) high-visibility corridor efficiency monitoring. This system would speed up regional integration, make African businesses more competitive and increase trade and tourism among all five countries.

Funding Requirements

Implementation in Million USD

840

PIDA PAP PROJECT SHEET SECTOR : TRANSPORT	
Name of Project	BEIRA / NACAL MULTI MODAL CORRIDOR
Project Number	PIDA / TRANSPORT / EASTERN / N° 9
Sector	Rail Transport
Type	Feasibility/needs assessment Program/project structuring and promotion to obtain financing
Parties Involved:	
REC Involved	COMESA/SADC
Beneficiary countries	Mozambique, Malawi
Inter Governmental Organizations:	AUC/NPCA
Technical Organizations	SARA
Background	
Overall and Specific Objectives	This programme includes the design of modern rail systems linking the ports of Nacala and Beira to the coal exporting region of Moatize, including the use of PPP. It also includes short term upgrading of the Beira and Nacala Corridor rail lines
Expected Results	Modern railways for exportation of coal from Moatize
Project Challenges	<ul style="list-style-type: none"> • Private partners are required to develop this rail project (either to Beira or to Nacala). Today the two lines are already concessioned to private partners which might have difficulties to find the requested financing to accomplish the project. • The potential operators of the coal mines in Moatize (from Brazil and Australia) seem to have divergent views on the best alternative and might support competing projects. • If the Beira port is selected, this project would be a 100% Mozambican project and would not be part of PIDA. If Nacala is retained, then the rail track would cross Malawi and the project would be regional, requiring MOU between the various stakeholders.
Milestones	
Next Stage	<ul style="list-style-type: none"> • The Sena line, part of the Beira corridor, in very poor condition, has been concessioned to Rites (India) together with the main Beira line to Zimbabwe. Today, the mining companies are analyzing the best ways to transport the coal to the sea. Three alternatives seem possible: • Rapid rehabilitation of the Sena line and up grading of the coal terminal at Beira, • Construction of a new rail line through Malawi to join the Nacala corridor, upgrading of the Nacala corridor railway and the Nacala port, • Rehabilitation of river navigation along the Zambezi and building a new port at Chinde • SADC with SARA should take a lead role in the identification of the best solutions, including, possibly the rehabilitation of the Zambezi river (the Shire-Zambezi project)
Funding Requirements	
Implementation in Million USD	450

PIDA PAP PROJECT SHEET SECTOR : TRANSPORT	
Name of Project	LAMU GATEWAY DEVELOPMENT
Project Number	PIDA / TRANSPORT / EASTERN / N° 10
Sector	Multimodal Transport
Type	Feasibility/needs assessment Program/project structuring and promotion to obtain financing
Parties Involved:	
REC Involved	COMESA/SADC/EAC
Beneficiary countries	Kenya, Uganda, Rwanda, Burundi
Inter Governmental Organizations:	AUC/NPCA
Technical Organizations	PAMESA, SARA
Background	
Overall and Specific Objectives	<p>This project is designed to help Eastern Africa deal with the major challenge of developing sufficient port capacity to handle future demand from both domestic sources and landlocked countries This project includes the first phase in the creation of a new multi-modal ARTIN gateway deep-water port and corridor from Lamu to Nairobi, Kampala and Juba.</p> <p>This project will meet future demands for the transport of people and goods serving the Northern Corridor Countries and Ethiopia and increase regional integration and trade.</p>
Expected Results	This project has six components: (a) a regional hub port and rail linkage master plan (including Lamu Corridor), (b) port expansion, (c) Lamu port construction, (d) road construction, (e) rail construction, (f) smart corridor and one-stop border post design and implementation.
Project Challenges	<ul style="list-style-type: none"> • Port projects are usually prepared and implemented at national level. One challenge will be to conduct the planning exercise at regional level with all the stakeholders to get the best regional approach, considering both national and regional priorities. Landlocked countries should ensure that enough port capacity will be available when and where needed at acceptable cost. For security they would like to get at least two alternatives • Land transport from the sea to the landlocked countries is directly linked to the location of additional port capacity improvement. Development of large capacities in one or two locations might justify the construction of new, modern land transport infrastructures such as new rail lines or modern highways, resulting in substantially reduced land transport costs. • The selection of one or more ports as hub for the region might prove difficult, as ports are major sources of revenues for the states. Development of one specific regional port as hub might require compensation mechanisms at the regional level for the other ports. • Port master plans need to be carried out with all the stakeholders (importers and exporters of coastal and landlocked countries, ports managers, shipping lines etc). The short and medium term port development programme should be prepared taking into account the long term ports requirement and the best land transport systems for the landlocked countries • One key issue is that domestic demand for port capacity will be growing, especially for containers. In most cases it will take up port capacity and not leave any extra capacity to meet the transit traffic demand. The RECs should encourage international agreements to give an appropriate priority to transit traffic to the landlocked countries.
Milestones	
Next Stage	<ul style="list-style-type: none"> • COMESA/EAC and IGAD, together with the port association (PAMESA) and Private Sector should launch a study to: <ul style="list-style-type: none"> ○ Identify and evaluate all the on-going and proposed port projects, in particular the extension projects at Mombasa and Dar es Salaam and the Lamu Port project.

- Identify the best locations to expand or build new port capacity in the region from a technical point of view, considering the changes in global shipping.
- Assess present and future port traffic from both coastal and landlocked countries.
- Identify additional port capacity requirements in the short, medium and long term.
- Define the best alternatives for port capacity extension from technical, economic and environmental point of view
- Assess the best land transport system for the landlocked countries for Lamu and other alternatives.
- The master plan would start as soon as possible, but it will require the cooperation of the countries involved, and preferably a partnership approach which would minimize inter-country competition for port location. The private sector must also be involved in order to take into account shipping line concerns with hub port characteristics and locations.

For Lamu Gateway Development:

- The Government of Kenya has been developing plans and designs for the this gateway corridor and has recently completed design for the initial port construction and development of the Lamu area, with associated plans for an oil pipeline and road and rail connections to South Sudan, Ethiopia and Uganda as well as Nairobi. Construction of the first three berths at Lamu has already begun. There is a Lamu planning unit located in the Ministry of Transport and a Corridor SDI scoping study has been carried out.
- The next step is for the Lamu Gateway Corridor Master Plan to be completed and accepted by the government and the key stakeholders. This should be done in coordination with the regional port and rail master plan (See project EA4 above) and with EAC and Tripartite coordination as well as consultation with the member states. The planners should review the PIDA traffic forecasts and prepare alternative solutions depending on these forecasts and on the future location of development in the region.
- Next a financing plan should be created by the government. The government has been attempting to locate various types of financing with a PPP emphasis and also discussing proposed plans with Sudan and Ethiopia. Regional development bonds are also an available means of financing, if they can be tied to a revenue source.
- For the rail components of this project, EAC and SARA should play a leading role in developing modern rail services in the region and in deciding on the rail gauge to be used (Standard gauge has been proposed). COMESA and EAC should update the existing railway studies taking into account the results of the multimodal master plan and the long term PIDA traffic forecasts. The existence of the Rift Valley Railway concession agreement is a model for possible railway concessioning.
- For the road components of this project, modern corridor design standards should be adopted, drawing on the experience of the Northern Corridor pilot project (EA2 above). The potential for PPPs in road operation and maintenance should be explored.
- For the smart corridor information system component, SADC, with the assistance of the AUC/NPCA, should establish norms/standards and characteristics for a smart corridor information system along the entire corridor. After review by EAC, this system should be designed and implemented in the countries along the Lamu corridor following the example and design of the Northern Corridor pilot project. Since this is a multi-modal corridor, the smart corridor system would have six modules: (i) single electronic window, (ii) cargo tracking, (iii) commercial vehicle tracking (including vehicle weight), (iv) container tracking, (v) freight train tracking and (vi) high-visibility corridor efficiency monitoring. This system would speed up regional integration, make African businesses more competitive and increase trade and tourism among all five countries. This system would be integrated with the railway management systems for the railway concessionaire.
- The port expansion component of this project initially involves implementing the existing port expansion plans and construction as expeditiously as possible. This includes the Mombasa and Dar-es-Salaam port expansion projects and the development of the port of Lamu. Other phases of port expansion will be needed to meet demand in the medium to

long term along with the development of new ports.

- Where there is an issue in regional hub port development the final locations would be decided on a partnership basis to achieve a system that would best serve the interest of the landlocked countries. This could include compensation mechanisms to encourage the stakeholder countries to accept the most cost-effective solutions. The key conclusions and recommendations of the studies should be presented and discussed with all the stakeholders through regional workshops and seminars to reach consensus
- Once a consensus on the best alternatives is reached, the three RECs, together with the member states should identify promoters willing to finalize the preparation of these port and railway projects and assist with the search for financing. COMESA/ EAC and IGAD should make sure that the required port capacities in the region are available on time to satisfy the expected transport demand, preventing port bottlenecks that might jeopardize expected economic growth of their member states.

Funding Requirements	
Implementation in Million USD	5 900