

Annex C: Legal and Institutional Study

EAST AFRICAN RAILWAY MASTER PLAN PROJECT

Sub-Contractor Report

on

Legal and Regulatory Matters

A. Terms of Reference

The Terms of Reference (TORs) provided that though various trade and transport facilitation initiatives have been ongoing in East Africa and progresses have been made, there remain many issues and obstacles to be resolved in order to achieve efficient cross-border trade and regional integration. These barriers include institutional/ regulatory/legal framework, which governs the railway sub-sector as well as the general cross-border transit/transport procedures.

In this context, the TORs required the Legal Specialist to draft Legal and Regulatory Study report, which would:

- Provide an overview of the evolutionary process and the current state of progress toward the regional (EAC) integration of the railway transport and related transit and trade facilitation.
- Identify existing rules, regulations, and policies that could act as barriers to improved cross-border transport flow and/or inhibit sub-regional trade integration.
- Recommend options and institutional/regulatory/legal framework for the successful implementation of the railway master plan and for further reform in the railway operation and management so that there is an unimpeded flow of railway traffic across borders to enhance trade development and regional integration.
- Propose specific programs and projects for improving the regulatory/legal/institutional environment for efficient railway traffic movements across borders.

In preparing the Legal and Regulatory Study, the Legal Specialist has carried out the following tasks, covering all the EAC Member States (i.e. Tanzania, Kenya, Uganda, Burundi, and Rwanda):

- Conducting brief review of the historical and current legal, regulatory, and institutional framework for the operation of railways and for cross-border transit and trade, focusing on existing reports.
- Assessing the current status of the integration initiatives, including their activities, agreements, achievements to date, etc. with a focus on the railway sub-sector.
- Identifying issues obstacles/barriers to coordinated railway services and efficient cross-border traffic flow within the EAC.
- Developing recommendations for possible options and institutional/regulatory/ legal framework for the implementation of the railway master plan and specific programs and projects.

B. Evolution of the Legal Process and Current State of Progress Towards EAC Integration in Railway Sector

Past integration efforts in Africa have included railway transport as one of the integration components. One of the reasons for consistent inclusion of railway transport in regional integration strategies is the fact that railway networks in Africa are generally characterized by the absence of connections between them, and thus lack physical integration between countries. Under these conditions, in Africa, with the exception of the Maghreb countries (Morocco, Algeria and Tunisia) and South Africa, there is no real railway transport system capable of effectively underpinning the continent's economic development.

For approximately three decades, railway companies in Africa, which are mostly public owned, have been experiencing a deterioration of their operations and investments resulting in heavy losses of income. As part of measures for the recovery of public enterprises, measures have been taken in various African countries (including Kenya, Tanzania and Uganda) to involve private sector in the management of railway activities through concessions. Another significant measure that has been taken to mitigate problems facing the railway sector is to promote regional co-operation. Regional co-operation initiatives have mainly focussed on pursuit for joint efforts on modernization of existing railway networks and development of an African railway network.

In the EAC, co-operation in the railway sector is one of the aspects that was agreed by Member States from the beginning and included in the treaty. The ultimate objective of EAC Member States is to have a common transport policy covering all modes of transport, including the railways. Although the main legal basis for efforts towards achieving common transport policy is the EAC Treaty, the co-operation efforts are also the result of the influence of other international legal instruments and initiatives. These instruments and initiatives have significantly contributed to the evolution of the legal, regulatory and institutional framework underpinning the efforts to promote co-operation in the railway sub-sector and cross-border transit and trade.

In this part, the Consultant reviews the historical and the current legal, regulatory and institutional framework for international co-operation in railway sub-sector and transport generally which have significantly contributed to the recognition and inclusion in the treaty by EAC Member States of the need to have common transport policy. The past experience provides lessons that are relevant to the current co-operation efforts in railway sub-sector in EAC and assists the implementing institutions in learning from past mistakes.

The initiatives for regional integration in railway sector in East Africa have been influenced by conventions, instruments and other initiatives which may generally be divided into four categories:

- Worldwide conventions, either setting rules of general policy, or specific to railway transport;
- Treaties and instruments valid or projected to be valid in the whole of the African continent;
- Sub-regional instruments, conventions and treaties specific to Southern, Eastern and Central African countries; and
- Partnership Based Transport Harmonization Initiatives.

(a) Worldwide Conventions and Instruments

Worldwide conventions, either setting rules of general policy, or specific to railway transport which have influenced regional integration initiatives in East Africa include:

(i) *United Nations Charter*: The United Nations through the United Nations Conference on Trade and Development (UNCTAD) sets out rules of general policy, or policy specific to railway transport. UNCTAD was established in 1964 as a permanent intergovernmental body and is the principal organ of the United Nations General Assembly dealing with trade, investment and development issues.

UNCTAD launched two Decades for Transport and Communication in Africa: 1978-1988 (UNCTAD I) and 1991-2000 (UNCTAD II). After the final evaluation of the Second Decade (UNCTAD II), it was recommended that the momentum instilled during the implementation of this decade should continue in the form of a plan of action for the development of infrastructure and transport services in Africa.

To this effect, the priorities of the transport sector in Africa were defined for the 2003-2007 period, comprising, among other things, activities for the development of railway transport, including the promotion of the establishment of the missing railway infrastructure links, interconnection of railways and the harmonization of technical standards.

(ii) *General international policy instruments applicable to all modes of transport*: There are about nineteen general international policy instruments applicable to all modes of transport (air, sea, land). These are:

- (1) The 1921 Barcelona Convention on freedom of transit.
- (2) The 1947 General Agreement on Tariffs and Trade (GATT), later General Agreement on Trade and Services (GATS).
- (3) The 1965 New York Convention on Transit Trade of landlocked countries, together with its predecessors, the 1921 Convention and Statute on Freedom of Transit and the 1958 Geneva Convention on the High Seas. All three conventions are protective of the interests of landlocked States.
- (4) Five conventions related to the functioning of Customs: the 1950 Brussels Convention establishing a Customs Cooperation Council, the 1973 Kyoto Convention on the simplification and harmonization of Customs procedures, preceded by a 1923 Geneva Convention on the same subject matter, the 1977 Nairobi Convention on mutual administrative assistance for the prevention, investigation and repression of Customs offences, and the 1982 Geneva Convention on the harmonization of frontier control of goods.
- (5) Five technical conventions related to transport equipment, the 1960 Brussels Convention on pallets, the 1956 and 1972 Geneva Customs Convention on containers, the 1960 Brussels Convention on Packings, and the 1994 Convention on Pool Containers.
- (6) Four customs conventions on the temporary import of goods and equipments. The main and central instrument is the 1961 Customs Convention on the ATA carnet for temporary admission of goods. The other three are the Customs Convention on the temporary importation of professional equipment (June 8, 1961) ratified by South Africa, Côte de Ivoire, Madagascar, Niger, Nigeria, the Central African Republic, Sierra Leone, Sudan and Zimbabwe (UN No 6862, Treaty Series, Vol.473, No 153); The Customs Convention on the temporary admission of scientific equipment (Brussels, June 11, 1968) ratified by Benin, Gabon, Ghana, Niger and Chad (UN No 5667, Treaty Series, Vol. 690, No 97);

and Customs Convention on the temporary admission of pedagogic material (Brussels, June 8, 1970) ratified by Cameroon, Niger, Rwanda, Somalia and Togo (UN No 11650, Treaty Series, Vol. 817, No 313).

The Consultant has noted that some of the EAC Member States have not ratified most of the above instruments.

(iii) *International Instruments relating to Railway*: There are two international instruments relating to railway sub-sector. These are:

(1) Geneva Convention on the International Regime of Railways, 1923: This convention penetrates sub-Saharan Africa, through its ratification by the United Kingdom in 1925, for most of its colonies and protectorates including Tanzania. Although the Convention is certainly alive, Tanzania does not consider itself bound by the Convention because of its clean slate doctrine. Provisions of the Convention fall in two categories: (i) commitments of contracting parties regarding the development and facilitation of international traffic; and (ii) rules of law regarding the relations between railways and their users. Main facilitation provisions are:

- (Articles 1 to 3) Existing lines of the different national networks ought to be connected.
- Common frontier stations should be established whenever possible. The State on the territory of which these stations will be located should offer every assistance to railway staff of the other State.
- (Articles 4 to 7) Freedom of operation is the rule but it should be exercised without impairing international traffic. Unfair discrimination directed against the other contracting State is prohibited.
- (Article 8) Customs, police and immigration formalities should be regulated so as not to be a hindrance for international traffic.
- (Articles 9 to 13) The Contracting Parties should enter into agreements to facilitate the exchange and reciprocal use of rolling stock.

Among the provisions of special interest regarding the relations between railways and their clients is the commitment to use, whenever possible, a through carriage contract covering an entire journey, and to develop the greatest possible measure of uniformity in the conditions of execution of such through contract.

(2) Bern Convention on International Railway Transport, 1980: On May 9, 1980 a new Convention on international railway transport (COTIF) was concluded in Bern. The Convention: (i) defines the role and jurisdiction of the intergovernmental Organization for International Rail Transport (OTIF) and of its General Secretariat; (ii) sets forth the standards applicable to international rail transport, or Uniform Rules (UR). These Uniform Rules are to be enforced in all international rail transport of goods under a direct consignment note for a carriage operation using at least two railway networks belonging to OTIF member countries. Signatories to the Convention agree on the railway lines on which Uniform Rules apply. On the other lines, the law of the state where the carriage contract was concluded applies. No African State south of the Sahara has ratified the 1980 Convention (including Kenya, Uganda and Tanzania). In North Africa, the states ratified the Convention are Algeria, Tunisia and Morocco. Accession to the Convention is also open to regional economic integration organizations.

(iv) *ACP-EU Partnership Agreement*: The Cotonou Agreement between the European Union (EU) and the African, Caribbean and Pacific (ACP) States was concluded on June 23, 2000. Thirty-five African countries are associated to the EU through this Agreement, of which fifteen are landlocked. According to the Cotonou Agreement, special attention must be paid to transport and communication infrastructure (Article 84). Article 87 provides that specific provisions and measures must be established to support landlocked ACP States in their effort to overcome their difficulties and obstacles hampering their development.

(b) African Continent Instruments

(i) *African Union Treaty*: The African Union (AU) was established in July 2002 and replaced the Organization of African Unity (OAU) in 2003. The AU Treaty states that the reinforcement of African unity and solidarity shall be obtained, inter alia, through the coordination and harmonization of general policies, including transport and communications.

The AU commission made provisions in its priority programme «**Linking Africa**» under its 2004-2007 Strategic Plan, for the establishment of a continental policy in the area of surface transport and the elaboration of an Integrated Continental Master Plan for the Development of Transport Infrastructure (rail, road, internal waterways, etc). From this Integrated Transport Master Plan, a railway master plan will emerge with the objective of establishment of an African railway network.

The elaboration of the Integrated Continental Transport Master Plan will be facilitated by the use of a Geographic Information System (GIS). The work will be carried out in close collaboration with the United Nations Economic Commission for Africa (ECA), Regional Economic Communities and the Union of African Railways (UAR). The Integrated Transport Master Plan will be based on the “corridor” approach. UAR, a specialized institution of the African Union, has identified twelve railways corridors in Africa linking the following countries:

- North Corridor: Morocco-Algeria-Tunisia-Libya-Egypt-Sudan
- North-East Corridor: Sudan-Ethiopia-Kenya-Tanzania
- North-East-West Corridor: Sudan-Chad-Nigeria
- East-South Corridor: Tanzania-Zambia-Zimbabwe-Mozambique-South Africa
- East-Central Corridor: (i) Sudan-Central African Republic-Cameroon; and (ii) Tanzania-Rwanda-Democratic Republic of Congo
- West-Central Corridor: Senegal-Mali-Burkina Faso-Niger-Nigeria
- South-Western Corridor: Côte d’Ivoire-Burkina Faso-Niger-Bénin
- Central-Southern Corridor: Cameroon-Gabon-Congo Brazzaville-Democratic Republic of Congo-Angola-Namibia
- North-Western Corridor: Senegal-Mauritania-Morocco
- North-Central-Southern Corridor: Libya-Chad-Central African Republic-Congo Brazzaville-Democratic Republic of Congo-Angola

(ii) *The Treaty of Abuja*: This treaty was concluded on June 3, 1991 and established the African Economic Community. In transport, partner states agreed:

- To promote integration of infrastructure and develop transport coordination to increase productivity and efficiency;
- To harmonize and standardize legislation and regulations;

- To promote transport coordination, the development of local transport industries, local transport equipment industries and encourage the use of local material and human resources;
- To reorganize and standardize railway networks in view of their interconnection in a Pan-African Network;
- To restructure the road transport sector for the purpose of establishing inter-state links;
- To harmonize maritime transport policies;
- To harmonize air transport policies and flight schedules; and
- In general, to coordinate and harmonize transport policies to eliminate non-physical barriers to free movement of goods, services and persons.

(iii) *The Treaty on the Harmonization of Business Law in Africa*: This treaty was concluded in Port Louis (Mauritius) on October 17, 1993. It came into force on January 1, 1998 between Benin, Burkina Faso, Cameroon, the Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Guinea, Guinea Bissau, Mali, Niger, Senegal and Togo. Senegal is the depository. All countries associated with this treaty are civil law countries. Extension of this treaty beyond the range of civil law countries would obviously involve in depth review of the existing statutes and practices of the various common law. However, if Rwanda and Burundi accedes to this treaty, it can form a good ground for harmonization of transport laws between these two countries which at the end will hasten the harmonization process in the EAC. The Treaty has two main objectives: (1) To develop a framework of business law that is "harmonized, simple, modern and well-adapted" (at Preamble), so as to facilitate business and ensure the security of transactions; and (2) To develop arbitration as a standard technique of solving contractual issues and litigation.

Business law covered under this treaty include transport laws, companies' laws, arbitration laws and any other item the Council of Ministers would decide to include. All these matters should be covered by rules common to all parties.

(c) Eastern, Southern and Central African Countries Instruments

(i) *Kampala Treaty on Common Market for Eastern and Southern Africa (COMESA)*: COMESA, established by Treaty in 1994, superseded the Preferential Trade Area for Eastern and Southern Africa (PTA), which, in turn, was established in 1981. COMESA currently comprises 21 Member States: Angola, Burundi, Comoros, Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya (since June 2005) Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia, and Zimbabwe. Over the last five years, COMESA has seen the withdrawal of Lesotho, Mozambique, Tanzania and, most recently, Namibia. COMESA's main objective is to establish and strengthen a common market. The objectives of the common market (Article 3 of the Treaty) are generally to attain sustainable growth and development of partner States in an overall system of economic cooperation. As far as the transport sector is concerned, the objective is to have common policies applicable to all modes of transport. The relevant parts of the treaty are as follows:

(i) Article 84, which calls for adequate maintenance of roads, ports, airports and other facilities, the security of transport systems, the grant of special treatment to landlocked States, the development of intermodal systems are the main objectives of the common policy.

(ii) Article 85 which provides that as regards roads, partner States must accede to international conventions on road traffic, road signals, etc., harmonize the provisions of their

laws, standards, formalities, regulations, transit traffic, and ensure equal treatment of common carriers and road operators in all countries of the Common Market.

(iii) Article 86 which provides that as regards railways, the objectives are efficiency and coordination. Priorities are common policies for the development of railways and railway transport, with common safety rules, procedures, regulations, non-discriminatory tariffs and standards of equipment.

A multimodal transport corridor project was initiated by COMESA in 2000 known as the Great Lakes Railway Project. The objective of this project is to ensure the transportation of goods along the present Southern African railway network towards the Great Lakes Region (Burundi, Rwanda, Democratic Republic of Congo, Uganda), and promote trade between the Great Lakes and Southern Africa. This project was adopted on 5 August 2004 by the governments of the countries concerned.

(ii) *South African Development Community Treaty (SADC)*: SADC originated from the political movement of the Front Line States (FLS) in opposition to South Africa apartheid policy. SADC was formally founded at Windhoek (Namibia) on August 17, 1992. The members are: Angola, Botswana, the Democratic Republic of Congo (joined in 1998), Lesotho, Malawi, Mauritius (joined in 1995), Mozambique, Namibia, South Africa (joined in 1994), Swaziland, Seychelles (joined in 1998), Tanzania, Zambia and Zimbabwe. SADC is generally overlapping with COMESA but SADC has resisted the efforts deployed to convince its members to merge the two institutions. Furthermore, unlike other regional and sub-regional organizations, the SADC Treaty (Article 23) envisages a role for and cooperation with non-governmental organizations.

Every Member State was allocated the responsibility for coordinating one or more of the 21 sectors identified by SADC. Transport was allocated to Mozambique and trade to Tanzania. Sectoral Commissions are assisted by a Commissions secretariat and funded by all partner States. The sector coordinating units are national institutions established in the appropriate line ministry by the member country responsible for coordinating the particular sector and staffed by civil servants of that particular country.

The SADC Protocol on Transport, Communications and Meteorology signed by the Heads of State and Governments in August 1996 has entered into force. It provides that as a main strategic goal towards integration of transport, communications and meteorology networks must be facilitated by the implementation of compatible policies, legislation, rules, standards and procedures, elimination or reduction of hindrances and impediments to the movements of persons, goods, equipment and services.... the right of freedom of transit for persons and goods, the right of land-locked States to unimpeded access to and from the sea.... the development of simplified and harmonized documentation which supports the movement of cargoes along the length of the logistical chain, including the use of a harmonized nomenclature.

The aim of the Protocol is to establish transport systems that provide efficient, cost-effective and fully integrated transport infrastructure, policy and operations. Main aspects of the policy are:

- Development of complementarities between modes and encouragement to multimodal service provision;

- Establishment of infrastructure, logistical, institutional and legal frameworks including the right of transit and the right of land-locked countries to unimpeded access to the sea and equal treatment of nationals from different member countries; and
- Establishment of cross-border multimodal Corridor Planning Committees comprising public and private participants.

On railways, partner states agreed to:

- Facilitate the provision of efficient railways;
- Formulate a policy for institutional restructuring of the railways, granting autonomy to their management and increasing private sector involvement in railway investment;
- Create an integrated regional network of railway corridors with common standards for customer service and promotion of data information exchange;
- Develop harmonized and simplified procedures and documents as well as a common freight nomenclature to establish a single railway invoicing system;
- Design compatible technical and equipment standards; and
- Establish Railway Route Management Groups to support the activities of regional railways and the Corridor Planning Committees.

From an early stage, SADC developed the transport corridor concept. According to the Protocol, a Corridor is a major regional transportation route along which a significant proportion of partner States or non partner States regional and international imports and exports are carried by various transport modes (Art. 1.1). Over time and after policy changes in South Africa modified the regional background, a Development Corridor concept emerged from the Transport Corridor concept, encompassing a wider scope than transportation. South Africa, besides, proposed the Spatial Development Initiative (SDI), which overlaps with the Development Corridor concept.

(iii) *The Northern Corridor Transit Agreement, 1985*: The Northern Corridor Transit Agreement covers the use of transportation facilities of East Africa served by the port of Mombasa in Kenya. It was concluded in Bujumbura (Burundi) on February 19, 1985 between Burundi, Kenya, Rwanda and Uganda. To the Agreement, a concise document, four Protocols were attached at signature; one Annex and five more Protocols were added at Nairobi on November 8, 1985. The Agreement is the clearest, most complete and making the most judicious reference to other international conventions and that other regional treaties and conventions reviewed in this Report. The Consultant is of the view that its clear understanding of the problems and its explanatory notes (widely used in this presentation) make it an excellent legal document. It can and should be used as a model. The signatories ratified the Agreement in 1985 and 1986, and Zaire (now Democratic Republic of Congo) acceded to it on May 8, 1987 in Kigali. The initial duration of the Agreement was ten years. The Consultant has not yet determined whether and by which instrument and at which date its duration was formally extended. The depository of the Agreement is the United Nations Economic Commission for Africa.

The Preamble to the Agreement makes reference to a number of international instruments. Not all of them are in effect or were acceded to by the Contracting Parties, such as the 1977 International Convention on Mutual Administrative Assistance for the Prevention, Investigation and Repression of Customs Offences or the 1980 Convention on International Multimodal Transport of Goods. It results in a bizarre legal situation, by which States that

have not ratified conventions seem to be bound by their provisions or by convention that never came into force.

The purpose of the Agreement is to promote the use of the Northern Corridor, as defined by the Agreement, as a most effective route for the surface transport of goods between Partner States. As a result, the Contracting States have agreed to grant each other the right of transit through their respective territories and to provide all possible facilities, regulations and procedures for that purpose, without any discrimination. Nothing in the Agreement prevents any Contracting Party (a) from fulfilling its obligation under any other international convention; and (b) from granting facilities greater than those provided in the Agreement.

An authority for coordination of transit transport in the Corridor is established and known as the Transit Transport Coordination Authority (TTCA), composed of the Ministers responsible for transport matters in each of the participating States and of their Permanent Secretaries. The Annex makes explicit the role and duties of the TTCA and of its executive officer, the Transit Transport Coordinator. Authority for the study of all questions related to cooperation in transit transport matters remains with the Ministers. The Executive Board of the Authority conducts day-to-day operations, circulates information and furnishes advice to the Contracting Parties.

No mention is made in the Agreement of responsibility of the Authority in the matter of rates and charges on transit traffic. According to Section 11 of the Agreement, no duties, taxes or charges of any kind...regardless of their designation and purposes, shall be levied on traffic in transit, except charges for administrative expenses entailed for traffic in transit... and charges levied on the use of toll roads, bridges,.....warehousing,....or similar charges.... Further, the Contracting Parties agree that said charges should be calculated on the same basis as for similar domestic transport operations. There is no explicit statement that the charges should correspond to the extent possible, with the expenses actually incurred by the State through which transit traffic takes place. This is however stated in Explanatory Notes with reference to Article 3 of the 1921 Barcelona Convention and Statute on the Freedom of Transit, Article 5 of the 1948 General Agreement on Tariffs and Trade and other international instruments quoted in such Notes.

The Agreement does not provide for any form of immunity from jurisdiction and execution. However, there is a flavour of reservation in the Explanatory Notes, in which it is pointed out that under all normal circumstances national law will prevail in the case of offences (Article 47) and that some State-owned enterprises established as companies are considered as an emanation of the State. As a consequence, ...the company is not legally distinct from the State and should benefit from the same advantages and privileges as the State it belongs to...., that is immunity. The legal issues here are:

- Whether immunity resulting from national law is limited to execution following the sanctioning of offences or applies to the execution of all judicial and arbitration awards; and
- Implicitly, whether in case of conflict of law in implementation of the Agreement, domestic law takes precedence over the Agreement, i.e. national law versus an international instrument.

In any case, whether a government-owned enterprise engaged in commercial operations is immune, very much open to question, State immunity implies that State entities perform government functions that cannot be conducted by private parties, in the common or public

interest. The issue is different when the government-owned entity engages in operations that could be conducted by private operators who frequently are in competition with the State-owned entity. In which case, there are no grounds for immunity. The Consultant is of the view that the issue of railways company will be immune from EAC law must be clearly addressed in the envisaged common transport policy.

TTCA has proposed a railway project in which these railway links were identified: Kasama/Mpulungu (Zambia) - 130km; Bujumbura/Cyangugu (Burundi and Rwanda)- 108km; Kibuye/Bwera (Rwanda and Uganda) - 123km; Kibuye/Kigali (Rwanda)- 120km; Kabatoro/Kasese (Uganda); and renovation of the Kasese/Kampala line (312km). Finally, the Mombasa (Kenya)–Kisangani (DRC) railway project which intends to link the Indian Ocean to the Atlantic Ocean, via Kisangani (DRC). The project also covers the following links: (i) Existing railway networks in Kenya and Uganda (Mombasa-Nairobi-Kampala-Kasese); (i) Railway extension from Kasese to Kisangani via Kasindi, Beni, Bunia, Komanda and Mombasa; and (iii) New railway lines: Kasese-Goma, Goma-Kigali, Goma-Bukavu and Bukavu-Bujumbura.

(iv) *Intergovernmental Authority on Development (IGAD)*: The Intergovernmental Authority on Development (Nairobi Agreement) was created by six countries of the Horn of Africa: Djibouti, Ethiopia, Kenya, Somalia, Sudan and Uganda. It was established by Agreement on March 31, 1996 at Nairobi to revitalize and expand the duties of the existing Intergovernmental Authority on Drought and Development established in 1986. It enjoys privileges and immunities similar to those accorded to regional or international organizations of similar status.

The preamble to the Nairobi Agreement refers both to the Treaty establishing the African Economic Community and to the Treaty establishing the Common Market for Eastern and Southern Africa. The aims of the Authority, in the area of transport, trade and facilitation, are prescribed under Article 7 as to:

- Promote joint development strategies and harmonize policies as regard, inter alia, trade, transport, communications and customs, promote free movement of goods, persons and services;
- Create an enabling environment for foreign, cross-border and domestic trade; and
- Develop and improve a coordinated infrastructure of transport.

In addition to defining the aims and objectives of the Authority, the Agreement stipulates the areas of cooperation between Member States (Article 13 A). As regard trade, facilitation and transport, the areas of co-operation are:

- Working towards the harmonization of trade policies and practice and the elimination of tariff and non-tariff barriers.
- Harmonization of transport policies and elimination of physical and non-physical barriers.

To date, and except for the identification of different infrastructure projects, especially road and port rehabilitation, IGAD took no significant actions on the areas of trade, transport and facilitation. Two transport policy workshops took place in Addis Ababa in 1997 and in Nairobi in 1999. A meeting of IGAD Ministries of Transport met in Khartoum on October 10, 2001.

(v) *Indian Ocean Co-operation Agreements*: There are two main instruments which are of interest regarding cooperation in transport by countries bordering Indian Ocean.

The first one is an Agreement on the Organization of Indian Ocean Maritime Affairs was concluded at Arusha on September 7, 1990. This instrument was the follow-up of the first Conference for economic, scientific and technical cooperation in maritime matters, held in Colombo (Sri Lanka) in 1987. Tanzania, Sri Lanka and other unidentified States signed the Agreement. Sri Lanka is the Depository of this Agreement. The Agreement was to be in force after ratification by eight signatories. The Consultant has not evaluated the status of its implementation. Although the agreement deals mainly with integrated oceanographic management, it also refers to transport co-operation. The relevant articles are:

- Article 3 which stipulates that the economic and social development of land-locked countries is one of the general policy objectives of the Agreement;
- Article 4 which states that the rule according to which all consideration will be given to the rights and needs of land-locked or geographically disadvantaged States is one of the principles of cooperation between Member States and maritime transport being one area of cooperation; and
- Article 8 states that the Committee or executive body of the Organization must include members originating from landlocked or geographically disadvantaged States.

The second instrument is the Charter of the Indian Ocean Rim Association for regional cooperation concluded in Port Louis (Mauritius) on March 7, 1997. This Charter was signed by fourteen Indian Ocean States; among them were Kenya, Madagascar, Mauritius, Mozambique, South Africa and Tanzania. The Association is open to all sovereign States of the Indian Ocean Rim subscribing to the principles and objectives of the Charter.

The objective of the Association is to facilitate and promote economic cooperation, bringing together representatives of government, business and academia. Cooperation within the Association is not intended to be a substitute, but seek to reinforce and be consistent with their bilateral and multilateral obligations.

(vi) *The Economic Community of Central African States Treaty*: The Economic Community of Central African States (ECCAS). ECCAS was created by the Libreville (Gabon) Treaty on October 18, 1983. Members of the Community are Burundi, Cameroon, Chad, Congo, the Democratic Republic of Congo, Gabon, Equatorial Guinea, Central African Republic, Rwanda and Sao Tome. Angola has an observer status. The Preamble of the Convention makes express reference to the OAU Charter, to the 1973 Declaration on Cooperation and Development Independence, to the Monrovia Declaration, and to the Lagos Plan of Action and Final Act. In infrastructure and transport, Partner States agreed to:

- Promote integration of infrastructure and to develop transport coordination so as to increase productivity and efficiency;
- Harmonize and standardize legislation and regulations;
- Promote transport coordination, the development of local transport industries, and local transport equipment industries;
- Reorganize railway networks in view of their interconnection; and
- Develop sub-regional joint shipping lines, river transport companies and airlines.

(vii) *The Convention for Economic Community of the Great Lakes Countries*: The Convention establishing the Economic Community of the Great Lakes Countries was concluded in Gisenyi (Burundi) on September 20, 1976 between Burundi, Rwanda and Zaire (now Democratic Republic of Congo). The Convention stipulates that cargos and goods in

transit in one of the Partner States shall be free of taxes and duties. On September 10, 1978, at Gisenyi the Partner States entered into another agreement on trade and customs cooperation.

(d) Partnership Based Transport Harmonization Initiatives

(i) *The New Partnership for Africa's Development (NEPAD)*: NEPAD is an integrated socio-economic development framework for Africa which was adopted by the 37th Summit of the OAU in July 2001. In transport, NEPAD's objectives include promoting economic activity and cross-border trade through improved land transport linkages and one of the action plan is development and maintenance of ports, roads, railways and maritime transportation.

NEPAD has an important programme for the development of transport infrastructure. Many activities in the area of railway transport have been retained in the Short Term Action Plan (STAP). NEPAD has recently launched Medium and Long Term Strategic Framework (MLTSF) for the development of infrastructure is scheduled during the year.

(ii) *The Sub-Saharan Africa Transport Policy Program (SSATP)*: SSATP is a partnership of 35 African countries, 8 regional economic communities, 3 African institutions - UNECA, AU/NEPAD and African Development Bank, national and regional organizations and international development partners - all dedicated to the goal of ensuring that transport plays its full part in achieving the developmental objectives of Sub-Saharan Africa: poverty reduction, pro-poor growth, and regional integration. The Program is currently funded by the European Commission, Denmark, France, Ireland, Norway, Sweden, United Kingdom, the Islamic Development Bank, and The World Bank.

The Long Term Development Plan (**LTDP**) 2004-2007 has been formulated with the full participation of SSATP member countries, regional organizations and donors, in order to effectively address the role of transport in the war against poverty. Bilateral and multilateral donors agreed to support the 4-year development plan. The SSATP's comprehensive support multi-donor trust fund (**MDTF**) was established in 2004 with the objective of supporting the implementation of the LTDP through yearly Work Programs.

The European Commission (**EC**) is by far the main contributor to the MDTF. The EC's contribution in 2004 provided a major source of financing for the SSATP's 2005 activities. Substantial contribution to the MDTF also comes from Sweden, Denmark and Ireland. Additionally France, Norway and the U.K., through their own standalone trust funds, support specific activities of the SSATP's Work Program. The WB also contributes to the funding and administers the Program. SSATP member countries contribute with the expert's time and logistical support.

All decisions on allocation of funding are subject to supervision by a four-member Executive Board on which the EC and the Bank have a representative. All accounts are published annually in a formal report submitted to the Program's Annual General Meeting, where the EC and the Bank are also represented. Trust Fund provisions are released by partners in annual tranches, conditional not only upon proper accounting decisions and records, but also upon the delivery of actual results.

(iii) *USAID East and Central Global Competitiveness Hub*: This is the initiative by USAID to facilitate the implementation of a Business to Business/Business to Government platform to support e-commerce and develop a platform for IT-enabled licensing and accreditation of

transport operators along the Northern Corridor. As mentioned above, the Northern Corridor covers transportation facilities of East Africa served by the port of Mombasa in Kenya. The Northern Corridor is the main artery of transport facilities and infrastructure linking landlocked countries in the Great Lakes region of East and Central Africa to the sea port of Mombasa, Kenya. The Corridor accounts for annual cargo volumes in excess of 10 million tons and combined transit and trans-shipment traffic of more than two million tons. USAID works to address infrastructure and regulatory challenges that constrain the movement of traffic and trade along the Northern Corridor.

Delays in cargo clearance have been cited as one of the major non-tariff barriers that affect trade in the East and Central Africa Region and the Northern Corridor. The East and Central Global Competitiveness Hub has been working with the Revenue Authorities of Uganda and Kenya to develop and adopt a “one-stop border post” at Malaba (Kenya-Uganda border) that simplifies border processes and joint customs operations to reduce transaction costs and opportunities for corruption. Phase 1, the refurbishment of the station building, has been completed, and the facility was handed over to the Kenya Railway Corporation by the US Ambassador to Kenya in May 2006. The Kenya Customs Service and Uganda Customs Service are now carrying out joint inspections on cargo entering Uganda. Delays of up to three days have been reduced to thirty minutes for cargo released without inspection; and three hours for full inspections, equalling a saving of \$600 per container.

The development of an IT infrastructure along the Northern Corridor will greatly facilitate customs harmonization and reduce cargo clearance. The Revenue Authorities in Kenya, Rwanda, Tanzania, and Uganda are upgrading and deploying a variety of customs-focused management information systems and the East and Central Global Competitiveness Hub is working with them to ensure that standardized customs procedures are incorporated in these applications. The result is a common interface between Kenyan & Ugandan systems to share and store information that meet s international standards as per World Customs Organization rules in the Revised Kyoto Convention.

Data transmission between Kenyan and Ugandan customs & revenue authorities will give advance notice of goods in transit, enable customs to assess, in advance, containers arriving which may require examination, encourage the development of risk assessment techniques, facilitate the early discharge of customs bonds and guarantees and reduce transit delays at border crossings.

The East and Central Global Competitiveness Hub is also facilitating the implementation of a Business to Business/Business to Government platform to support e-commerce and develop a platform for IT-enabled licensing and accreditation of transport operators along the Northern Corridor.

(e) Consultant’s Comments

Basing on the above review, the Consultant is of the view that:

(i) There is serious overlapping of membership and functions between different legal frameworks and, unfortunately, there is no common approach by EAC Member States to different legal frameworks. There are a number of role players at the national, regional, continental and international level with a direct interest in railway sector in EAC. The necessity of involving all these role players in some or other way is not disputed. However, it

is clear that their relative role in respect of proximity to implementation differs. As a result, there is a need to clarify and circumscribe their relative roles.

(ii) In order to streamline the legal framework, continental based institutions should ideally co-ordinate regional economic communities' policies and strategies, observe, monitor regional economic communities' initiatives and disseminate best practices. The regional economic communities should facilitate regional policy harmonization, observe corridor and national implementation, disseminate best practices and monitor corridor committees. The corridor committees should anchor for public-private partnership across two or more countries focussing on elimination of constraints, marketing investment opportunity and improving transit efficiency and monitoring of national implementation. The national governments should develop and implement national policies and enabling frameworks. Then national co-ordinating committees should identify enablers and constraints, investment opportunities and potential efficiency gains at national level, and co-ordinate within government and with private sector

(iii) Some of the legal frameworks were not based on realistic premises. As a result, these frameworks have not been as effective as anticipated. A solid and sound legal framework should start with what is in place and not what 'will' be in place.

(iv) The Northern Corridor Transit Agreement provides a good basis for structuring legal co-operation in railway sector in EAC. Since its establishment, the TTCA (corridor committee) has focussed on the reduction of transport costs on the corridor and facilitation of trade and traffic. As such, it has coordinated a number of initiatives that have reportedly resulted in improvements in corridor efficiency. Although TTCA operates under a very limited budget, it has managed to set a baseline for the preparation of corridor action plans. TTCA type institutions can be strengthened for central and southern corridors.

C. Main Legal Basis for East African Railway Master Plan and Current Status

(i) Treaty Provisions and Development Strategy

The Treaty for the establishment of the East African Community (EAC) was concluded at Arusha (Tanzania) on November 30, 1999. Parties to the Treaty are Kenya, Uganda, Tanzania, Rwanda and Burundi. According to Article 5 of the Treaty, the objectives of the Community are to develop policies and programmes aimed at widening and deepening cooperation among the Partner States in political, economic, social and cultural fields, research and technology, defence, security and legal and judicial affairs, for their mutual benefit.

Article 89 of the Treaty provides that in order to promote the achievement of the objectives of the Community as set out in Article 5 of this Treaty, the Partner States undertake to evolve co-ordinated, harmonised and complementary transport and communications policies; improve and expand the existing transport and communication links; and establish new ones as a means of furthering the physical cohesion of the Partner States, so as to facilitate and promote the movement of traffic within the Community. The ultimate objective is to have a common transport policy.

The steps to be taken, as further explained in Article 89, include:

- developing harmonised standards and regulatory laws, rules, procedures and practices;
- constructing, maintaining, upgrading, rehabilitating and integrating roads, railways, airports, pipelines and harbours in their territories;
- reviewing and re-designing intermodal transport systems and developing new routes within the Community for the transport of the type of goods and services produced in the Partner States;
- maintaining, expanding and upgrading communication facilities to enhance interaction between persons and businesses in the Partner States and promote the full exploitation of the market and investment opportunities created by the Community;
- granting special treatment to land-locked Partner States in respect of the application of the provisions of this Chapter;
- providing security and protection to transport systems to ensure the smooth movement of goods and persons within the Community;
- taking measures directed towards the harmonisation and joint use of facilities and programmes within their existing national institutions for the training of personnel in the field of transport and communications; and
- exchanging information on technological developments in transport and communications.

With regard to railways and rail transport, Article 91 of the Treaty provides that the Partner States agree to establish and maintain coordinated railway services that would efficiently connect the Partner States within the Community and, where necessary, to construct additional railway connections. In this regard, Partner States agreed to:

- adopt common policies for the development of railways and railway transport in the Community;
- make their railways more efficient and competitive through, *inter alia*, autonomous management and improvement of infrastructure;
- adopt common safety rules, regulations and requirements with regard to signs, signals, rolling stock, motive power and related equipment and the transport of dangerous substances;
- adopt measures for the facilitation, harmonisation and rationalisation of railway transport within the Community;
- harmonise and simplify documents required for railway transport within the Community;
- harmonise procedures with respect to the packaging, marking and loading of goods and wagons for railway transport within the Community;
- agree to charge non-discriminatory tariffs in respect of goods transported by railway within the Community;
- consult each other on proposed measures that may affect railway transport within the Community;
- integrate the operations of their railway administrations including the synchronisation of train schedules and the operations of unit trains;

- establish common standards for the construction and maintenance of railway facilities;
- agree on common policies for the manufacture of railway transport equipment and railway facilities;
- agree to allocate space for the storage of goods transported by railway from each other within their goods sheds;
- take measures to facilitate thorough working of trains within the Community;
- facilitate the deployment of railway rolling stock, motive power and related equipment for the conveyance of goods to and from each other without discrimination;
- endeavour to maintain the existing physical facilities of their railways to such standards as will enable the Partner States to operate their own systems within the Community in an efficient manner;
- provide efficient railway transport services among the Partner States on a non-discriminatory basis;
- facilitate joint utilisation of railway facilities including manufacture, maintenance and training facilities to ensure their optimal use; and
- promote co-operation in the fields of research and exchange of information.

The Consultant is of the view that the treaty provides a sufficient legal basis for co-operation in the railway sector. The focus should be on creating detailed guidelines and steps for implementing treaty provisions. Indeed, recommendations on this subject are required of the Consultant's as per the TOR for the project.

In implement the treaty provisions, the second EAC Development Strategy 2006 – 2010 was adopted. With regard to Railways, the main objectives of the strategy are: First; to assess the state of restructuring of railways in the three Partner States in areas of ownership, management, infrastructure, financing and investment, national legislations and human resources; and Second; to recommend a harmonised approach towards restructuring of the railways in the region and possible areas of co-operation during the restructuring process.

The Second EAC Development Strategy recognised that regional infrastructure interventions are key to attracting investment into the region, improving competitiveness, and promoting trade. The infrastructure and support services sub-sector covers roads, railways, civil aviation, maritime transport and ports, multi-modal transport, freight administration and management, postal services, telecommunications, and meteorological services as well as energy and cooperation in supportive services including Standardization, Quality Assurance, Metrology and Testing (SQMT).

The Second EAC Development Strategy confirms that Partner States have reaffirmed their commitment to enhancing budgetary resources, expediting the necessary legislations in the roads sub-sector, strengthening of the institutional and administrative capabilities of the ministries and agencies formed to manage the sub-sector, and to prioritise the EAC Road Network Project within their national poverty reduction strategies and budget provisions.

The Second EAC Development Strategy outlines that the current strategic intervention by EAC is to develop and implement the EAC Railways Master Plan and to carry through the ongoing railway concessioning process. It is expected that the Master Plan will provide a road map of goals to be reached by specific dates, development of infrastructure of EAC, the simplification of border controls and formalities and improving safety. The Master Plan is

also expected to achieve realisation of harmonisation of national legal and administrative regulations, including the prevailing technological, social and tax conditions, has gradually taken on an ever-increasing importance.

In terms of best approach, the railway master plan ought to arise from from comprehensive guidelines for the common transport policy embracing all modes of transport. To the contrary railway master plan seems to be the starting point, to be followed by general common transport policy.

Railway master plan to be developed may require to be modified to be aligned with comprehensive guidelines for the common transport policy embracing all modes of transport to be adopted later. The Consultant is of the view that this will not be a problem because the master plan is expected to be a living document.

(ii) Current Status in Railways Sub-Sector

As pointed out above, with regard to railways sub-sector, the main objectives of the EAC Development Strategy 2006 – 2010 are: First; to assess the state of restructuring of railways in the three Partner States in areas of ownership, management, infrastructure, financing and investment, national legislations and human resources; and Second; to recommend a harmonised approach towards restructuring of the railways in the region and possible areas of co-operation during the restructuring process.

The railways in Kenya and Uganda have been recently concessioned to Rift Valley Railways Consortium (RVRC), following a strategic decision taken in 2003 to have joint concessioning of Kenya and Uganda Railways. A Memorandum of Understanding and a general blueprint for the design of the Joint Concession was signed July 8, 2004. The joint concession was awarded through a competitive bidding process governed by the laws of Kenya and Uganda in 2005. The two Governments selected the RVRC led by Sheltam of South Africa on October 14, 2005. The handing over, though delayed for good reasons, was done on 1st November 2006. The concessioning of the two railways is expected to stem the deterioration in their operating and financial performance under state management and to reduce the need for periodic large injections of state funds.

The railway concession will have monitoring mechanisms managed by a Joint Railway Commission established under the Interface Agreement concluded among Uganda, Kenya and the concession companies. The Joint Railway Commission is composed of representatives of key ministries and KRC and URC and its functions will be to: (a) harmonize policy, laws and regulations; (b) facilitate policies and actions relating to efficiency improvements common to both railway networks and the integration of the common functional areas and facilities; and (c) consult on any breach of the Concession Agreements. Additional tools available under the Concession Agreements include scheduled performance audits, which will be used to monitor the concession companies' performance. The concessions of Kenya and Uganda Railways have not been preceded by properly defined separation between infrastructure and services. Essentially, the state owned enterprises are still in place and vertically integrated despite the concession of railways. In Kenya, for example, the Kenya Railways Corporation Act, Cap. 397 is still in place. This Act establishes Kenya Railway Corporation, provides for operating arrangements and empowers the Kenya Railways Corporation to sub-contract services. In order to ensure successful concessioning of the Kenya Railways, Steering Committee for Kenya Railways Privatisation was legally enabled in the short term, the mandate / authority to oversee the concession process. The

concession was then validated through enactment of the Privatisation Act 2005. In fact section 19 of Kenya Railway Corporation Act does not allow provision of rail transport services by any other entity apart from KRC except when the consent is given by the minister responsible for railways.

Tanzania has adopted vertical separation and the law creating a state owned enterprises as a vertically integrated has been repealed. Tanzanian Railway Corporation assets have been concessioned for 25 years to RITES of India. RITES, a unit of state-owned Indian Railways, signed a shareholding agreement with the government in May 2007 that gave it RITES a 51 per cent stake in the Tanzania Railway Corporation (TRC) while the government retained the remaining stake. RITES and Tanzanian government formed a new company to operate the railway services. Under the deal, RITES is required to rehabilitate TRC's 2,700-km network and introduce new locomotives for both passenger and cargo services. The rehabilitation is expected to occur in five stages and the first will be to restore tracks, communication equipment and rolling stock, for which the TRC has applied for a \$44 million loan from the International Finance Corporation. The Railways Act was enacted in 2002. This Act provides the basic legal framework underpinning the concession structure. It provides for among other things, licensing of railway operators and regulation of safety. The Railways Act, 2002 requires Railway Asset Holding Company (RAHCO) in undertaking its functions to take into account the objectives of the East African Community Treaty, 1999 and the 1996 protocol on Transport Communications and Meteorology of the Southern African Transport and Communications Commission of the Southern African Development Community.

The three Governments of the United Republic of Tanzania, Republic of Zambia and People's Republic of China are still discussing the concessioning process of the TAZARA railway system. TAZARA is expected to be concessioned to a qualified Chinese operator.

D: Obstacles/Barriers to Coordinated Railway Services and Efficient Cross-Border Traffic Flow within the EAC

(i) **Overlapping memberships:** The regional integration arrangements in transport sector arrangements are a muddle. For example, Kenya, Uganda, Rwanda and Burundi are members of COMESA and have been participating in regional transport integration under the auspices of this body. Tanzania is a member of SADC and has been actively participating in transport regional integration under the auspices of this organisation. There is a Northern Corridor which comprises Burundi, Kenya, Rwanda and Uganda and Democratic Republic of Congo. Rwanda and Burundi are members of another regional group known as Economic Community of Central African States (ECCAS) which has the objective of achieving full economic union (including common transport policy. Moreover, Rwanda and Burundi are members of Economic Community of Great Lakes States (ECGLS) which has the objective of achieving full economic union (including harmonizing road transport policies).

Recently, the EAC countries also have decided to join different negotiating groups for the upcoming Economic Partnership Agreement with the EU, Tanzania selecting SADC, Kenya and Uganda choosing to negotiate together with a group of Eastern and Southern African states under a COMESA-IGAD-EAC grouping. Since it is not possible for members to belong to more than one group or to negotiate diverging free trade agreements, the regional configuration will have to be reviewed before any additional transport policies can be fully implemented.

Successful implementation of the transport policies becomes more difficult in these circumstances because of the differences of obligations and timing of implementation. Moreover, administration of more than one regional trade agreement could become a burden on the limited institutional capacity of member countries.

(ii) **Slow substantive changes in national policies, legislation, rules, and regulations:** The failure of governments to translate their commitments under regional treaties and arrangements into substantive changes in national policies, legislation, rules, and regulations. National policymaking institutions have frequently failed to take into account the provisions of the East African Community Treaty and other efforts towards common transport policy.

(iii) **Absence of effective monitoring mechanism at EAC level:** At EAC level there is absence of effective monitoring and enforcement mechanisms to ensure adherence to agreed matters and timetables. This is mainly due to the fact that the organisation is small comparing with the responsibilities that are required to be performed and achieved according to EAC treaty.

(iv) **Lack of well structured financing sources :** It is generally recognized that inadequate financing is one of the main barriers to Africa's integration. The past tendency has been to focus more on "soft issue" reforms and less on infrastructure. Unless there is a clear legal framework and proper funding mechanism for railway development, it is difficult to realize integration in railway sector. In an era where PPP is a favoured strategy, the economic justification of "missing" links lies in a regional assessment of projects. One of the solutions is to put in place a railway fund. This fund can be used to develop railways. The funds can be established at national level. In Tanzania, a Railway Infrastructure Fund (RIF) is expected to be established by RAHCO and will be funded from concession payments earned by RAHCO as well as from donor funding. Similar funds can be established in other EAC countries and a mechanism can be put in place to 'pool' these funds for projects that are significant for railway integration (i.e. projects that involve more than one member state)..

(v) **Domestic opposition to integration and sovereignty sentiments:** Vested interests opposed to integration could derail progress towards common transport policy. This applies to other government agencies involved in regulation and policy making. Governments may prove unwilling to subordinate immediate national political interests to long-term regional economic goals (which would have had much higher payoffs for long-term national welfare) or to cede essential elements of sovereignty to regional institutions.

(vi) **Differences in laws relating to railways:** In EAC the laws governing railway activities which are uniform include laws relating to:

- procedures for obtaining licences to operate railway services including procedures for hearing or deciding contested applications for licences.
- public services obligations (ensuring that railway services are offered to remote destinations when vital for the local economy).
- regulation of safety including rules in respect of death of, or injury to, passengers or loss or damage to baggage or cargo, rules about the liability of railway operators, etc.

- competition law frameworks and rules regulating direct or indirect financial support to individual companies by the government or government-controlled agencies or companies (state aid) in the railway sector. In 2006, the EAC competition Act was enacted and is expected, among other things, to form a basis for competition law frameworks and rules regulating direct or indirect financial support to individual companies by the government or government-controlled agencies or companies (state aid) in the railway sector among others.

(vii) Different regulatory frameworks and licensing system for railways sub-sector. In Tanzania, there is an industry specific regulatory agency but no such agencies exist in Kenya and Uganda where the regulation is mainly done by responsible ministries. In Kenya, the railway regulatory functions are performed by Kenya Railways Corporation and the Railways Division in the Ministry of Transport is responsible for the Railways Sub-sector and has the following responsibility of developing, reviewing and overseeing enforcement of policies in the rail transport; ensuring development of regulatory framework regarding provision of rail services in the country; overseeing service delivery by Kenya Railways Corporation through enforcement of enabling Acts, policy direction and performance monitoring and evaluation. As far as licensing of new railways operators is concerned, there is no clear legal framework in Kenya. Indeed, section 19 of Kenya Railway Corporation Act does not allow provision of rail transport services by any other entity apart from KRC except when the consent is given by the minister responsible for railways. This means that the licensing of new railways operators can only be done by the minister responsible for railways.

In Tanzania, SUMATRA is the authority responsible for licensing railway operators, for monitoring their behaviour and for ensuring they do not abuse any local monopolies. As such, it has regulatory powers with respect to rail transport. In addition, the SUMATRA Act enables it to establish standards for the terms and conditions of supply of regulated services and to facilitate the resolution of complaints and disputes. It also has powers to modify and terminate licences. The SUMATRA Act specifies an Appeals and Review procedure (section 25 -28), involving members of an external Review Panel, which can review any decisions (other than those concerned with the administrative procedures of the Authority) made by Authority staff or a Division under delegated powers. Grounds for further appeal to the Fair Competition Tribunal are specified in section 28 of the SUMATRA Act. SUMATRA has powers to issue, renew and cancel licences to railway operators. In Tanzania, there is a clear and comprehensive licensing system which is backed by legislative provisions.

(viii) Lack of clear division of responsibilities between EAC and Member States:

The area of EAC competency is very wide in terms of railways. As pointed out above, as far as achieving common market, Article 91 of the EAC treaty provides that, the Member States agreed to:

In this regard, Partner States agreed to:

- adopt common policies for the development of railways and railway transport in the Community;
- make their railways more efficient and competitive through, *inter alia*, autonomous management and improvement of infrastructure;
- adopt common safety rules, regulations and requirements with regard to signs, signals, rolling stock, motive power and related equipment and the transport of dangerous substances;

- adopt measures for the facilitation, harmonisation and rationalisation of railway transport within the Community;
- harmonise and simplify documents required for railway transport within the Community;
- harmonise procedures with respect to the packaging, marking and loading of goods and wagons for railway transport within the Community;
- agree to charge non-discriminatory tariffs in respect of goods transported by railway within the Community;
- consult each other on proposed measures that may affect railway transport within the Community;
- integrate the operations of their railway administrations including the synchronisation of train schedules and the operations of unit trains;
- establish common standards for the construction and maintenance of railway facilities;
- agree on common policies for the manufacture of railway transport equipment and railway facilities;
- agree to allocate space for the storage of goods transported by railway from each other within their goods sheds;
- take measures to facilitate thorough working of trains within the Community;
- facilitate the deployment of railway rolling stock, motive power and related equipment for the conveyance of goods to and from each other without discrimination;
- endeavour to maintain the existing physical facilities of their railways to such standards as will enable the Partner States to operate their own systems within the Community in an efficient manner;
- provide efficient railway transport services among the Partner States on a non-discriminatory basis;
- facilitate joint utilisation of railway facilities including manufacture, maintenance and training facilities to ensure their optimal use; and
- promote co-operation in the fields of research and exchange of information.

Basing on the above, the EAC has wide authority to act on any issue so long as it has the effect of achieving a common market in the railway sub-sector. Since community law is emerging as supranational law, if there is Community legislation on a particular issue, Member States are required to observe. Indeed, under Article 8(1)(c) of EAC treaty, Member States have agreed to 'abstain from any measures likely to jeopardise the implementation of the provisions of the treaty'. The problem will occur where there is no specific Community legislation on a particular issue. Under this situation, Member States may argue that the matter is not within the domain of EAC and this may derail the efforts towards common policy in railways sub-sector.

E: Recommendations for Possible Options and Institutional/Regulatory/Legal Framework for the Implementation of the Railway Master Plan and Specific Programs and Projects

(i) **Adopt uniform approach to international bodies:** To better serve the interests of the EAC, and realize easily the integration in railway sub-sector, it is recommended that the Community's role should be uniform in international organisations such as NEPAD, SADC, COMESA, AU, etc. The bilateral treaties such as the one for TAZARA should also be handled in the context of intended railway integration in EAC. As pointed out above, in order to streamline the legal framework, the role of continental based institutions should be perceived by EAC to be limited to that of co-ordinating regional economic communities' policies. The EAC itself should facilitate regional policy harmonization, observe corridor and national implementation, disseminate best practices and monitor corridor committees. The corridor committees for Northern Corridor, Central Corridor and Southern Corridor should anchor for public-private partnership across two or more countries focussing on elimination of constraints, marketing investment opportunity and improving transit efficiency and monitoring of national implementation. The national governments should develop and implement national policies and enabling frameworks.

(ii) **Adopt comprehensive guidelines for common transport policy:** Comprehensive guidelines for the common transport policy embracing all modes of transport (including railways) should be adopted as soon as possible. Experience in EU has shown that problems relating to transport and the unequal growth of the modes of transport may seriously affect common transport policy. It therefore recommended that a comprehensive and integrated transport policy should be in place. Railway transport policy should be part of the integrated transport policy. The imbalance in the development of individual modes of transport is one of the biggest challenges in achieving common transport policy. Sustainability must be the hallmark of the EAC transport policy.

(iii) **Increase financial efficiency in railways sub-sector:** For the railways to flourish, clear financial objectives and a proper division of responsibilities between the Member States and railways companies are essential. The railways must have a financial structure that allows effective, independent management. Railways companies should be run on a commercial basis.

The guidelines should aim at facilitating the adaptation of the EAC's railways to the needs of the single market and to increase their efficiency, in particular, by concessioning railway operations.

Independence ownership railways infrastructure from the provision of railways transport services means that:

- commercial undertakings must be administered in accordance with the principles which apply to commercial companies;
- Member States must take the measures necessary to ensure that business units relating to the provision of transport services and those for business units relating to the management of railway infrastructure are kept separate;

- Member States must take the measures necessary for the development of their national railway infrastructure and may entrust the management to independent railway undertaking; and
- a non-discriminatory user fee must be charged to railway undertakings which use the infrastructure.

The Consultant is of the view that if the efficiency of railways is increased in a manner stated above, the objective of make their railways more efficient and competitive through, *inter alia*, autonomous management and improvement of infrastructure as provided under Article 91(2)(B) can be achieved.

(iv) Introduce market forces in railways sub-sector: The guidelines should oblige the Member States to progressively open up the rail freight market and, in the long term, international passenger transport service market. The free movement of services under EAC treaty implies granting access rights to rail infrastructure for railway undertakings in the EAC. As a first step, rights of access can be established to the trans-East African rail freight network. In the end, access rights should be opened to whole EAC rail network for international freight services.

The guidelines should aim at opening the market for the whole railway sector, including the railway supply industry and rail freight customers such as rail freight forwarders, logistics integrators and shippers. In fact, this is the requirement under Article 97(3) of the EAC treaty, which provides that 'The Partner States shall not restrict the commercial activities, rights and obligations of a lawfully registered and licensed freight forwarder or clearing agent'. The objective is to enable national railway undertakings that were in the past too focused on the national market to pursue a genuine EAC market strategy.

(v) Take measures to integrate technical standards of national rail systems: According to Article 91(2)(k) of the EAC treaty, one of the necessary measures that need to be taken towards common policy in railway sub-sector is to 'agree on common policies for the manufacture of railway transport equipment and railway facilities' and 'establish common standards for the construction and maintenance of railway facilities'. EAC railways sub-sector has potential for integration due to historical reasons.

In order to align the harmonization efforts in EAC with harmonization efforts for the rest of Africa, the work that has already been done by ARU may form a good starting point in the technical standardization process. The ARU has carried out several studies on the definition of standards and technical specifications or the formulation of recommendations adapted to the conditions of operating in Africa. These studies focused on the following areas:

(a) Unification of gauge – the ARU's recommended railway gauge for rail lines in East and Southern Africa is 1067 mm.

(b) Maintenance and repair standards of Wagons and Coaches - ARU recommends the following standards for maintenance and repair:

- Wagons equipped with friction bearings - 800,000 km or 8 years cycle
- Wagons equipped with rolling bearings – 1,200,000 km or 12 years cycle

(c) The ARU has recommended that networks gradually move away from the vacuum brake system to the more powerful compressed-air brake system.

(d) Coupler types- ARU has adopted the AAR (Association of American Railroads) coupler most widespread in Africa, as its standard coupler. The AAR coupler is the most commonly used coupler in Africa, and provides the highest breaking loads at 200 tons on collision and 150 tons on traction. The ARU recommends all the networks that are yet to use it, to introduce it. With regard to the height of attachment, an estimate of 825 mm between the top of the rail and the axis of plugging was retained. It is a "tropicalized" African coupler, conceived for ARU member networks.

(e) Standards concerning platforms of new lines, railway line maintenance and ballast characteristics - The ARU has proposed the adoption of:

- Rails of 36 kg/m minimum and heavier rails from 45 to 60 kg for the renewal of the railway and the construction of new lines;
- Maximum gradients of 10% for new lines;
- Maximum speeds of 120 km/h for the metric gauge track and 160 km/h for the railway with 1435 mm spacing; and
- Radiuses of curves higher than 300 m for the new lines.

(vi) **Introduce EAC railways licensing system:** As pointed out above, there is no common system for licensing of railways operators. In order to be able to realize integration in railway sector, a long run objective should be free circulation of railways services and undertakings be treated fairly and without discrimination. A common scheme for licences would allow the achievement of both these objectives and would prevent licensing becoming a barrier to entry. This will be in line with Article 91(2)(d) of EAC treaty which requires Member States to 'adopt measures for the facilitation, harmonisation and rationalisation of railway transport within the Community'. In harmonizing licensing system, EAC needs to have something like EU Directive 95/18/EC on licensing of railway undertaking.

The guidelines should therefore provide the criteria applicable to the issue, renewal or amendment of operating licences by Member States to railway undertakings which intends to operate in the EAC. Railway undertakings whose activities are limited exclusively within the boundaries of Member States can be excluded from the scope of the guidelines. The guidelines must designate the body responsible for issuing railway operating licences within a Member State (preferably the regulatory agency). The guidelines may also highlight the major conditions for obtaining a licence such as

- requirement for being a 'railway undertaking';
- requirements relating to good repute, financial fitness, professional competence and cover for civil liability;
- ability to cover their civil liability in the event of accidents;
- the term of the licence and review period;
- circumstances on which the licensing authority may suspend, revoke or amend the operating licence;
- requirement for compliance with provisions of national law unless not compatible with EAC law;
- for railway undertakings which provide international transport services beyond EAC, requirement for respecting the agreements applicable to international rail transport in force in the Member States in which they operate;

The guidelines may also provide that that Member States must put a mechanism to ensure that the licensing authority's decisions are subject to judicial review.

(vii) **Ratify important international conventions and instruments:** As noted above, most EAC member States have not ratified important conventions and instruments. In particular, for the purpose of having benefit of sharing knowledge with other countries and be able to set standards in an easy way, the Consultant recommends that EAC may seek to accede to the Bern Convention on International Railway Transport, 1980. EAC may (i) enter reservations on areas where competence lies with the EAC; (ii) declare that the uniform rules on the validation of technical standards and the approval of railway equipment used in international transport will not apply where these areas are already covered by EAC legislation; and (iii) enter reservation on the right not to apply certain provisions of the Convention.

(viii) **Create Railways Unit at EAC:** The railway industry in EAC is characterized by a lack of international technical regulation. The creation of an integrated rail area entails putting in place monitored common technical regulations. Given the difficulties encountered by Member States in the past, it may be necessary to create a Railways Unit at EAC level. The main objective of the Unit will be to provide the Secretariat and the Member States with technical assistance in order to enhance the level of integration of the EAC rail system.

The Unit will also coordinate the groups of technical experts responsible for finding common solutions on railway safety and will send the draft decisions to the Secretariat, which will approve them once they have been endorsed by the committees of representatives of Member States. The Unit will also facilitate communication between the various competent national authorities.

The main tasks of the Unit will be, among other things, to:

- prepare and propose common safety methods and targets;
- draw on the support of groups of experts in the sector placed under its responsibility;
- consult social partners and organizations representing rail freight customers and passengers at EAC level;
- ensure safety performance is continuously monitored;
- produce a public report every two years; and
- keep a database on railway safety;

The Unit itself may not have decision-making powers, but will put forward proposals to the Secretariat. It will be independent, but work in close collaboration with experts in the area.

(ix) **Give special role to East African Legislative Assembly:** The East African Legislative Assembly should be given special role in overseeing development of common transport policy. Experience in EU has shown that Parliament can play a crucial role in shaping the transport policy through numerous legislative process.

(x) **Strengthen the role of corridor committees:** As pointed out above, the corridor committees for Northern Corridor, Central Corridor and Southern Corridor are supposed to anchor for public-private partnership across two or more countries focussing on elimination of constraints, marketing investment opportunity and improving transit efficiency and monitoring of national implementation. At the beginning, corridor committee may start with exploring PPP options in the following areas:

- Construction of Freight Corridors

- Construction of Logistics parks and warehouses
- Construction of cargo handling at terminals
- Linking railways to ports
- Modernization and upgrading of passenger terminals
- Hospitality and catering
- Commercial Utilization of surplus land where private sector can invest in public utilities like food plazas, cyber café, rest rooms.

(x) Adopt comprehensive guidelines for railways sub-sector to cover, among other things, the following aspects:

(a) Elements of safety: According to Article 91(2)(c) of EAC treaty, one of the measures required to achieve common policy in railways is to 'adopt common safety rules, regulations and requirements with regard to signs, signals, rolling stock, motive power and related equipment and the transport of dangerous substances'.

There are currently different national approaches to railway safety, different targets and different methods applied. Technical standards, the rolling stock and the certification of staff and railway undertakings differ from one Member State to another and have not been adapted to the needs of an integrated EAC rail system.

The guidelines should set out the essential elements of safety systems for infrastructure managers and railway undertakings. The idea is to develop a harmonized approach to safety by:

- harmonizing the regulatory structure in the Member States;
- defining responsibilities between the actors;
- developing common safety targets and common safety methods with a view to greater harmonization of national rules;
- requiring the establishment, in every Member State, of a safety authority and an accident and incident investigating body;
- defining common principles for the management, regulation and supervision of railway safety.
- the mutual recognition of safety certificates delivered in the Member States;
- the establishment of common safety indicators in order to assess that the system complies with the common safety targets and facilitate the monitoring of railway safety performance; and
- the definition of common rules for safety investigations.

The guidelines should oblige Member States to ensure that safety rules are laid down, applied and enforced in an open and non-discriminatory manner, fostering the integration in rail transport system. The safety rules must be published and made available to all infrastructure managers, railway undertakings, applicants for a safety certificate and applicants for a safety authorization in clear language that can be understood by the parties concerned.

The guidelines must provide that in order to be granted access to the railway infrastructure, a railway undertaking must hold a safety certificate which may cover the whole railway network of Member States or only a defined part thereof. The purpose of the safety certificate is to provide evidence that the railway undertaking has established its safety management system. Member States must ensure that train drivers and staff accompanying

the trains, as well as infrastructure managers and their staff performing vital safety tasks have fair and non-discriminatory access to training facilities. The guidelines may also introduce the principle of independent accident investigation.

Safety rules and standards, such as operating rules, signaling rules, requirements on staff and technical requirements applicable to rolling stock have been devised mainly nationally after the collapse of the East African Community in 1977. Under the current system, a variety of bodies deal with safety.

These national safety rules, which are often based on national technical standards, should gradually be replaced by rules based on common standards. The new national rules should be in line with Community legislation and facilitate migration towards a common approach to railway safety. As noted above, the safety elements which need to be harmonized include the following:

Safety certification: In order to be granted access to the railway infrastructure, a railway undertaking must hold a safety certificate. This safety certificate may cover the whole railway network of a Member State or only a defined part thereof.

The fact that national safety certificates differ is an obstacle to the development of the EAC railway system. The ultimate objective is to arrive at the introduction of a single Community certificate. In other words, if a railway undertaking obtains a safety certificate in a Member State, that certificate should be the subject of mutual recognition in another Member State.

The safety certificate should give evidence that the railway undertaking has established its safety management system and is able to comply with the relevant safety standards and rules. For international transport services it should be enough to approve the safety management system in one Member State and give the approval Community validity. Adherence to national laws on the other hands should be subject to additional certification in each Member State.

The safety certificate must be renewed upon application by the railway undertaking at intervals to be set. It must be wholly or partly updated whenever the type or extent of the operation is substantially altered.

A railway undertaking applying for authorization to place rolling stock in service in another Member State will submit a technical file concerning the rolling stock or type of rolling stock to the relevant safety authority, indicating its intended use on the network.

In addition to the safety requirements laid down in the certificate, licensed railway undertakings must comply with national requirements, compatible with Community law and applied in a non-discriminatory manner, relating to health, safety and social conditions, including legal provisions relating to driving time, and the rights of workers and consumers.

An essential aspect of safety is the training and certification of staff, particularly of train drivers. The training covers operating rules, the signaling system, the knowledge of routes and emergency procedures.

National safety authority: Each Member State must establish a safety authority which is independent from railway undertakings, infrastructure managers, applicants for certificates and procurement entities. It will respond promptly to requests and applications,

communicate its requests for information without delay and adopt all its decisions within four months after all requested information has been provided.

The safety authority will carry out all inspections and investigations that are needed for the accomplishment of its tasks and be granted access to all relevant documents and to premises, installations and equipment of infrastructure managers and railway undertakings.

Accident and incident investigations: Serious train accidents, such as derailments and collisions with fatal consequences, occur rarely, but when they do like the accident that occurred in Tanzania in 2002, they attract public interest and the interest of safety professionals.

Criteria governing the independence of the investigating body must be strictly defined so that this body has no link with the various actors of the sector. This body decides whether or not an investigation of such an accident or incident should be undertaken, and determines the extent of investigations and the procedure to be followed. The investigations should be carried out with as much openness as possible, so that all parties can be heard and can share the results. The relevant infrastructure manager and railway undertakings, the safety authority, victims and their relatives, owners of damaged property, manufacturers, emergency services involved and representatives of staff and users should be regularly informed of the investigation and its progress.

Each investigation of an accident or incident will be the subject of reports in a form appropriate to the type and seriousness of the accident or incident and the importance of the investigation findings.

Each Member State must ensure that investigations of accidents and incidents are conducted by a permanent body, which comprises at least one investigator able to perform the function of investigator-in-charge in the event of an accident or incident.

(c) **Infrastructure financing:** According to Article 91(2)(p) of the EACT treaty, common policy in railways should aim at, among other things, providing efficient railway transport services among the Partner States on a non-discriminatory basis. As said above, unless there is a clear legal framework and proper funding mechanism for railway development in EAC, it is difficult to realize integration in railway sector. The recommended solution is to put in place a railway investment fund. The returns on railway infrastructure are generally not sufficient to allow investments to be made purely by the private sector. Public sector investments are also required.

Member States are, therefore, supposed to participate in infrastructure investment financing. An apparent sustainable solution seems to be creation of rail investment fund, in the same fashion as the road fund. The objective of the rail investment fund would be, like the road fund, to finance maintenance and rail infrastructure renewal operations. The sources of the funds could be as follows:

- toll charges paid by the rail operator;
- a percentage of the operator's business turnover for maintenance; and
- contribution from the government budget.

The rail investment fund could be managed by a Joint Management Committee comprising members of the rail company and the infrastructure holding company under the auspices of the regulatory agency.

The railway funds can be established at the national level. In Tanzania, a Railway Infrastructure Fund (RIF) is expected to be established by RAHCO and will be funded from concession payments earned by RAHCO as well as from donor funding. Similar funds can be established in other EAC countries and a mechanism can be put in place to 'pool' these funds for projects that are significant to EAC railway integration. This is in line with Article 87(1) of the EAC treaty which provides that 'The Partner States undertake to co-operate in financing projects jointly in each other's territory, especially those that facilitate integration within the Community'.

(c) Certification of train crews operating locomotives and trains on the EAC's rail network: Article 91(2) (m) of the EAC treaty provides that one measure that needs to be taken to achieve common policy in railways is to 'take measures to facilitate through working of trains within the Community'. In order to address professional concerns for drivers and other staff, in locomotives or trains, who are directly or indirectly involved in driving and whose professional qualifications therefore contribute to rail safety, the guidelines may require certification of train crews. In general, train drivers may be required to have the necessary fitness and qualifications to drive trains and hold the following documents:

- an EAC licence identifying the driver and the authority issuing the certificate and stating the duration of validity. The licence will be the property of the driver and will be issued, on application, to drivers meeting the minimum requirements as regards medical and psychological fitness, basic education and general professional skills;
- a harmonized certificate stating that the holder has received additional training under the railway undertaking's safety management system. The certificate should state the specific requirements of the authorized service for each driver and its validity will therefore be restricted.

The harmonized complementary certificate will authorize holders to drive in one or more of the following categories:

- category A: shunting locomotives and work trains;
- category B: carriage of passengers; and
- category C: carriage of goods.

Drivers holding the licence and the harmonized complementary certificate can drive trains provided that the railway undertaking or the infrastructure manager in charge of the transport operation in question holds a safety certificate.

With regard to the basic training and fitness required of drivers, applicants may be required to meet requirements to be identified including necessary professional qualifications.

The competent authority, i.e. the authority appointed by the Member State to issue the driver's licence after establishing that the applicant meets the necessary requirements, must carry out the following tasks, in a transparent and non-discriminatory fashion:

- respond quickly to requests for information;
- delegate or subcontract certain tasks to third parties, if necessary;
- give reasons for its decisions;
- set up an administrative appeals procedure allowing employers and drivers to request a review of a decision;

- keep a register of all licences issued, expiring, amended, suspended, cancelled or reported lost or destroyed;
- supply information on the status of such licences to the competent authorities of the other Member States, the railway agency or any employer of drivers who wishes to check certain particulars;
- ensure that all tasks associated with training, assessment of skills, updating of licences and complementary certificates are continuously monitored;
- verify at all times, on board trains operating in its area of jurisdiction, that the driving personnel are in possession of the documents issued pursuant to the guidelines; and
- carry out administrative enquiries regarding compliance with the guidelines by drivers, railway undertakings, infrastructure managers, assessors and training centres pursuing their activities in their areas of jurisdiction.

The railway undertakings may be required to:

- keep a register of all harmonized complementary certificates issued, expiring, amended, suspended, cancelled or reported lost or destroyed;
- cooperate with the competent authority of the State where they are domiciled in order to interconnect its register with that of the competent authority so as to give it immediate access to the particulars required; and
- supply information on the status of such certificates to the competent authorities of the other Member States.

(d) **Passengers rights:** Article 91(2) (m) of the EAC treaty provides that one measure that needs to be taken to achieve common policy in railways is to 'take measures to facilitate thorough working of trains within the Community'. In order to make the railways more attractive, the passengers' rights need to be better protected - particularly with regard to reimbursement for train delays.

The proposal lays down provisions on minimum requirements for the information to be provided to passengers before, during and after their journey, contract conditions, the liability of railway undertakings in the event of an accident, delays or cancellation of services, and transport conditions for persons with reduced mobility. This may apply to international journeys undertaken within the EAC where the international service is operated by a railway undertaking licensed according to EAC law and international journeys to or from a third country if the EAC or Member State has concluded an agreement on rail transport with that country (such as Tanzania and Zambia on TAZARA).

The guidelines may require the railway undertakings to provide passengers with the following information:

- *Pre-journey information:* all relevant conditions applicable to the contract, time schedules and conditions; any activities likely to disrupt or delay services, and the availability of on board services;
- *Information during the journey:* on board services, delays, main connecting services, and security and safety issues;
- *Information after the journey:* procedures and places for lost luggage, procedures for submission of complaints.

The railway undertaking may be made liable in the event of a passenger's death or bodily injury (physical or mental) if the accident takes place when the passenger is on the train or

while he/she is boarding or leaving the train. In the event of the death of, or bodily injury to, a passenger the railway undertaking is liable for the total or partial loss of or damage to personal effects carried by the passenger. The railway undertaking may be made liable for delay, including delay leading to a missed connection, and for cancellation, except where these are the result of exceptional circumstances (weather conditions, natural disasters, acts of war, terrorism). It is also liable for consequential damages.

The passenger has the right to be reimbursed or re-routed when he has missed a connection due to delay or there has been a cancellation of services. The same is being proposed within the aviation sector for denied boarding and cancellation or long delay of flights. In the event of missed connections or cancellations, passengers must be offered a choice between:

- reimbursement of the full cost of the ticket, under the conditions attaching to its purchase, and a return service to the first point of departure at the earliest opportunity, and
- continuation or re-routing, under comparable transport conditions, to the final destination at a later date at the passenger's convenience.

In the event of a delay, a delay leading to a missed connection or a cancellation of service, passengers are entitled to assistance including meals, accommodation, transport and notification of persons.

The guidelines may provide that anyone with reduced mobility has the right to obtain a ticket and a reservation for an international journey. The station manager must provide persons with reduced mobility with assistance in relation to boarding, changing to a corresponding service, and disembarking. Persons with reduced mobility have the right to request assistance from the railway undertaking or tour operator on board or when embarking or disembarking, on condition that they have notified their needs in advance.

The guidelines may provide that railway undertakings must take adequate measures to ensure a high level of security in railway stations and on trains and must cooperate to accomplish and maintain security and prevent its deterioration.

The guidelines may establish a complaint handling mechanism to help passengers. It states to whom complaints can be submitted, what language can be used, who is to respond and within what time limit a response is to be given. Railway undertakings must publish the number of complaints they receive.

(e) Compensation in cases of non-compliance with contractual quality requirements for rail freight services: Article 91(2)(m) of the EAC treaty provides that one measures that needs to be taken to achieve common policy in railways is to 'take measures to facilitate thorough working of trains within the Community'. Poor quality service is currently a major obstacle to the development of rail freight services in the Community. This low quality performance is largely due to the lack of economic and contractual incentives. It is difficult for most rail freight customers to conclude transport contracts on fair and satisfactory terms. A compensation scheme should therefore be established to cover losses and damage to transported goods, delays in delivery and cancellations as well as breaches of any other quality requirements laid down in the transport contract.

Quality requirements for rail freight services must be based on an agreement between the parties, resulting in rights and obligations and taking into account the specific circumstances of the transport contract. The contract must define the following quality requirements:

- agreed hand-over times for goods, wagons or trains between the railway undertaking and the rail freight customer;
- arrival time and compensation for delays;
- compensation in the event of goods being lost or damaged;
- compensation in the event of a train being cancelled by the railway undertaking;
- compensation in the event of a train being cancelled by the rail freight customer; and
- a quality monitoring system defined by the parties.

If the railway undertaking does not meet the contractual quality requirements according to the quality monitoring system defined in the transport contract, it must pay compensation to the rail freight customer. The railway undertaking is therefore responsible for:

- loss of or damage to the goods transported;
- failure to comply with the agreed times of arrival;
- cancellation of trains by the railway undertaking; and
- any other failure to comply with contractual quality requirements defined by mutual agreement between the parties to the transport contract.

If the rail freight customer does not meet the contractual quality requirements according to the quality monitoring system defined in the transport contract, the rail freight customer must pay compensation to the railway undertaking. The rail freight customer is therefore responsible for:

- failure to comply with the agreed hand-over times; and
- cancellation of trains by the rail freight customer.

If loss or damages occur as a result of the arrival time agreed in the transport contract being exceeded, the railway undertaking must pay compensation not exceeding four times the transport price, based on evidence of such losses or damages.

The parties must define in the transport contract, by mutual agreement, the amount of compensation payable in the event of the cancellation of a train by the railway undertaking or by the rail freight customer.

Under the following conditions the compensation scheme does not apply:

- fault of the rail freight customer or the railway undertaking;
- fault of or any other act by a third person;
- force majeure; and
- circumstances that the railway undertaking or the rail freight customer could not avoid.

The contracting railway undertaking, which has accepted goods for transport, is responsible for the transport over the entire route up to arrival, including handling and/or transshipments of the wagons or the trains. The railway undertaking is also liable for its servants and other persons, including infrastructure managers.

(f) Rail transport statistics: Article 91(2)(r) of the EAC treaty provides that one measure that needs to be taken to achieve common policy in railways is to 'promote co-operation in the fields of research and exchange of information'.

The Secretariat requires statistics on freight transport and rail transport passengers in order to ensure the monitoring and development of the common transport policy and the preparation of measures in the field of transport safety. Each Member State must report statistics which relate to rail transport on its national territory. Member States may exclude from the scope of this guideline:

- railway undertakings which operate entirely or mainly within industrial and similar installations; and
- railway undertakings which provide local tourist services.

Member States also have to provide a list of the railway undertakings for which statistics are provided. Although the national authorities (national statistical institutes) are responsible for the coordination and quality control of the statistics, Member States may designate any public or private organization to participate in collecting the data. Different sources (surveys, administrative data, etc.) may be used in any combination to obtain the required statistics.

F. Changes to National Legislation to achieve Harmonisation

We believe that the domestic legislation which hinders integration can be amended progressively by requiring member states to harmonise their laws with the measures adopted by the East African Community. Based on the fact that East African Community is promoting supra national law, the main focus should be to set standards and request member states to amend their laws to comply with the adopted standards.

Nevertheless, the Consultant is of the view that as a first key step, member States should be encouraged to adopt a similar regulatory system in the railway sector. This will assist in building common ground. In this regard, the Consultant recommends the following amendments to domestic legislation:

KENYA

- (i) Amendment of Kenya Railways Corporations Act, Cap. 397

In Kenya, the Kenya Railway Corporation Act will need to be amended with a view to creating an independent regulator in the railways sector. Currently, the railway regulatory functions are performed by Kenya Railways Corporation and the Railways Division in the Ministry of Transport is responsible for the Railways Sub-sector and has the responsibility of developing, reviewing and overseeing enforcement of policies in the rail transport; ensuring development of regulatory framework regarding provision of rail services in the country; overseeing service delivery by Kenya Railways Corporation through enforcement of enabling Acts, policy direction and performance monitoring and evaluation.

As far as licensing of new railways operators is concerned, there is no clear legal framework in Kenya. Indeed, section 19 of Kenya Railway Corporation Act does not allow provision of rail transport services by any other entity apart from KRC except when KRC decides to concession, lease or enter into a management contract when the consent is given by the minister responsible for railways.

The proposed amendments for Kenya are three: (i) establishing an independent regulator in the railway sector who will license railway operators and regulate operations operators, safety, competence of safety critical workers, etc; (ii) establishing special licenses for railway operators who intends to operate in member States (East African Railway licenses). In order for this to occur in an orderly fashion, the regulatory agency in Kenya must work jointly with the Railways Unit at the East African Community; and (iii) liberalizing the licensing system to allow other entrants in the market.

(ii) Amendment of Privatization Act, 2005

The Privatization Act, 2005 will also need to be amended to be harmonised with recommendations which will be finally adopted from this study. For example, section 35 of the Privatization Act, 2005 provides that:

'If a privatization would otherwise result in an unregulated monopoly the Commission shall ensure that the agreement to give effect to the privatization provides for the regulation, under the agreement, of the monopoly.'

The concept of regulation by agreement is likely to create confusion with measures that will be taken as the result of this study. Accordingly, we recommend that Privatization Act, 2005 should be amended to ensure that it is consistent with measures adopted as part of the EARMP.

TANZANIA

Amendment of the Surface and Marine Transport Regulatory Authority Act, 2001

In Tanzania, SUMATRA is the authority responsible for licensing railway operators, for monitoring their behaviour and for ensuring they do not abuse any local monopolies. As such, it has regulatory powers with respect to rail transport. In addition, the SUMATRA Act enables it to establish standards for the terms and conditions of supply of regulated services and to facilitate the resolution of complaints and disputes. It also has powers to modify and terminate licences. The SUMATRA Act specifies an Appeals and Review procedure (section 25 -28), involving members of an external Review Panel, which can review any decisions (other than those concerned with the administrative procedures of the Authority) made by Authority staff or a Division under delegated powers. Grounds for further appeal to the Fair Competition Tribunal are specified in section 28 of the SUMATRA Act. SUMATRA has powers to issue, renew and cancel licences to railway operators.

In our view, in Tanzania, there is a clear and comprehensive licensing system which is backed by legislative provisions. The Tanzanian model can be adopted by other East African States. However, the Surface and Marine Transport Regulatory Authority Act, 2001 will need to be amended to establish special licenses for railway operators who intend to operate in member States (East African Railway licenses). Again, for this to occur in an orderly fashion, SUMATRA will need to work jointly with the Railways Unit at the East African Community.

UGANDA

Amendment of Uganda Railways Corporation Act, Cap. 331

The Ugandan railway legislation is substantially similar to Kenyan legislation. The Uganda Railways Corporation Act, Cap. 331 will need to be amended with a view to creating independent regulator in the railways sector.

Like Kenya, three amendments are needed, namely: (i) establishing independent regulator in the railway sector; (ii) establishing special licenses for railway operators who intends to operate in member States (East African Railway licenses); and (iii) liberalizing the licensing system to allow other entrants in the market.

Annex D: Environmental Study

Environmental discussions of various Railway Links considered in the East African Community Railway Master Plan

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1 ENVIRONMENTAL LEGISLATION FOR RAILWAYS

1.1 MEMBER STATE LEGISLATION

Legislation related to railway operations and railway construction projects is not specific in each member states. Railway operations would fall into the scope of ‘industrial’ or ‘transport’ type legislation. The exercise to review all relevant legislation for each member state was not possible; however, a Case study of relevant legislation was undertaken for Tanzania¹ and to some extent, Uganda and Tanzania. The observations indicate that legislation applicable for railway operations are generalized as:

- ❖ Occupational health and safety
- ❖ Hazardous substance, mostly included in Legislation dealing with industrial installations such as factories

The list of some relevant legislation for certain member state is provided in Section 1.1.1, 1.1.2, 1.1.3. There is a general trend fuelled by World Bank IFC encouragement to ratify various international conventions and adapt legislation for regulating industries and sectors such as railways.

Since there is limited degree of specific legislation regulation the railway industry in EAC, the best place to start is to review the broader scope of international conventions to guide the foundation of a path forward to forming an EAC EIA policy that can be suited not just to the railway master plan but to overall EAC projects. A review of the relevant conventions that should be consulted to direct policy level EAC environmental documents are discussed in Section 1.2.

1.1.1 Tanzania

Using Tanzania as a case point², the past decade in parliamentary legislation has been focused on environment, natural resource exploitation (mining, petroleum), land and forestry.

Table 1 Tanzanian Legislation of some relevance to Railway operations

Category	Title	Year	Government Notice
Environ	The National Environment Management Act	2004	GN 20
Industry	Construction Industry Policy	2003	
Forestry	The Forests Act	2002	
Transport	The Surface & Marine Transport Regulatory Authority Act	2001	
Forestry	The Forests (Amendment) Rules	2001	GN 29
Mining	The Mining (Safe Working and Occupational Health) Regulations	1999	GN 219
Mining	The Mining (Environmental Management and Protection) Regulations	1999	GN 218
Land Use	The Village Lands Act	1999	GN 5
Land Use	The Land Act	1999	GN 4
Land Use	National Land Policy. Land ordinate	1999	
Mining	The Mining Act	1998	GN 5
Forestry	National Forestry Policy	1998	
Trade	Tanzania Investment Act	1997	GN 26
Environ	National Environmental Policy	1997	
Agric	Plant Protection Act	1997	GN 13
Admin	The Executive Agencies Act	1997	GN 30

¹ The general trend of new legislation in the member states appears to be associated with mineral exploitation, tourism, and land tenure

² Similar legislation list for the other member states are likely but not available for review for this exercise

Category	Title	Year	Government Notice
Admin	Allocation of Business to Departments and Assignment of Responsibility to Ministers Instrument	1995	GN 489, 720
Wildlife	Marine Parks and Reserves Act	1994	GN 29
Trade	Fair Trade Practices Act	1994	GN 4
Agric	Cultivation of Agricultural Lands (Geita District Council by-laws)	1992	
Trade	Territorial Seas and Exclusive Economic Zone Act	1989	GN 3
Pollution	Fire and Rescue services Act	1985	GN 3
Industry	The Factories (Occupational Health Services) Rules	1985	GN 18
Health	Protection from Radiation Act	1983	GN 5
Environ	National Environment Management Council Act, Government	1983	GN 19
Fisheries	The Fisheries (Explosives, Poison and Water Pollution) Regulation amending regulations 26, 27 ND 28 of Fisheries General regulation of 1973	1982	
Petrol	The Petroleum (Exploration and Production) Act	1981	GN 27
Petrol	The Petroleum (Conservation) Act	1981	GN 18
Health	Pharmaceuticals and Poisons Act	1978	GN 9
Transport	Tanzanian Harbors Authority Act Tanzania Railway Corporation Marine Division. Projects on Lake Victoria are considered under their jurisdiction.	1977	GN 12
Admin	The Constitution of the United Republic of Tanzania	1977	
Pollution	Standards Act Amendment (in written laws miscellaneous amendments).	1975	GN 1, 3
Industry	Tanzania Bureau of Standards Act	1975	GN 3
Wildlife	Wildlife Conservation Act (and amendments)	1974	GN 12, 21
Land Use	Fire inquiry Ordinance, Revised under R.L.	1974	Supp. 66-74
Fisheries	The Fisheries Act	1970	GN 6
Wildlife	The Protected Places and Areas Act	1969	GN 38
Transport	Merchant Shipping Act	1967	GN 43
Pollution	Explosives Regulations, Section 29	1964	
Industry	The Factories Ordinance	1950	GN 1 & 2
Wildlife	National Parks Ordinance	1948	
	Water Policy		
Wildlife	Ngorongoro Conservation Area Ordinance		
Wildlife	Natural Resources Ordinance		
Transport	Inland Water Transport Ordinance, Rules		Supp. 65
Transport	Highways Ordinance		Supp. 58

1.1.2 Kenya

Kenya, on the other hand, has developed a SHE policy and Occupational Health and safety and Environmental Policy for their railway operation.

- ❖ WB/IFC Environmental. Health Safety for Kenya with KRC having their own SHE Policy
- ❖ 2003, Petroleum Act (pending)
- ❖ The Factories and other places of Works Act
- ❖ Occupational Health and Safety Regulatory by the Directorate of Occupational Health and Safety Services
- ❖ Land Policy 2007 (draft)
- ❖ EMCA 1999
- ❖ Forest Act 2005
- ❖ Water Policy 2002
- ❖ Urban Planning Act

- ❖ Environmental Policy (draft).

1.1.3 Uganda

- ❖ 1998, The Land Act
- ❖ 1998, The National Environment (Noise Control Standards) Regulations
- ❖ 1998, The National Environment Standards (Discharge of effluent into water or on land) Regulations
- ❖ 1998, The Air Quality (Pollution Control in the Occupational and Ambient Environment) (Licensing and Emission Standards) Regulations
- ❖ 1999, The National Environment (Waste Management Regulations), No. 52
- ❖ Draft Standards for Soil Pollution, under preparation,

1.2 INTERNATIONAL CONVENTIONS IN REGARDS TO TRANSPORT AND TRANSBOUNDARY MOVEMENT AS WELL AS ENVIRONMENTAL CONSERVATION

Most member states have yet to domesticate all the International Conventions³. In reviewing the EIA legislation there is specific acknowledgement of the convention (with an implied sense that their ratification is ‘wished’) but with limited legal status.⁴ There are extensive conventions on transport, transboundary and waste issues in the general international transport sector. The EAC should definitely take these into consideration when developing their Master Plan.

The list of the most relevant conventions is provided below.

1.2.1 Transboundary and rail transport

- ❖ Convention on the Protection and Use of Transboundary Watercourses and International Lakes. 1992: a). Protocol on Water and Health 1999
- ❖ Convention on Transit Trade of Land-locked States. New York, 8 July 1965.
- ❖ United Nations Convention on the Liability of Operators of Transport Terminals in International Trade. 1991.
- ❖ International Convention to facilitate the crossing of frontiers for passengers and baggage carried by rail. 1952.
- ❖ International Convention to facilitate the crossing of frontiers for goods carried by rail. 1952.
- ❖ European Agreement on Main International Railway Lines (AGC). Geneva, 31 May 1985.
- ❖ United Nations Convention on International Multimodal Transport of Goods. 1980.
- ❖ European Agreement on Important International Combined Transport Lines and Related Installations (AGTC). Geneva, 1 February 1991. a). Protocol 1997.

1.2.2 Hazardous Waste and Pollution

Railways are sources of pollution and contamination due to the use of hydrocarbon fuels as well as the various transport substances. In the KRC audit many environmental issues-concerns were raised about the poor waste handling, emergency response and chronic contamination at fuelling stations.

- ❖ **Basel Convention:** Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal Ratified The main objectives of the convention are the reduction of the production of hazardous waste and the restriction of transboundary movement and disposal of

³ Although Rwanda has created various presidential decree and laws for these conventions. (See Table 2)

⁴ Notwithstanding its accession to various international treaties, Tanzania has not yet enacted legislation giving effect to various treaty provisions. However, in the case of *Transport Equipment Ltd and Nolan versus Valambhia*, the Court of Appeal found that even though an international agreement (to which Tanzania is a party) is not incorporated into Tanzanian law, the government is not absolved of its duty to adhere strictly to its undertakings under that agreement.

such waste. It also aims to ensure that any transboundary movement and disposal of hazardous waste, when allowed, is strictly controlled and takes place in an environmentally sound and responsible way. Locally, draft regulations are in preparation in an effort to control the movement of such waste. a). Amendment Geneva, 1995, b). Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and Their Disposal. 1999

- ❖ **Vienna Convention** for the Protection of the Ozone Layer (1985) and **Montreal Protocol** on substances that deplete the Ozone (1987) (various amendments): Protocol for the Protection of the Ozone Layer The protocol is aimed at ensuring measures to protect the ozone layer. a). Montreal Protocol on Substances that Deplete the Ozone Layer. Montreal, 16 September 1987, b). Amendment London, 29 June 1990, c). Amendment Copenhagen, 25 November 1992, d). Amendment adopted by the Ninth Meeting of the Parties. Montreal, 17 September 1997, e). Amendment Beijing, 3 December 1999
- ❖ MONTREAL International Convention on **Substances that Deplete the Ozone Layer**
- ❖ **KYOTO Protocol** to the Framework Convention on Climate Change
- ❖ **CLC**: International Convention on Civil Liability for Oil Pollution Damage 1969 and Protocol of 1976 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC PROT 1976)
- ❖ **PIC: Rotterdam** Convention on Prior Informed Consent. Consent for certain hazardous chemicals and pesticides in international trade. The convention will ensure obligatory detailed information exchange between countries on hazardous chemicals and pesticides allowing informed decision-making on the national use of such chemicals. It is not yet clear how large the additional administrative burden will be on the government.
- ❖ **POP: Stockholm** Convention on Persistent Organic Pollutants. Convention on the establishment of international procedures agreed by states on commercial transactions of agricultural pesticides and other poisonous products To take international action to minimize risks associated with POP chemicals already identified and proven to pose a threat to the environment and human health through their toxicity and persistence. To further identify additional POPs as candidates for future international action. Enacted Legislation in Tanzania as “Act 3 of 2003, Industrial and Consumer Chemicals Management and Control Act.”
- ❖ Convention on the Transboundary Effects of Industrial Accidents. 1992
- ❖ Convention on Civil Liability for Damage caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels (CRTD) 1. 1989.
- ❖ Convention on Long-range Transboundary Air Pollution. 1979: a). Protocol on long-Term Financing of the Co-operative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants in Europe (EMEP). 1984, b). Protocol on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent. 1985, c). Protocol concerning the Control of Emissions of Nitrogen Oxides or their Transboundary Fluxes. 1988, d). Protocol concerning the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes. 1991, e). Protocol on Further Reduction of Sulphur Emissions. 1994, f). Protocol on Heavy Metals. 1998, g). Protocol on Persistent Organic Pollutants. 1998, h). Protocol to Abate Acidification, Eutrophication and Ground-level Ozone. 1999
- ❖ Geneva Convention Concerning the Protection of Workers against Occupational Hazards in the Working Environment due to Air Pollution, Noise and Vibration

1.2.3 Environmental Conservation

This section provides insight to the various conventions that are relevant to the development of some of the links, since some of the rail network passes through on near environmental important and sensitive areas: such as Serengeti National Park, Selous game reserve, Ruwenzori National. For a complete list of the sensitive Environs and which links affect these areas see Table 4.

- ❖ 1968, African Convention on the conservation of Nature
- ❖ 1972, Stockholm Declaration on the Human Environment

- ❖ 1992, UNCED, Rio Declaration on Environment and Development, Agenda 21
- ❖ **CARTAGENA** protocol on Biosafety to the Convention of Biological Biodiversity
- ❖ **CBD:** Convention on Biological Diversity: The aim of the CBD is to effect international cooperation in the conservation of biological diversity and to promote the sustainable use of living natural resources worldwide. It also aims to bring about the sharing of the benefits arising from the utilization of natural resources.
- ❖ **CITES:** Convention on International Trade in Endangered Species of Wild Flora and Fauna. The main objectives of this convention are the protection of endangered species prominent in international trade through appropriate trade control measures and monitoring the status of such species. This convention has a high profile in Africa as well as internationally.
- ❖ **CMS:** Bonn Convention on the Conservation of Migratory Species of Wild Animals. The convention was a response to the need for nations to cooperate in the conservation of animals that migrate across their borders. These include terrestrial mammals, reptiles, marine species and birds. Special attention is paid to endangered species.
- ❖ Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters. Aarhus, Denmark, 25 June 1998
- ❖ **Jakarta Mandate** on Marine and Coastal Biological Diversity
- ❖ **Lusaka Agreement** on Co-operative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora. Directed at controlling illegal trade in Wildlife and Wildlife products
- ❖ **RAMSAR:** Convention on Wetlands of International importance especially as Waterfowl Habitat: The broad aims of this convention are to stem the loss and to promote wise use of all wetlands.
- ❖ **UNCCD:** United Nations Convention to Combat Desertification, in those countries experiencing serious drought and/or desertification, particularly in Africa.
- ❖ **UNCLOS:** United Nations Law of the Sea Convention. Comprehensive codification of the law of the sea. does not establish any international Programmes and essentially it represents a codification of international law rules for states to observe in marine-related operations.
- ❖ **1972 UNESCO** Convention for the Protection of the World Cultural and Natural Heritage: Convention concerning the protection of the world cultural and natural heritage The convention aims to promote cooperation among nations to protect natural and cultural heritage which is of such outstanding universal value that its conservation is of concern to all people. At present 144 countries are Parties to it.
- ❖ **UNFCCC:** The United Nations Framework Convention on Climate Change was signed by 154 governments in Rio de Janeiro during the United Nations Conference on Environment and Development (UNCED) in June 1992. The convention addresses the threat of global climate change by urging governments to reduce the sources of greenhouse gases. The ultimate objective of the convention is to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous interference with the climate system of the world. Eligible for Global Environment Facility (GEF) as well as financial assistance from industrialized countries. Access to financial, technological and information resources will facilitate meaningful participation by all stakeholder groups in the national climate change policy development process. The energy sector has several Programmes in place to improve the efficiency of the coal-fired thermal-power systems. The convention enhances international recognition and support for these and other commitments towards greenhouse gas control.

1.3 REGIONAL CONVENTIONS OR INITIATIVES

There have also been a number of regional conventions or initiatives that would be relevant to the development and operations of EAC railway network. They include:

- ❖ *Northern Corridor Transit Agreement* (Kenya, Uganda, Rwanda, Burundi and the Democratic Republic of Congo)
- ❖ **Bamako convention** on the ban of the import into Africa and the control of transboundary movement and management of hazardous wastes within Africa (1991)

- ❖ NEPAD New Partnership for African Development among the African union
- ❖ **Partnership Project for the Development of Environmental Laws and Institutions in Africa (PADELIA)**: PADELIA seeks to support the development of environmental law as well as the corresponding national and regional institutions to ensure effective enforcement. Already a Compendium of environmental laws (10 volumes); Compendium of judicial decisions (4 volumes); Handbook on implementation of environmental conventions; Guidelines for compliance by industries; and procedures for harmonization of laws in East Africa⁵.
- ❖ **Lake Victoria Fisheries Organisation** 1994: To regulate and enhance fisheries in Lake Victoria
- ❖ **Lake Victoria Environment Management Programme 1994**: Project for the management of the environment in the Lake Victoria region addressing water quality, land use, wetlands, fisheries and control of water hyacinth
- ❖ **Nile Basin Initiative**. Technical Cooperation Committees for the promotion of resources Development and Environmental Protection of the **Nile Basin** 1992: Promote Basin wide cooperation for the integrated and just development, conservation and use of the Nile Basin water and to determine the equitable entitlement of each state of the Nile Basin (Burundi Incl.)
- ❖ Inter-Government Authority in Development 1986: Regional Forum for conflict Resolution and environment management particularly early warning system and food security.
- ❖ Conference for Ecosystems of Forests Dense and humid in Central Africa (**CEFDHAC**).

Other similar MEA that can be reviewed for examples are:

- ❖ CEC, Transboundary EIA provisions and initiatives in selected regional and multilateral environmental Agreements
- ❖ North American Agreement on Environmental Cooperation between the government of Canada the government of the United Mexican States and the government of the United States of America; Draft North American Agreement on Transboundary Environmental Impact Assessment
- ❖ UN Current Policies, Strategies and aspects of EIA in a transboundary aspect

1.4 ORGANIZATIONS WITH INTERNAL REGULATION OF EIA AND MEA

Most of the EIA and MEA developed to date have been molded from international organization such as the World Bank and UN. The more important guidelines and documents that mold various member states' environmental policies and legislation are listed below:

African Development BANK (AfDB)

- ❖ Environmental Policies, Procedures and Guidelines

European Union (EU)

- ❖ Directive 85/337/EEC

World Bank/IFC

- ❖ OP 4.01 Environmental Assessment,
- ❖ OP 4.04 Natural Habitats,
- ❖ OP 4.09 Pest Management,
- ❖ OP 4.11 Cultural Heritage,
- ❖ OP 4.12 Involuntary Resettlement,
- ❖ OP 4.10 Indigenous People,
- ❖ OP 4.36 Forests,
- ❖ OP 4.37 Safety of Dams,
- OP 7.50 Projects on International Waterways,

⁵ See Appendix For more details of this program

- ❖ OP 7.60 Projects in Disputed Areas.
- ❖ Environmental Assessment Sourcebooks (various)
- ❖ Hazardous Materials Management Guidelines (IFC 2001)
- ❖ Good Practice Note: Addressing the Social Dimensions of Private Sector Projects

WB/IFC EHS Guidelines⁶

- ❖ EHS guidelines for Port and Harbour facilities.
- ❖ EHS guidelines for PCBs.
- ❖ Pollution Prevention and Abatement Handbook, WB Group (1998).
- ❖ EHS guidelines for Rail Transit systems.
- ❖ EHS guidelines for Waste Management Facilities.
- ❖ EHS guidelines for Hazardous Materials Risk Management Plan.
- ❖ EHS guidelines for Hazardous Materials Transportation Plan.

OECD

- ❖ Project Coherence of Environment Assessment and International Bilateral Aid

1.5 ENVIRONMENTAL IMPACT ASSESSMENT AND MULTI LATERAL ENVIRONMENTAL AGREEMENTS (MEA)

EAC is already in the process of looking onto transboundary EIA. With the question to Multi lateral Environmental Agreements, the following documents were considered for templates for the EAC.

- ❖ Memorandum of Understanding between the Republic of Kenya, the united Republic of Tanzania, and the Republic of Uganda for cooperation on Environment Management, 1998
- ❖ Convention on environmental impact assessment in a transboundary context. Espoo, Finland, 25 February 1991
- ❖ Report of the Meeting of the Permanent Secretaries on the Development and Harmonization of Environmental Law on selected topics under the East African Sub-regional Project, Nairobi, 15 April 1998

1.6 HOW THE CONVENTIONS ARE INTEGRATED IN MEMBER STATE POLICIES AND LEGISLATION

Rwanda, as an example from the EAC, has legalized many of the international conventions. This type of action is usually followed by the establishment of an Environmental authority, which, as one of its many jobs, regulates the EIA process in the country. A list of conventions, legalize by Rwanda, is provided in the table as an example below:

Table 2 Various International Conventions Ratified by Rwanda

Convention	Law Code
CBD	Presidential order
UNFCCC	Presidential order
POP	Presidential order
Basel	Presidential order
Montreal	Presidential order
CITES	Presidential order
Cartagen	Law no. 38/2003.
Kyoto	Law No. 36/2003
RAMSAR	Law No. 37/2003
Bonn	Law No. 35/2003

⁶ PICK on WEB

1.7 CONVENTIONS AND SENSITIVE AREAS

Going through the exercise of Environmental rating each link, it became clear that large portions of the links are ‘self-contained’, i.e. inside one member state’s territory. However, the most sensitive sites such as Dar-Mtwara and Arusha-Musoma are too important an issue for the EAC to develop separate EIA procedures. Sensitive area. The links and associated sensitive areas are provided in Table 4.

2 EIA REQUIREMENTS

In the mid to late 1990's most of the member states became active in establishing environment policies, authorities, almost directly due to the 1992 Rio Declaration on Environment and Development, Agenda 21.

However, only recent years did EIA regulations become legally binding. The table below summarizes the EIA requirement for each member state. Until now, while EIA regulations are applicable to all development projects including those in the transport sector, much of the environmental focus is on mining and tourism sectors, with legislation spearheading in the mining sector, in particular for Tanzania.

There are limited shared sensitive or protected environments, among two or more member states⁷. The most shared protected environments are the water bodies bordering more than one country. Animal migrations between Kenya and Tanzania (Maasai Mara and Serengeti; Amboseli and Mkomazi) as well as between Tanzania and Malawi are also shared sensitive environs. This means that MEA are really only required between those states which share the water bodies. They are Lake Victoria, Lake Malawi (Nyasa) and Kagera Basin.

Most of the member states (namely Kenya, Uganda and Tanzania) have based their EIA legislation on international principles and templates such as World Bank and IFC standards. They hold many similarities, with difference mostly in fee and time scheduling for the EIA processes.

Table 3 Comparing EIA regulations among the member states

Comparative Legislation					
Regulation-Convention etc.	Tanzania	Kenya	Uganda	Rwanda	Burundi
Environmental Policy plan	Nat'l Environment Action Plan (NEAP) 1994	Nat'l Environment Action Plan (NEAP) 1994	Nat'l Environment Management Plan (NEMP) & NEAP 1995	not available	Stratégie Nationale de l'Environnement du Burundi no. 100-10 1997
Environmental Act	Environmental Management Act, 2004	EMCA no. 8, 1999	National Environment Statue (NES) No. 4, 1995	Organic Law No. 41, 2005	l'Institut National pour l'Environnement et la Conservation de la Nature, 1989
EIA Authority	NEMC	Sec. 7 of EMCA, NEMA, Ministry	NEMA	Organic Law Art. 65, REMA	INECN no. 100-188
Authority Established	Yes	Yes	Yes	Yes	Yes
EIA Regulatory Framework	Yes, EMA no. 20	pending, 2002	EIA Regulations of 1998	Organic law Chap. 4, limited	Code de l'Environnement de la République du Burundi Decree 1/10
EIA required for Railways	Yes	Yes	Yes	Not stated	

⁷ For example, the more sensitive environs noted to be impacted by various links like Serengeti, Selous, Malagarasi are wholly within Tanzania.

2.1.1 *Burundi*

- ❖ 1989, Ministry of Natural Environments Management, No. 100/10
- ❖ 1989, INECN National Institute for Conservation No. 100/188
- ❖ 2000, Environmental Regulation (Code) Law. No. 1/010)(articles 21-27 deal with EIA)
- ❖ 1985, Forestry Policy
- ❖ 1980, National Parks and reserves Decree
- ❖ 1983, Protection of Cultural heritage

In the Environmental Regulation (Code) Law. No. 1/010, Section III deals with protecting and valuing the natural resources, the first Chapter in the section is on soil and sub soil and notes that construction projects or those of public infrastructure are subject to EIA, as are mines and quarries. Chapter II deals with water, Art 58 specifically mentions waters on the boundaries of the country. Ch. III deals with atmospheric pollution, Cha. IV, forests, Ch. 5 protected areas, natural areas, biodiversity, Section IV deals with protecting the Human Environment, culture, etc. Waste (radioactive waste, industrial waste, etc) is covered, as are toxic and dangerous chemicals, and noise and nuisance vibrations, lights and smells...it ends with a section on penalties to be imposed.

2.1.2 *Kenya*

- ❖ 1994, NEAP; National Environmental Action Plan which provide the basis for Development and Environmental Authority and protection of the environment
- ❖ 1998, Report of the National Environmental Litigation Workshop, Mombasa, Kenya
- ❖ 1998, Report on the National Consensus Building workshop on Management of Toxic Hazardous Chemicals and Draft Regulations on the Management of Non-Hazardous Wastes in Kenya
- ❖ 1999, EMCA No. 8, Environmental Management and Coordination Act set the outline for establishing an authority and rules and regulation for environmental protection including EIA process Section 7 Established the NEMA⁸
- ❖ 1999, Kenya's Framework Environmental Law enacted by Parliament
- ❖ 1999, Report of the Seminar on the Role of Parliamentarians in Environmental Management, Nairobi
- ❖ 2002 (Pending), Draft EIA Guidelines and Administration Procedures , 2002, provide the details of the EIA processes and authority
- ❖ 2002 Water Act
- ❖ 2005 Forest Act

2.1.3 *Rwanda*

Organic Law 04/2005 of 08/04/2005 “Determining the modalities of Protection, Conservation and Promotion of Environment in Rwanda” Mentions all of the major international conventions (Stockholm, Rotterdam, Basel, Montreal, Cartagena, Kyoto, RAMSAR, Bonn, Washington Agreement) and then gives details and definitions ...and statutes (Article 31: ”Every government project or private individual activities cannot be permitted ...if they are contrary to their plan ... , also covers wastes, toxic waste, emissions effecting biodiversity,

⁸ Document in Appendix

The state undertakes to design a general and integrated policy on the env and its protection...much focus is on soil and water protection from pollution, etc. and also protecting catchment areas. “Decentralized entities” must design plans of collecting and treatment of domestic waste, also responsible for collecting and piling domestic waste.

Chapter II deals with establishment of institutions, including Rwanda Environment Management Authority (abbreviated in English as REMA)

The National Fund for Environment in Rwanda, abbreviated as FONERWA in French...

Ch. IV is titled Environmental Impact assessment and gives a description of what one must include, also an explanation of the methods that will be used in monitoring and evaluating the state of the environment before, during activities of project, and after the completion of the project.

Article 69, Ch. IV: The EIA shall be examined and approved by the REMA or any other person given a written authorisation by the Authority. The promoter pays a levy reduced from the operating cost of his or her project excluding the working capital. This tax is determined by the law establishing the National Fund for the Environment. The EIA shall be carried out at the expense of the promoter.

2.1.4 Tanzania

- ❖ 2004, Environmental Management Act⁹
- ❖ 2004, Environmental Management Act (EIA Rules and Regulations) No. 20
- ❖ 1999, National Biodiversity Strategy and Action Plan Final Draft
- ❖ 1997, National Environment Action Plan (1994) & National Environmental Policy
- ❖ National Fisheries Sector Policy and Strategy Statement
- ❖ National Plan of Action to Combat Desertification
- ❖ Poverty Reduction Strategy Paper
- ❖ 1997, The Mineral Policy of Tanzania
- ❖ 2000, The National Energy Policy
- ❖ The National Forest Policy
- ❖ The National Poverty Eradication Strategy
- ❖ The National Tourism Policy of Tanzania.
- ❖ 2003 Tanzania Construction Industry Policy
- ❖ 1974 Water Utilization Act
- ❖ Public Private Partnership Policy (draft)

2.1.5 Uganda

- ❖ 1987, The Investment Code, No. 18
- ❖ 1995, National Environment Management Policy
- ❖ 1995, National Environmental Statues (NES)
- ❖ 1995, National Policy for the Conservation and Management of Wetland Resources
- ❖ 1995, The Water Statues, No. 9

⁹ Document in Appendix

- ❖ 1996, National Environment Action Plan
- ❖ 1996, The Wildlife Statue, No. 14
- ❖ 1997, Guidelines for Environmental Impact Assessment in Uganda, NEMA
- ❖ 1998, The Environmental Impact Assessment Regulations, No. 13
- ❖ 1999, Environmental Audit Guidelines for Uganda, NEMA
- ❖ 2000, The National Environment (Wetlands, Riverbeds and Lake Shore Management) Regulation No. 3

Uganda has been sharing or decentralizing the authority for approval of EIA. Although the final Environmental permit is given by NEMA the District/Municipal Environment Office where the project lies has the initial review and approval of the EIA before sending it off to the NEMA.

2.2 RAILWAY POLICIES

EAC environmental legislation should not re-invent the wheel. Relative to railway operations and construction, the EAC could review and consider becoming party to relevant international conventions, in particular the transport conventions, but as well the environments conventions. This report should serve as a general reference point of which to build on.

The EAC could focus on the following items that could be expended in future development phases:

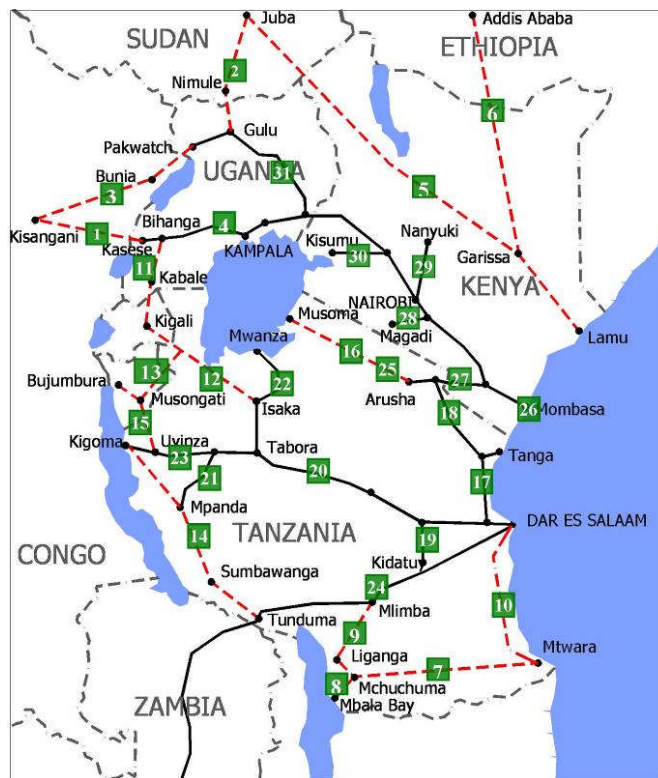
- ❖ Emergency Response plan
- ❖ Resettlement plan
- ❖ Hazardous Waste plans
- ❖ OSHA

3 ENVIRONMENTAL ISSUES OF THE LINKS UNDER STUDY

This chapter provides some insight as to the rating assigned to each link. However, there is difficulty in giving detailed environmental opinions since the ‘links’ are basically arbitrary lines on a map. Not all sensitive areas are necessarily going to be impacted by any railway developed-improvements. Not all sensitive areas are listed, either. **A more detailed exercise would require much more individual follow up for each link**, once a particular line is picked. It is recommended that this occur when feasibility studies are conducted for individual links. In certain cases, e.g. Tanga to Musoma, the possibility of following a common alignment with actual or proposed road links should be pursued when these studies are conducted. Many of our references were based on available maps of “Important Bird Areas” (IBA) as well as member state national park and forest reserve maps.

There were no social or cultural comments provided for the links, other than the most obvious issue with conflicts areas (Northern Uganda, Southern Sudan, Eastern DRC). There are many marginalized tribes in remote areas (Turkana, Maasai, etc.)

Map 1 Railway Links



Link	Location
1	Kasese – Kisanani
2	Gulu – Nimule – Juba
3	Pakwach – Buia – Kisanani
4	Tororo – Kampala – Bihanga – Kasese
5	Lamu – Garissa – Juba
6	Garissa – Addis Ababa
7	Liganga – Mchuchuma – Mtwara
8	Mchuchuma – Mbamba Bay
9	Liganga – Mlimba
10	Dar es Salaam – Mtwara
11	Kigali – Kabale – Bihanga
12	Isaka – Keza – Kigali
13	Keza – Musongati (a branch from, and part of, Isaka – Keza – Kigali Line)
14	Tunduma – Sumbawanga – Mpanda – Kigoma
15	Uvinza – Gihofi – Nyanza – Lac – Bujumbura
16	Arusha – Musoma
17	Dar – Ruvu – Korogwe – Tanga
18	Dar – Ruvu – Korogwe – Moshi – Arusha
19	Dar – Ruvu – Kilosa – Kidatu
20	Dar – Ruvu Kilosa – Dodoma – Singida – Tabora
21	Dar/Tabora Line – Kaliua – Mpanda
22	Dar/Tabora Line – Isaka – Mwanza
23	Dar/Tabora Line – Uvinza – Kigoma
24	Dar – “Kilombero” Ifakara – Chita – Mlimba – Mbeya – Tunduma
25	Arusha – Natron
26	Mombasa MAIN LINE to Toroto
27	Mombasa – Voi – Taveta – Arusha
28	Mombasa – Voi – Konza – Magadi
29	Mombasa – Nanyuki
30	Mombasa – Kisumu (Lake Port)
31	Toroto – Gulu - Pakwach

The numbers assigned to the link lines are arbitrary, and were given only for ease of reference when discussing each link.

Table 4 Sensitive Areas and the links they are associated with

Conventions	Countries	Links	Sensitive Areas
UNESCO World Heritage Site: Old Town Lamu Old town Convention on the Protection, Management and Development of the marine and coastal environment of the Eastern African Region and related protocols (UNEP, Nairobi Convention 1985)	Kenya and Tanzania	Lamu Port (Link 5, 6) and Mtwara (Link 7, 10)	Lamu
UNESCO World Heritage Site and Biosphere Reserve (Serengeti National Park-SENAPA and Ngorongoro Conservation Area-NCA)	Tanzania	Link 16	Serengeti, Ngorongoro,

Conventions	Countries	Links	Sensitive Areas
RAMSAR Conventions	Tanzania	Link 25	Natron Lake Natron
RAMSAR Convention	Tanzania	Link 12, 13	Malagarasi Muyovozi Ecosystem
UNESCO World Heritage Site:	Tanzania	Link 7, 24	Selous Game reserve (largest in Africa)
UNESCO World Heritage Site	Tanzania	Link 10	Ruins of Kilwa Kisiwani and Ruins of Songo Mnara, GROW
UNESCO World Heritage Site	Uganda and Congo	Link 1	Ruwenzori Mountains National Park
UNESCO World Heritage Site	Tanzanian and Malawi	Link 8	Lake Malawi National Park
Bamako Convention: Convention on the Ban of the Import into Africa and the Control of Trans-boundary Movement and Management of Hazardous Wastes within Africa was adopted at the conferences of environment ministers on 30th January 1991 and signed by 51 countries including Tanzania.	All member states	Links 2, 3, 5, 6, 11, 12, 13, 15, 24, 8	Links shared by more than one country
Report on International Legal and Institutional Arrangements for the Management of Lake Malawi/Nyasa	Tanzania and Malawi	Link 8	Lake Malawi National Park
Lake Victoria Convention on (Burundi incl.) Lake Victoria Fisheries Organisation Lake Victoria Environment Management Programme 1994: Nile Basin Initiative.	Tanzania, Uganda and Kenya	Links 4, 30, 16, 22 and possibly 12	Lake Victoria
Kagera Basin Agreement 1997 Forum for cooperation between the Kagera Basin States Convention Objective to ensure that environmental conditions are taken into account in development projects	Tanzania, Uganda, Rwanda and Burundi	Links 12 and 13	Kagera Basin
Inter-Government Authority in Development 1986	Sudan, Eritrea, Djibouti, Ethiopia, Kenya, Uganda and Somalia	Links 5, 6, 31 (war zones and famine)	Disaster areas: famine, war. Etc.

Environmental Ratings of a numbered link were assigned a very loose qualitative value. Since the links are basically arbitrary lines on a map; not reflection of the actual alignment of the links, the environment rating are given as a discussion point. The basic description of each rating point is provided in the table below.

Table 5 Qualitative Environs ratings for links

Rating	Description
Red Flag	indicates major concerns over negative effects
Concern	indicates environmental and possibly social concerns need to be taken into account by mitigation as part of the EIA process
Caution	indicates the need for care with regard to the environment and possibly need to address particular issues raised. Not certain that sensitive areas nearby will be affected directly by the railway
Low	indicates relatively little environmental risk and often category was used with regard to an existing link

Table 6 Summary of Environmental Issues and Legislature Regulator

Link	Development Status	Location	Rating	EIA Regulator	Comment
1	New line proposed	Kasese-Kisangani	RED FLAG	NEMA Uganda especially for Ruwenzori	war zone, Ruwenzori NP
2	New line proposed	Gulu-Nimule-Juba	Concern	NEMA Uganda and Sudan	war zone
3	New line proposed	Pakwach-Bunia-Kisangani	RED FLAG	NEMA Uganda and Congo	major war zone
4	Existing	Tororo-Kampala-Bihanga-Kasese	Concern	NEMA Uganda	
5	New line proposed	Lamu-Garissa-Juba	Concern	NEMA Kenya and Sudan	
6	New line proposed	Garissa-Addis Ababa	Concern	NEMA Kenya and Ethiopia	
7	New line proposed	Liganga-Mchuchuma-Mtwara	RED FLAG	NEMC Tanzania	Selous Game reserve the largest in AFRICA, GROW
8	New line proposed	Mchuchuma-Mbamba Bay	RED FLAG	NEMC Tanzania and Malawi	Lake Nyasa (Malawi)
9	New line proposed	Liganga-Mlimba	caution	NEMC Tanzania	
10	New line proposed	Dar es Salaam-Mtwara	RED FLAG	NEMC Tanzania	GROW
11	New line proposed to join an existing link	Kigali (Rwanda)-Kabale (Uganda)-Bihanga	caution	NEMA Uganda, Rwanda (EAC)	
12	New line proposed	Isaka (Tanzania)-Keza (Tanzania)-Kigali (Rwanda)	caution	NEMC Tanzania and Rwanda (EAC)	
13	New line proposed	Keza (Tanzania)-Musongati (Burundi) (a branch from, and part of, the Isaka-Keza-Kigali Line)	caution	NEMC Tanzania, Burundi (EAC)	
14	New line proposed	Tunduma-Sumbawanga-Mpanda-Kigoma	caution	NEMC Tanzania	large number of reserves, and a National Park, Katavi
15	New line proposed	Uvinza-Gihofi-Nyanza-Lac-Bujumbura	caution	NEMC Tanzania, Burundi (EAC)	
16	New line proposed	Arusha-Musoma	RED FLAG	NEMC Tanzania	Serengeti National Park
17	Existing	Dar-Ruvu-Korogwe-Tanga	caution	NEMC Tanzania	
18	Existing	Dar-Ruvu-Korogwe-Moshi-Arusha	Low	NEMC Tanzania	
19	Existing	Dar-Ruvu-Kilosa-Kidatu	Low	NEMC Tanzania	
20	Existing	Dar-Ruvu-Kilosa-Dodoma-Singida-Tabora	Low	NEMC Tanzania	
21	Existing	Dar/Tabora Line-Kaliua-Mpanda	RED FLAG,	NEMC Tanzania	Malagarasi Wetlands
22	New line proposed	Dar/Tabora Line-Isaka-Mwanza	Low	NEMC Tanzania	
23		Dar/Tabora Line-Uvinza-Kigoma	RED FLAG,	NEMC Tanzania	Malagarasi Wetlands
24	Existing	Dar-“Kilombero” Ifakara-Chita-Mlimba-Mbeya-Tunduma	Caution	NEMC Tanzania	
25	New line proposed	Arusha-Natron	RED FLAG	NEMC Tanzania	Lake Natron
26		Mombasa MAIN LINE to Tororo	Low	NEMA Kenya	
27	Existing (or previously existed)	Mombasa-Voi-Taveta-Arusha	Caution	NEMC Tanzanian and NEMA Kenya	Amboseli and Mkomazi
28	Existing	Mombasa-Voi-Konza-Magadi	Low	NEMA Kenya	
29		Mombasa to Nanyuki	Low	NEMA Kenya	
30	Existing	Mombasa to Kisumu (Lake Port)	Caution	NEMA Kenya	Lake Victoria
31	Existing	Tororo-Gulu-Pakwach	Low	NEMA Uganda	

Kasese – Kisangani

RATING: RED FLAG plus war zone and TECHNICALLY difficult due to extreme terrain and forest

EIA REGULATOR: NEMA, Uganda but mostly United Republic of Congo

ENVIRONMENTAL TEAM COMMENT: There is **Ruwenzori Mountain National Park (World Heritage Site)**. Kabale and Kisangani are also environmentally sensitive; lots of logging by multinational companies of which the rail connection would accelerate. There is a possibility that the line passes near the Okapi Reserve; this is listed as a World Heritage site.

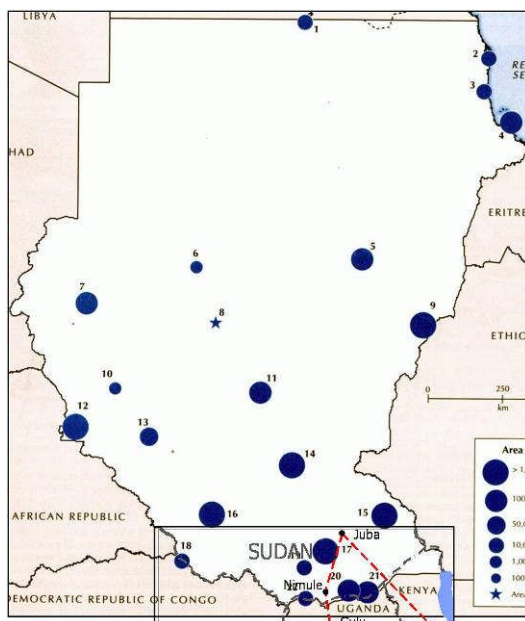
Potential Sites:

1. Kibale National Park
2. Ruwenzori Mountain National Park (Especially famous area for impenetrable forests)
3. Kyambura Wildlife Reserve

SOCIAL: Area of political unrest and warfare. Not to be underestimated.

OTHER INFORMATION: A very geographically challenging area to build a railway, lots of mountains and dense forests.

Gulu – Nimule – Juba



MAP 1 SUDAN MAP with LINK LINES AND PROTECTED AREAS

RATING: Concern, plus war zone

EIA REGULATOR: NEMA, Uganda but mostly Sudan

ENVIRONMENTAL TEAM COMMENT: Sudan's double decades of **civil war** continues between North and South — Africa's longest and bloodiest conflict, killing some two million people. There is major scramble for the oil resource in the region that 'fuels' the continued conflict.

Northern Uganda is recovering from decades of guerrilla warfare (LRA) which has devastated and traumatized both rural communities and wildlife. The WILDCO Project-USAID/Uganda's RFA "Conservation of Biodiversity across Diverse Landscapes in Northern Uganda" is active in mitigating the devastation this conflict posed on the natural resources and local communities. Gulu has suffered major conflict and human suffering, as well as wildlife poaching. Nimule is a National Park located on the southern most border (to the 'left' of the link line). There is also an IBA near Juba; Imatong Mountains. The team could not comment with much authority in regards to Sudan.

Pakwach – Bunia – Kisangani

RATING: RED FLAG Due to war zone

EIA REGULATOR: NEMA, Uganda but mostly United Republic of Congo

ENVIRONMENTAL TEAM COMMENT: This area sensitive due to **civil war and military unrest**; FDLR and ADF guerrilla armies fighting each other. The war that has gripped the Democratic Republic of Congo for the past 18 months (March 2000 but it continues) is taking a devastating toll on great apes. The front lines cut through the heart of the range of Bonobos, the so-called pygmy chimpanzees famous for their language-learning ability in captivity and their complex social behaviour in the wild. Data are scarce and largely anecdotal because most researchers have left the country, but local conservationists have been warning over the past few weeks that both Bonobos and gorillas are severely threatened in parts of the country¹⁰. Bunia is near **Lake Albert**, and Bunia is also the base of the of centre for biodiversity study of **Albertine Rift** so it must be fairly sensitive. In **Kisangani wetlands** 10 035 birds were recorded, representing 7 orders, 12 families, 42 genera and 71 species, of which 48 are migrants. The wetlands of Kisangani region are of considerable importance in bird conservation. There is a possibility that the line passes near the Okapi Reserve; this is listed as a World Heritage site. Little information available on Pakwach.

Tororo-Kampala-Bihanga-Kasese



MAP 2 UGANDA MAP with LINK LINES AND PROTECTED AREAS

RATING: Concern

EIA REGULATOR: NEMA, Uganda

ENVIRONMENTAL TEAM COMMENT: The Bihanga to Kasese link goes through Kibale national Park. already working? Bihanga is very sensitive passing through Kashoha-Kitomi Forest Reserve in Bushenyi District, one of the nation's most sensitive forest reserves. A 12-kilometer section of the road would pass through a "Strict Nature Reserve" (SNR) of the forest reserve. In a SNR, a forest is left in its natural undisturbed

state and no human activity is permitted. Thirteen streams that discharge into Lake George, itself an important ecological system, cross the road. However, it also posed significant ecological risk to one of the most sensitive forest reserves in Uganda and richest in biodiversity. Kashoha-Kitomi Forest Reserve is home to four species of primates namely: *P. troglodytes*, *C. lhoesti*, and *C. guereza Cercopithecus ascanius*. In addition, African elephant (*Loxodonta Africana*) is a species of conservation concern. Three plant species found in the forest: *Uvariadendron magnifica*, *Lecaniodiscus cupanioides*, *Halea stipulata* are listed by International Union For Conservation Of Nature And Natural Resources (IUCN) as endangered while *Guarea cedrata*,

¹⁰ Science 31 March 2000: Vol. 287. no. 5462, pp. 2386 – 2387 DOI: 10.1126/science.287.5462.2386

Entandophragma angolense are threatened species. Also, the forest reserve is a sanctuary to migratory animals from nearby Queen Elizabeth National Park.

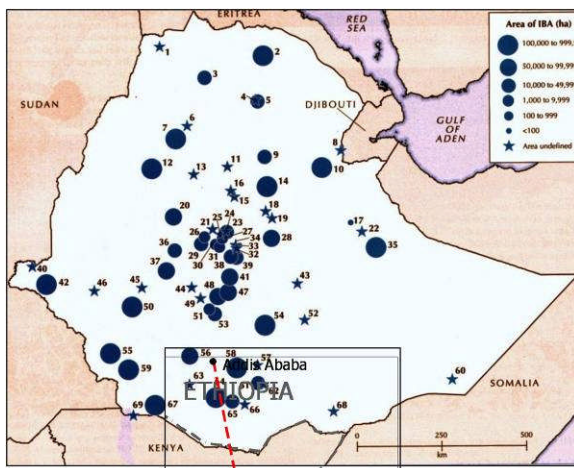
Lamu – Garissa – Juba

RATING: Concern

EIA REGULATOR: NEMA, Kenya and Sudan

ENVIRONMENTAL TEAM COMMENT: Political and civil unrest throughout Southern Sudan. Within Kenya, the line starts near Kiunga Marine National Reserve and Old Town Lamu which is a World Heritage Site and **may** pass through Tana River Forest Primate Reserves. The Tana River National Primate Reserve was gazetted in 1976 to protect the Lower Tana riverine forests and two highly endangered primates, the Mangabey and the Tana River Red Colobus. Other protected sites along the rail alignment are Ol donyo Sabache Mountains, Shaba National Reserve, Meru National Park. Although we would not expect a route in the vicinity of Lake Turkana, it should be noted that this too is an internationally recognized sensitive site. The line may pass close to Garissa Arawale National Reserve in NE Kenya

Garissa – Addis Ababa



MAP 3 ETHIOPIA MAP with LINK LINES AND PROTECTED AREAS

RATING: Concern

EIA REGULATOR: NEMA, Kenya and Ethiopia

ENVIRONMENTAL TEAM COMMENT: Arawale National Reserve is 77 km W of Garissa town. Ethiopia has a number of National Parks and Reserves, we do not know the route of the proposed

line but Ethiopia’s environment generally very sensitive and it would not be seen as positive to pass through these. The rail link may pass by Arero Forest and Yabello Sanctuary.

Liganga – Mchuchuma – Mtwara



MAP 4 TANZANIA MAP with LINK LINES AND PROTECTED AREAS¹¹

RATING: RED FLAG, yet an economic growth agreement AMONG bordering COUNTRIES see this area as IMPORTANT to develop

EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: This line may pass through the Selous Game Reserve (World Heritage Site, MAB) and GROW (Greater Rovuma Wilderness area). WWF has already raised concern over

both the road and the proposed rail link here. It also is not clear how close this would pass to the Niassa Elephant reserve, which abuts on the Selous, and is a Transboundary Reserve linking elephant populations in Tanzania and Mozambique. There may also be concerns over coastal forests in this area, Tanzanian coastal forests are known for high levels of plant endemism.

The **Great Rovuma Wilderness (GROW)** runs from Lake Niassa/Nyasa/Malawi to the Indian Ocean, along the Rovuma River catchment area, and includes parts of both Northern Mozambique and Southern Tanzania. The area includes a number of WWF's ecoregions (Miombo Woodland, Eastern African Coastal Forest, Lake Niassa/Nyasa/Malawi, and Eastern African Marine) and various protected areas (Niassa Reserve in Mozambique, Selous Game Reserve, Lukwika-Lumesule Game Reserve, Msangesi Game and Mnazi Bay Marine Park in Tanzania). Recently, the governments of Tanzania, Mozambique, Malawi and Zambia signed the **Mtwara Development Corridor Agreement** - an agreement, which commits the 4 governments to develop the region.

There are a number of recently completed, ongoing and planned economic and developmental initiatives in the Mtwara corridor/Great Rovuma Wilderness area. These include the Rufiji bridge, the tarring on the Pemba-Lichinga (which cuts GROW in 2) and the possibility of a rail line from Mtwara almost as far as Lake Nyasa/Niassa/Malawi (which again would dissect GROW).

Mchuchuma – Mbamba Bay

RATING: RED FLAG

EIA REGULATOR: NEMC, Tanzania

¹¹ Note this map only shows important INTERNATIONAL areas, there are numerous National Forests and Protected areas other than what is show. See Reference Maps following link discussion.

ENVIRONMENTAL TEAM COMMENT: This link would go to the shores of **Lake Nyasa (Malawi)** which is a National Park in Malawi, this is a rift valley lake with high numbers of fish endemics and is an important tourist attraction. There is to be an upgrade of the port in Malawi, with resulting increase in water traffic and resulting pollution. Steep terrain, little known area, formerly forested, status unclear now

Mlimba to Liganga to Mchuchuma

RATING: Caution

EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: Mlimba is at the edge of Kilombero Valley (wetland), a RAMSAR site. Steep terrain, Liganga to Mchuchuma?

Dar es Salaam – Mtwara

RATING: RED FLAG!

EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: Would go through important coastal forest habitats (these are already highly fragmented and contain some of the highest numbers of endemic species of plants per unit area anywhere in Africa, greater than in Congo); Several IBAs are in this area (47,49, 32, 48, 51), Selous Game Reserve; A recent study by TRAFFIC showed that there is tremendous corruption in the timber industry and that the Mkapa bridge across the Rufiji greatly facilitated an increase in illegal timber felling. A rail link might be expected to have the same effect.

Kigali (Rwanda) -Kabale (Uganda) linking to Bihanga (Uganda) (existing)

RATING: Caution

EIA REGULATOR: NEMA, Uganda and Rwanda

ENVIRONMENTAL TEAM COMMENT: Kabale area is where Mgahinga Gorilla National Park in Uganda is located; Ruwenzori and Bwindi World Heritage Sites.

OTHER INFORMATION: A very geographically challenging area to build a railway, lots of mountains and dense forests.

Isaka-Keza-Kigali

RATING: Caution

EIA REGULATOR: NEMC, Tanzania and Rwanda

ENVIRONMENTAL TEAM COMMENT: There is little information as to biodiversity and conservation in Isaka area, but from the map it looks like the link would pass through Geita, the district in Mwanza Region with the majority of what little forest cover remains in the region. This

would seem to be extremely sensitive. Looks like it might pass near Lake Victoria (very ecologically sensitive, including international concerns) as well as forests of Geita District. There are two Important Bird areas, both wetlands, near Kigali: Nyaborongo wetlands (IBA 4) and Akanyaru wetlands (IBA 5)

OTHER INFORMATION: A very geographically challenging area to build a railway, lots of mountains and dense forests.

Keza (Tanzania)-Musongati (Burundi) (a branch from, and part of, the Isaka-Keza-Kigali Line)

RATING: Caution

EIA REGULATOR: NEMC, Tanzania and Burundi

ENVIRONMENTAL TEAM COMMENT: Uvinza is an old salt production area. Little information available; Ruvubu National Park in Burundi is within a few kilometres of the Kabanga Project area.

OTHER INFORMATION: A very geographically challenging area to build a railway, lots of mountains and dense forests.

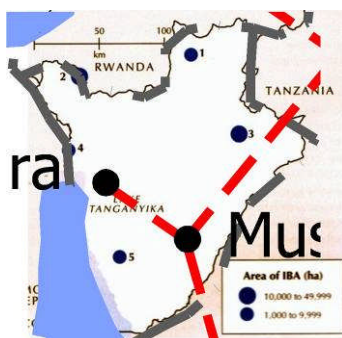
Tunduma – Sumbawanga – Mpanda – Kigoma

RATING: Caution

EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: The Tunduma-Sumbawanga portion will pass near Lake Rukwa, Uwanda Game Reserve and as one gets near Mpanda, Katavi National Park. This National Park has already been negatively affected by poaching and encroachment from large numbers of refugees. To the west of Mpanda is Mahale National Park, a globally important area for chimpanzees. As one moves from Mpanda to Kigoma one goes on the Masito Escarpment (just before getting to Uvinza) **Positive:** might encourage tourism to Kalambo falls, a potential site for tourists for scenic reasons (long free fall falls into Lake Tanganyika); the Zambian side has exploited this and there is considerable archaeological information available on the unique Kalambo falls site. General security issues: large former populations of refugees in Mpanda and surrounding area.

Uvinza – Gihofi – Nyanza – Lac – Bujumbura



MAP 5 BURUNDI MAP with LINK LINES AND PROTECTED AREAS

RATING: Caution

EIA REGULATOR: NEMC, Tanzania and Burundi

ENVIRONMENTAL TEAM COMMENT: Uvinza is within the Malagarasi RAMSAR site; near large refugee settlements.

Towards the Isaka junction, the link passes Ruvubu National Park. In the area, the rail may indirectly impact the Gombe National Park to the west, bordering on Lake Tanganyika. The terminal of this line is close to Lake Tanganyika; if there is any ferry port associated with this terminal there are many environmental implications with ferry transport on this sensitive lake.

Arusha – Musoma (branch for Natron is Link #25)

RATING: MAJOR RED FLAG

EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: Can not stress enough how controversial this link is; through the Serengeti National Park, Lake Natron and other important cultural environs. It is not clear what hazmets might be transported but North Mara gold mine is in the general area. Wildlife, especially larger forms, killed and/or injured by railways in Tanzania¹².

Dar-Ruvu-Korogwe-Tanga

RATING: Caution

EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: Near Dar, Pugu Forest Reserve, Kazimzumbwe Forest Reserve , further, Ruvu Forest Reserve all important for biodiversity; construction crews, etc likely to poach the few existing mammals; forests habitat for Red and Black Elephant Shrew, Four-toed Elephant Shrews, important habitat for coastal forest birds; Ref: Kaolin at Pugu apparently too sandy for current market; Tunnels, bridges; Ruvu floodplain (Ruvu main water supply for Dar) so concerns over diesel, other oil spills during construction.

Dar-Ruvu-Korogwe-Moshi-Arusha

RATING: Positive

EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: It would be useful to have this up and running for passenger service-including tourism. As above; in the dry Pare gap the line would be near Mkomazi National Park, a wildlife stronghold; a world renowned rhino rehabilitation project is in Mkomazi; there would be concerns over increased poaching of wildlife generally. Ref: Coe et al, 1999.

Dar-Ruvu-Kilosa-Kidatu

RATING: Low

¹² There are considerable data on the effects of roads through National Parks in Tanzania (Mikumi, National Park) and Kenya (Tsavo National park) and parks are becoming more isolated (roads may of course also do this by acting as barriers, and by allowing in folks who will alter habitat, engage in poaching, etc. A portion of the railway does pass through Mikumi but we are not aware of any records in the public domain about damage to wildlife from rail traffic.

EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: Kidatu very near Udzungwa National Park; Tanzania's Biodiversity Hotspot. There is a small but important patch of forest that is habitat for an isolated populations of colobus monkeys at Mogombero Forest. But the line will most likely not impact these areas which are on extreme slopes. Kidatu is site for large hydro dam and also nearby, Ilovo Sugar plantation and processing factory. Kilombero valley floodplain, RAMSAR site; also may present engineering difficulties

Dar-Ruvu-Kilosa-Dodoma-Singida-Tabora

RATING: Positive

EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: As long as normal EIA procedures were followed, this upgrade of existing line would not seem to raise major environmental issues.

Dar/Tabora Line-Kaliua -Mpanda

RATING: RED FLAG yet potentially socially positive

EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: Mica was formerly mined at Mpanda, the area is known to be rich for gemstones, etc. and formerly, lead was also extracted. The Mpanda area has huge settlements of refugees. The rail would open up the possibility of reliable transport for people who are largely cut off from the rest of Tanzania.

The link cuts through RAMSAR Site: Malagarasi-Muyovozi Wetlands complex with Moyowosi, Kigosi and Ugalla Game Reserves Project: Sustainable and Integrated Management of the Malagarasi-Muyovozi RAMSAR Site (SIMMORS). Fishing is licensed in the game reserve and game controlled areas, but enforcement is minimal and the proximity of the railway in the central part of the RAMSAR site is stimulating a commercial market and consequent overexploitation of the resource. The RAMSAR site is included in a list of nine heavily exploited or over-exploited fishery areas in Tanzania (Ministry of Water, Energy and Minerals, 1995) .

Dar/Tabora Line-Isaka-Mwanza

RATING: Positive

EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: Possibly mining chemicals (if they come across the lake) moving from Mwanza to Isaka; Fish moving from Mwanza to Isaka. Lake Victoria is ecologically and politically sensitive, Nile Basin, regional cooperative agreements, etc. Commercially, fits in well since Isaka is a "dry port" for lorries. But there is already a new road for much of the cargo.

Dar/Tabora Line –Uvinza-Kigoma

RATING: RED FLAG and Caution

EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: Important passenger transport getting in and out of Kigoma. Between Tabora and Kigoma, major wetland system, Malagarasi; RAMSAR site; Salt mined at Uvinza. Timber from Tabora, dried fish from the wetlands and honey. **The link cuts through RAMSAR Site: Malagarasi-Muyovozi Wetlands complex with Moyowosi, Kigosi and Ugalla Game Reserves .**

Dar-“Kilombero” Ifakara-Chita-Mlimba-Mbeya-Tunduma (TAZARA)

RATING: Caution

EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: At the foot of the Eastern Arc Mountains, one of Tanzania’s Biodiversity hotspots. As a result of expanded rail activities, probable poaching for the pot as well as for skins, etc. Railway would potentially be a mechanism allowing access for unsustainable timber and wildlife harvest in Kilombero valley and in forests

Arusha-Natron

RATING: RED FLAG

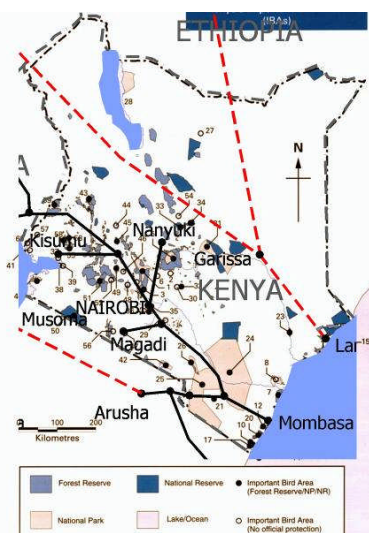
EIA REGULATOR: NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: Lake Natron is an internationally important breeding ground for the Lesser Flamingoes, make the lake a RAMSAR site. The Maasai Culture is also a marginalized tribe in the area. Major wildlife stronghold; RAMSAR site; Landscape Values; greater access for illegal wildlife killing, medicinal plants? Etc There is already a TANROADS road approved from Mto wa Mbu to Loliondo and a proposed one that will run along the Tanzania-Kenya border (this part is of course, extremely controversial, passing through the area used by migrating wildebeest in the Serengeti-Maasai Mara complex. We understand that there is serious opposition to this from some individuals within the Tanzania National Parks system. Natron is also adjacent to the Ngorongoro Crater Conservation Area. One might also envision conflicts with local and migratory pastoralists and their cattle.

Mombasa MAIN LINE to Tororo

RATING: Positive, existing line have environmental issues¹³ which could be addressed in any rehabilitation

EIA REGULATOR: NEMA, Kenya



ENVIRONMENTAL TEAM COMMENT: Much is over existing rail route. The KRC has addressed extensively in various audits that these lines need rehabilitation including the assurance that existing practices leading to contamination of soils and water bodies are curbed. It would be a Negative affect if these lines are not rehabilitated, therefore a positive rating was applied

MAP 6 KENYA MAP with LINK LINES AND PROTECTED AREAS

Mombasa-Voi-Taveta-Arusha

RATING: Caution

EIA REGULATOR: NEMA, Kenya and NEMC, Tanzania

ENVIRONMENTAL TEAM COMMENT: Cargo only when in Tanzania. Link goes by Amboseli National Park, famous for its elephants. As well, the link passes the Mkomazi National Park, gazetted as a nation park in 2007.

Mombasa-Voi-Konza- Magadi

RATING: Low. No Special Flags

EIA REGULATOR: NEMA, Kenya

ENVIRONMENTAL TEAM COMMENT: A mineral rail link.

Mombasa-Nanyuki

RATING: Low. No Special Flags

EIA REGULATOR: NEMA, Kenya

ENVIRONMENTAL TEAM COMMENT: Nanyuki famous for wildlife, may be near Mt. Kenya, a big tourist destination. Mwea National Reserve is close to the railway alignment.

Mombasa-Kisumu

RATING: Caution, a lake port on Lake Victoria

EIA REGULATOR: NEMA, Kenya

ENVIRONMENTAL TEAM COMMENT: Lake Victoria port terminus. Lake Victoria very environmentally sensitive, subject of major regional pacts and cooperative agreements (Nile Basin) and has suffered major extinctions of hundreds of endemic species of fish due to introduction of Nile Perch, but also highly detrimental effects of Water Hyacinth. The lake is related to some IBAs. Kenya has very biodiversity rich forests in the Kakamega area near the Lake.

Tororo-Gulu-Pakwach

RATING: Low

EIA REGULATOR: NEMA, Uganda

ENVIRONMENTAL TEAM COMMENT: This project consist of upgrading the existing 503 km line to Pakwach from Tororo junction on the main Kampala-Nairobi route. As much of this (with the exception of possible curve rectification) is on existing line, normal EIA procedures should follow any upgrade. See comments above for concerns about Gulu and Pakwach. A Chinese firm has been building a road for the Government of Uganda from Olwiyo – Pakwach. Probably a very geographically challenging area to build a railway, lots of mountains and dense forests.

Member State Environmental Legislation reviewed

RWANDA

ORGANIC LAW N° 04/2005 OF 08/04/2005 DETERMINING THE MODALITIES OF PROTECTION, CONSERVATION AND PROMOTION OF ENVIRONMENT IN RWANDA

We, KAGAME Paul, President of the Republic; THE PARLIAMENT HAS ADOPTED, AND WE SANCTION, PROMULGATE THE FOLLOWING ORGANIC LAW, AND ORDER IT BE PUBLISHED IN THE OFFICIAL GAZETTE OF THE REPUBLIC OF RWANDA. **THE PARLIAMENT:** The Chamber of Deputies, in its session of 23 December 2004; The Senate, in its session of **15 February 2005**; Given the Constitution of the Republic of Rwanda of June 4, 2003 as amended to date, especially in its Articles 29, 30, 49, 62, 88, 90, 93, 108, 118, 190, 191 and 201;

Recalling the International **Convention on Biological Diversity** and its Habitat signed in RIO DE JANEIRO in BRAZIL on 5 June 1992, as approved by Presidential Order n° 017/01 of 18 March 1995;

Recalling the **United Nations Framework Convention on Climate Change**, signed in RIO DE JANEIRO in BRAZIL on 5 June 1992, as approved by Presidential Order n° 021/01 of 30 May 1995;

Recalling the **STOCKHOLM Convention on persistent organic pollutants**, signed in STOCKHOLM on 22 May 2001, as approved by Presidential Order n° 78/01 of 8 July 2002;

Recalling the ROTTERDAM International Convention on the **establishment of international procedures agreed by states on commercial transactions of agricultural pesticides and other poisonous products**, signed in ROTTERDAM on 11 September 1998 and in New York from 12 November 1998 to 10 September 1999 as approved by Presidential Order n° 28/01 of 24 August 2003 approving the membership of Rwanda;

Recalling the **BASEL Convention on the Control of Transboundary Movements of Hazardous wastes and their disposal as adopted at BASEL** on 22 March 1989, and approved by Presidential Order n° 29/01 of 24 August 2003 approving the membership of Rwanda;

Recalling the **MONTREAL International Convention on Substances that Deplete the Ozone Layer**, signed in LONDON (1990), COPENHAGEN (1992), MONTREAL (1997), BEIJING (1999), especially in its Article 2 of LONDON amendments, and Article 3 of COPENHAGEN, MONTREAL and BEIJING amendments as approved by Presidential Order n° 30/01 of 24 August 2003 related to the membership of Rwanda

Recalling the **CARTAGENA protocol on Biosafety to the Convention of Biological Biodiversity** signed in NAIROBI from May 15, to 26, 2000 and in NEW YORK from June 5, 2000 to June 4, 2001 as authorised to be ratified by Law n° 38/2003 of 29 December 2003;

Recalling the **KYOTO Protocol** to the Framework Convention on Climate Change adopted at KYOTO on March 6, 1998 as authorised to be ratified by Law n° 36/2003 of 29 December 2003;

Recalling the **RAMSAR International Convention** of February 2, 1971 on Wetlands of International importance, especially as waterfowl habitats as authorised to be ratified by Law n° 37/2003 of 29 December 2003;

Recalling the **BONN Convention** opened for signature on June 23, 1979 on conservation of migratory species of wild animals as authorised to be ratified by Law n° 35/2003 of 29 December 2003 ;

Recalling the **Washington Agreement** of March 3, 1973 on **International Trade in endangered species of Wild Flora and Fauna** as authorised to be ratified by Presidential Order n° 211 of 25 June 1980;

ADOPTS: TITLE ONE: GENERAL PROVISIONS, DEFINITIONS OF SOME TERMS APPLIED, FUNDAMENTAL PRINCIPLES AND THE SCOPE OF THIS ORGANIC LAW

CHAPTER ONE: GENERAL PROVISIONS

Article One: This organic law determines the modalities of protecting, conserving and promoting the environment in Rwanda: This Organic law aims at:

1. conserving the environment, people and their habitats;
2. setting up fundamental principles related to protection of environment, any means that may degrade the environment with the intention of promoting the natural resources, to discourage any hazardous and destructive means;
3. promoting the social welfare of the population considering equal distribution of the existing wealth;
4. considering the durability of the resources with an emphasis especially on equal rights on present and future generations;
5. guarantee to all Rwandans sustainable development which does not harm the environment and the social welfare of the population;
6. setting up strategies of protecting and reducing negative effects on the environment and replacing the degraded environment.

Article 2: The environment in Rwanda constitutes a common national heritage. It is also an integral part of universal heritage.

Article 3: Every person has the duty to protect, conserve and promote environment. The State has a responsibility of protecting, conserving and promoting the environment.

CHAPTER II: DEFINITIONS OF SOME TERMS APPLIED IN THIS ORGANIC LAW

Article 4: In this Organic law: **Environment** is a diversity of things made up of natural and artificial environment. It includes chemical substances, biodiversity as well as socio-economic activities, cultural, aesthetic, and scientific factors likely to have direct or indirect, immediate or long term effects on the development of an area, biodiversity and on human activities.

A. The natural environment

The natural environment is composed of soil and subsoil, water, air, biodiversity, mountains and landscapes, tourist sites and monuments.

1. **Soil** is the surface land that hosts living things like plants, animals and people, any type of buildings as well as all things that exist underground. **Underground** means beneath the soil.
2. **Water** is one of the natural resources of the earth. As it forms, some will be trapped making pools of water, flowing and underground water. Depending on where it is and how it forms, it may change its name in the following manner:
 - a. stagnant water is that of the oceans, lakes, ponds, pools and swamps;
 - b. flowing rain water;
 - c. flowing river and stream water;
 - d. water that penetrates the soil;
 - e. underground water.
3. **Air** is a mixture of gaseous fluid in the atmosphere and which is breathed by biodiversity but which can create effects on their existence and the environment in general. In gases, we find air that we breath or natural gas like methane gas;
4. **Biodiversity** is the variability of the living organisms of all types including man, animals of all species, plants of all types, be it on land or underground, in water as well as in the atmosphere and the interactions among them. Biodiversity means all things that breath. Ecosystem is a particular place on land or in water where biodiversity is found and complement each other; A biotope is a geographical area where all the environment's physical and chemical factors remain more or less constant; Ecology is a study of the different kinds of environment where biodiversity live, reproduce and die, as well as the relationship among them.
5. **Landscape** is a general outlook of an area made of mountains, forests, plainlands, valleys, swamps, lakes, rivers and streams.
 4. a mountain is an elevated part of the earth higher than the plainlands and swamps;

5. plain land is a flat area with little water and less biodiversity;
6. a valley is an area between two mountains characterised by a source of water above the ground or underground;
7. a swamp is a flat area between mountains with much stagnant water and biodiversity, with papyrus, cypress or other vegetation of the same family;
8. a wetland is a place made up of valleys, plainlands and swamps.

6 **Site** is a place selected because of its natural beauty or its special history.

7 **Natural monument** is a place characterised by natural elements.

B. Human environment: Human environment is the organisation of an area relating to his or her social welfare. It is made up of those that are destructive and those that are not.

B.1. Those that are destructive: It is made up of pollutants, waste, hazardous waste, installations and pollution.

1 **pollutants** are any waste disposal whether solid, liquid or gaseous, all wastes, smell, heat, excessive automobile noise, unbearable music noise, echo, radiation or combination of all that are likely to be destructive.

2 **Waste** is any substance whether solid, liquid or gaseous resulting from household activities, from manufacturing plants or any abandoned movable or immovable property, and which may be harmful.

3 **Hazardous wastes** are any substances whether solid, liquid or gaseous that cause a serious harm to human health, security and other biodiversity together with the quality of the environment.

4 **Installation** is any building that is fixed to a certain place or its replacement may cause disruption of the environment regardless of the owner and its value.

5 **Pollution** is the contamination caused by waste, harmful biochemical products derived from human activities that may alter man's habitat and cause adverse effects on the environment like man's social well being, animals, flora and fauna and the world he or she lives in. Pollution may be: **Marine pollution** which is caused by contamination of water by any substance that may change its physical, chemical or biological characteristics which may cause disease to human and animals that use it, aquatic life, plants or which may change the beauty of tourist sites, adjacent valleys and swamps;

Atmospheric pollution is a voluntary or accidental contamination of the atmosphere and the surrounding air, gas, smoke, any particles or substances that may endanger biodiversity, human health and their security or disrupt agricultural activities, disrupt installations or the nature of tourist sites and mountains;

Transboundary pollution is the contamination originating from one country to another.

B. 2. Those that are not destructive: Activities that are aimed at enriching and reducing the adverse effects on the environment like afforestation, preparing entertainment places and applying technology geared at reducing human effects on environment.

Other terms used

1 **Sustainable development** is an effective method of using the environment with an aim of exploiting it to support the present and plan for future generations in consideration of conserving biodiversity, play a role in what constitutes biodiversity and equal distribution of benefits derived from their use and the technology applied on them.

2 **Environment impact assessment** is an evaluation which identifies effects that may be caused by planned human activities or a project.

3 **Evaluation on the environment** is a procedure of assessing and controlling the activities of conserving the environment.

4 **The Environment Impact Assessment Bureau** is a service instituted by competent authority with the responsibility of following up the environment impact assessment.

5 **The Competent authority** is a service or several services with competence provided for by law.

CHAPTER III: FUNDAMENTAL PRINCIPLES

Article 5: The establishment of national policy of protection, conservation and promotion of the environment is the responsibility of the Government of Rwanda. It develops strategies, plans and national program aiming at ensuring the conservation and effective use of environment resources.

Article 6: Every person in Rwanda has a fundamental right to live in a healthy and balanced environment. He or she also has the obligation to contribute individually or collectively to the conservation of natural heritage, historical and socio-cultural activities.

Article 7: Conservation and rational use of environment and natural resources are dependent upon the following principles:

1 The protection principle

The precaution principle is important so as to protect or reduce the disastrous consequences on environment. Precaution or preventive measures result from an environmental evaluation of policies, plans, projects, developmental activities and the social welfare of the population and are aimed at identifying the consequences of certain activities and hinders their commencement in case there arise consequences identified by an environmental impact assessment.

Protection discourages extravagant financial expenses as well as environmental degradation that may cause severe and irreversible problems. The activities considered or suspected to have negative impacts on environment shall not be implemented even if such impacts have not yet been scientifically proved. Scientific uncertainty must not be taken into consideration for the benefit of the destroyers of environment instead it may be used in conservation of the environment.

2 **The principle of sustainability of environment and equal opportunities among generations**

Human beings are central to sustainable development. They are entitled to the right of a healthy and productive life in harmony with nature. However, the right to development must be achieved in consideration of the needs of present and future generations.

3 **The polluter pays principle**

Every person who demonstrates behaviour or activities that cause or may cause adverse effects on environment is punished or is ordered to make restitution. He or she is also ordered to rehabilitate it where possible.

4 **The Principle of Information dissemination and Community sensitisation in conservation and protection of the environment**

Every person has the right to be informed of the state of environment and to take part in the decision taking strategies aimed at protecting the environment.

5 **The Principle of cooperation**

Authorities, international institutions, associations and private individuals are required to protect the environment at all possible levels. In its policy of protecting the environment, the Government of Rwanda always aims at promoting international cooperation.

CHAPTER IV: THE SCOPE OF THIS ORGANIC LAW

Article 8: This organic law is particularly concerned with the following :

9. classified installations as stated in their nomenclature;
10. factories, warehouses, mines, building sites, quarries, underground or above the ground stock pilings;
11. shops and workshops;
12. installations used or which are in responsibility of any natural or legal person or private association, public institution which may cause a danger or accidents either on a commodity, health, as well as security;
13. dumping, discharging and storing substances that may provoke or increase the degradation of the area of placement;
- 14.6 substances, chemical products, a combination of manufactured or natural substances may, depending on their hazardous nature, be dangerous to human health, soil conservation and sub soils, water, flora and fauna, environment in general when they are used or dumped in the natural surroundings.

Installations mentioned in this article can not be opened and the substances mentioned in the same article shall not be used without authorisation issued in accordance with the law upon request by the user.

Those installations shall be declared, even if they do not cause difficulties or accidents, and must comply with the general principles provided for by competent authorities. The installations which are subject to authorization and which may cause major risks (outbreak of fire, explosions, toxic emanations, etc.) are subject to specific regulations.

Article 9: Acts relating to fishing, hunting and capture of animals, mining of valuable minerals and quarry as well as activities carried out in a critical ecosystems are subject to permission or a licence granted by the Minister having them in his or her attributions.

Article 10: State Security installations are subjected to specific rules.

TITLE II: NATURAL ENVIRONMENT AND HUMAN ACTIVITIES

CHAPTER ONE: NATURAL ENVIRONMENT

Section one: Soil and subsoil

Article 11: The soil and subsoil constitute the natural resources to be preserved from all kinds of degradation and they shall be used in a sustainable manner. In that regard, the exploitation of the soil and subsoil shall take into account the public interest related to their conservation.

Article 12: The soil must be used while considering its nature. The use of a place which discourages rotation shall be prevented; and where considered necessary, such a place shall be used as rational as possible.

Article 13: Any soil development and exploitation project for industrial, urban organisation as well as any research project or the one of exploitation of subsoil raw materials is subject to authorisation issued through procedures determined by the order of the Minister concerned.

Article 14: Issuance of authorisation mentioned in article 13 of this organic law is subject to:

- 1 urgency and effectiveness of measures to prevent environmental degradation due to research activities, land use and planned extractions ;
- 2 taking into consideration the interests of the local community by the promoter;
- 3 the obligation to rehabilitate in any possible way in order to restore the beauty of the landscape or the natural systems modified by human activity, in accordance with a pre- established rehabilitation plan approved by the competent authority.

Section 2: Water resources

Article 15: Rivers, artificial lakes, underground water, springs, natural lakes are part of the public domain. Their use is at disposal of every individual in accordance with law.

Article 16: Places where water is drawn for human consumption must be surrounded by a protective fence, as provided for by article 51 of this organic law.

Article 17: The use, management of water and its resources shall not in any way use unfair methods of exploitation that may lead to natural disasters such as floods or drought. Any acts concerned with water resources like watering plants, the use of swamps and wetlands and others, shall always be subject to prior environmental impact assessment.

Article 18: Water from the sewage system as well as any liquid waste must be collected in a treatment plant for purification before being released into a river, a stream, a lake or a pond.

Article 19: Swamps with permanent water shall be given special protection. Such protection shall consider their role and importance in the preservation of the biodiversity.

Section 3: Biodiversity

Article 20: The introduction, importation and exportation of any animal or any plant of any specie in Rwanda are governed by special rules.

Article 21: With exception of provisions of laws that govern National Parks in regard to self defense or in case of necessity, any poaching shall be carried out by an authorised individual.

Article 22: Keeping of wild animals or products from wild animals is subject to permission granted by competent authorities.

Article 23: Hawking, sale, exchange, trading of wild animals require special permission issued by competent authorities.

Article 24: Importation, exportation of wild animals or products of wild animals and wild plants are governed by permission issued by competent authorities in accordance with the provisions of the Convention on International Trade in endangered species of wild fauna and flora.

3.1.1.1.1 Section 4: The atmospheric pressure

Article 25: Classified buildings, vehicles and engine driven machines, commercial, craft or agricultural activities, owned by any individual or an association shall be used in accordance with technical principles established by competent authorities in order to preserve the atmospheric pressure.

Article 26: Any activities that may pollute the atmospheric pressure are governed by an order of the Minister having environment in his or her attributions. Burning of garbage, waste or any other object (tires, plastics, polythene bags and others) shall respect regulations of competent authorities.

Article 27: The use of substances that pollute the atmospheric pressure that deplete the Ozone Layer or that may cause climatic changes is governed by an order of the Minister having environment in his or her attributions.

CHAPTER II: HUMAN ACTIVITIES

Article 28: National land organizational surveys, urban planning or plans to set up grouped housing, master plans and other documents related to national land organizational plans, must take into account environmental conservation in selecting their sitting as well as the location of economic, industrial, residential areas and leisure activities.

Article 29: No competent authority, in accordance with existing laws, can issue permission for construction in cases where such constructions may degrade environment.

Article 30: Public or private construction works such as the construction of roads, dams are subject to environmental impact assessment.

Article 31: Every government project or private individual activities can not be permitted to operate if they are contrary to their plan and shall aim at considering the strategies of conservation of environment as provided for by law.

Article 32: No one is permitted to dispose waste in an inappropriate place, except where it is destroyed from or in a treatment plant and after being approved by competent authorities.

Article 33: Any waste, especially from hospitals, dispensaries and clinics, industries and any other dangerous waste, shall be collected, treated and changed in a manner that does not degrade the environment in order to prevent, eliminate or reduce their adverse effects on human health, natural resources, flora and fauna and on the nature of the environment.

Article 34: Burying toxic waste is only done when there is an authorisation and in accordance with special regulations determined by an order of the Minister having environment in his or her attributions.

Article 35: Removal of waste shall be done in accordance with existing rules and where possible it shall be carried out with an aim of enhancing productivity.

Article 36: All automotive machines shall possess horns in accordance with regulations set by competent authorities and must not emit noise that may disrupt road users and residents.

Article 37: Competent authorities may take a decision aimed at stopping any emission of noise that is harmful to health of biodiversity, disrupts the neighborhood or damages the property.

Article 38: Burning of forests, National Parks as well as reserved areas is governed by law. Burning of mountains, swamps, grazing land, bushes with an aim of agriculture or organizing grazing land is prohibited. Bush burning with an aim of solving particular problems is authorised by the Minister having environment in his or her attributions.

Article 39: Any form of fishing is carried out in accordance with law and it is governed by competent authorities. Traditional or modern fishing is carried out in accordance with authorisation issued by competent administrative authorities and it shall take into account conservation of the environment.

TITLE III: OBLIGATIONS OF THE STATE, THE DECENTRALIZED ENTITIES AND THE POPULATION

CHAPTER ONE: GENERAL OBLIGATIONS

Article 40: Public administration, private institutions, international organizations, associations and individuals are obliged to conserve the environment at all possible levels.

Article 41: Laws and regulations in application shall guarantee the right to everyone to a healthy environment and shall ensure equal opportunities within ecosystems and between the urban and rural areas.

Article 42: All public administrative organs, private institutions and individuals are obliged, in their capacity, to sensitize the population on environmental problems and to incorporate environmental educational programmes into their activity plan.

Article 43: Public institutions and projects or those of private individuals which have in their attributions training, research and information are obliged, through concrete sensitisation programmes to publicize environmental problems and integrate in their activity plan environmental campaign programs.

Article 44: Every person has the right to be informed of the effects human health and the environment may encounter, due to damaged activities or destructive ones as well as the measures taken for protective purposes or restitution of the damaged.

Article 45: The State, the population as well as land developers are obliged to sustainably exploit natural resources in respect of laws relating to environmental conservation.

Article 46: The State and the population are obliged to establish, maintain and manage parklands and green spaces.

Article 47: The treatment of liquid waste is the obligation of the State, the population and all other parties that may perform activities that degrade the environment. Concession regarding treatment of such liquid waste may be granted to any other competent person.

Article 48: Central Government administration and decentralized entities are obliged to prepare a plan of action and to draft emergency plans in all domains in order to protect the environment.

CHAPTER II: SPECIFIC OBLIGATIONS

Section one: Obligations of the State

Article 49: The State undertakes to:

- 1 design a general and integrated policy on the environment and its protection;
- 2 take necessary measures to protect and respect the obligations stipulated in international agreements and conventions which it ratified;
- 3 prohibit any activity carried out on its behalf or in its capacity that may degrade the environment in another country or in regions beyond its national jurisdiction;
- 4 co-operate with other States in taking decisions to control transboundary pollution;
- 5 put in place through concrete policies, sanitary establishments and hygiene management in buildings and public places, on roadsides and in homes.

Article 50: The State is also obliged to:

- 1 initiate a national policy on environment and ensures its implementation;
- 2 protect, conserve and manage properly the environment using appropriate measures;
- 3 establish regulations governing water dams, waste pipe lines, dumping places, and the treatment plants.

Article 51: The State shall establish:

- 1 measures to control soil erosion;
- 2 measures to control soil pollution by chemical substances, fertilizers, medicines and others which are allowed to be used;
- 3 measures to prevent diffusion of soil pollution as well as concrete measures to rehabilitate degraded soils;
- 4 measures to protect and reserve catchment areas around wells from where drinking water is drawn.

Article 52: The State shall identify reserved areas for protection, conservation or rehabilitation of:

- 1 ecosystems;
- 2 forests, woodlands, species of biodiversity and protected zones;
- 3 monuments, historical sites and landscapes;
- 4 water systems and its quality;
- 5 banks and shores, rivers, streams, lakes, plains, valleys and swamps.

Article 53: The competent authorities may, in respect of provisions of article 52 of this organic law:

- 1 prohibit, limit activities or set up regulations that govern incompatibilities with responsibilities assigned thereto;
- 2 set up programs for the rehabilitation of natural sites and monuments;
- 3 approve organizational plans or procedures to facilitate the achievement of the responsibilities assigned to such a zone.

Article 54: The State shall establish the list of following:

- 1 species of animals and plants that shall be protected depending on their role in ecosystems, their scarcity, their aesthetic value, their extinction as well as their economic, cultural and scientific role. The list shall be established by an order of the Minister having environment in his or her attributions;
- 2 historical sites and protected installations and the strategies that may be taken for the protection of national architectural, historical and cultural heritage. Such a list is established by an order of the Minister having tourism in his or her attributions.

Article 55: The State is obliged to establish concrete measures for the better management of water resources, which considers the quality of its sources, and determines means of raising the volume of water and avoiding its wastage.

Article 56: The State establishes appropriate standards for treatment of waste in order to produce more productivity. In that regard, the responsible organs are obliged to:

- 1 promote and disseminate modern technical knowledge;
- 2 establish means of properly recycling the wastes;
- 3 establish appropriate methods of manufacturing and using certain materials in order to facilitate the recovery of elements in their composition.

Article 57: The State is obliged to:

- 1 promote the use of renewable energy;
- 2 to discourage wastage of sources of energy in general and particularly that derived from wood.

Article 58: The State shall take adequate measures to promote environmental education, training and sensitisation in schools curricula at all levels. It may approve the creation of associations for the conservation of the environment.

Article 59: Competent authorities shall coordinate national activities and monitor the implementation of international conventions and agreements relating to environment.

Section 2: Obligations of decentralized entities

Article 60: Generally, decentralized entities are responsible for the implementation of laws, policies, strategies, objectives and programmes relating to protection, conservation and promotion of the environment in Rwanda.

Article 61: In the framework of conservation and protection of the environment, decentralized entities are particularly responsible for:

- 1 ensuring activities related to better management of land, especially controlling soil erosion and tap rain water;
- 2 afforestation, protection and proper management of forests;
- 3 efficient management of rivers, lakes, sources of water and underground water;
- 4 efficient management and effective use of swamps;
- 5 protection and proper management of reserved areas, historical sites, endangered animal and plant species.

Article 62: Decentralized entities shall have the responsibility of designing plans of collecting and treatment of domestic waste. Decentralized entities are also responsible for collecting and piling domestic waste. This is carried out in collaboration with institutions, Districts, Towns and Municipalities or associations and authorised competent individuals. Decentralized entities shall also put much emphasis on the removal of any other waste in any possible way depending on its nature and quantity, supervision and its treatment. Upon the advise of the committees responsible for the protection of environment referred to in article 66 of this organic law, consultative committees of Districts, Towns and Municipalities, shall determine a hygiene and sanitation service fee.

Section 3: Rights and obligations of the population

Article 63: In environmental management, the population has the right to:

- 1 a free access to sufficient information on the environment;
- 2 be given time to express their views on the environment;
- 3 representation in decision making organs on environmental issues;
- 4 training, sensitisation and access to findings of the research on the environment.

Article 64: The population has the obligation to conserve the environment by individual action or through collective activities, associations of the environment, in preparing green spaces and reserved areas and other activities that promote environment.

CHAPTER III: ESTABLISHMENT OF INSTITUTIONS

Article 65: In the framework of implementation of this organic law, there is hereby established:

1 the Rwanda Environment Management Authority abbreviated in English as "REMA", a public establishment with legal personality and shall enjoy financial and administrative autonomy ;

2 the National Fund for Environment in Rwanda, abbreviated as "FONERWA" in French, which is responsible for soliciting and managing financial resources. The organisation, functioning and their responsibilities shall be determined by specific laws.

Article 66: There is hereby established committees responsible for conservation and protecting the environment at the Provincial, City of Kigali, District, Town, Municipality, Sector and the Cell levels. The organisation, functioning and their responsibilities are determined by Prime Minister's Order.

CHAPTER IV: ENVIRONMENTAL IMPACT ASSESSMENT

Article 67: Every project shall be subjected to environmental impact assessment, before obtaining authorisation for its implementation. This applies to programmes and policies that may affect the environment. An order of the Minister having environment in his or her attributions shall determine the list of projects mentioned in this organic law.

Article 68: The environmental impact assessment shall at least indicate the following:

- 1 a brief description of the project and its variants;
- 2 a study of direct or indirect projected effects on a place;
- 3 analysis relating to the initial state of a place;
- 4 measures envisaged to reduce, prevent or compensate for the damage;
- 5 reasons based on in selecting such a place;
- 6 a brief description of points from 1° to 5° of this article;
- 7 an explanation of the methods that will be used in monitoring and evaluating the state of the environment before, during the activities of the project, in using the installation but particularly after completion of the project;
- 8 an estimation of the cost of the measures recommended to prevent, reduce or compensate for the negative effects the project may cause on the environment as well as the measures for examining and controlling the status of the environment.

An order of the Minister having environment in his or her attributions shall specify the details of the provisions of this article.

Article 69: The environmental impact assessment shall be examined and approved by the Rwanda Environmental Management Authority or any other person given a written authorisation by the Authority. The promoter pays a levy reduced from the operating cost of his or her project excluding the working capital . This tax is determined by the law establishing the National Fund for the Environment. The environment impact assessment shall be carried out at the expense of the promoter.

Article 70: An order of the Minister having environment in his or her attributions establishes and revises the list of planned works, activities and projects, and of which the public administration shall not warrant the certificate, approve or authorize without an environmental impact assessment of the project. The environmental impact assessment shall describe direct and indirect consequences on the environment.

TITLE IV: INCENTIVES TO PERSONS THAT CONSERVE THE ENVIRONMENT

Article 71: Any activity aiming at controlling soil erosion and drought, one that aims at afforestation and forestry, using renewable energy in a sustainable manner, using modern cooking stoves and any other means that can be used to protect forestry, may receive support from the National Fund for Environment.

Article 72: The National Fund for Environment may grant support to public services, associations and individuals in case they invest or put in place campaigns or carry out activities intended to fight against causes of pollution or support existing installations so as to match with the environmental quality standards, in accordance with instructions of competent authorities.

Article 73: Industries that import equipment which assist in eliminating or reduce gases like carbon dioxide and chlorofluorocarbons which intoxicate the atmosphere and those which manufacture equipment that reduce the pollution of the environment, are subject to reduction of customs duty on the equipment and for a period to be determined depending on the needs, and it shall be governed by the law concerning taxes and revenues.

Individuals and moral persons that undertake activities that promote environment are subject to reduction on taxable profits in accordance with the law concerning taxes and revenues.

TITLE V: CONTROL, MONITORING AND INSPECTION

Article 74: Without prejudice to other provisions, competent authorities to investigate and prosecute crimes provided for by this organic law and other related laws, are the judicial police officers, employees responsible for hunting, fishing, water, forestry, national parks, protected areas, inspectors of work, customs inspectors, employees of Rwanda Environment Management Authority and other concerned employees determined by an order of the Minister having Justice in his or her attributions.

Article 75: Without prejudice to other provisions, competent persons mentioned in article 74 of this Organic law determined by an order of the Minister having justice in his or her attributions may:

- 1 enter residences and industrial or agricultural installations, depots, warehouses, stores and retail outlets;
- 2 inspect installations, construction, houses, machines, vehicles, devices and products;
- 3 have the right to inspect records relating to the operations of the enterprise;

4 have a sample, measure, take and conduct a required research;

5 suspend activities that appear to degrade the environment for a period not exceeding (30) days.

Article 76: In respect of article 75 of this organic law, the competent persons shall refrain from objecting to and hindering the general investigation, impede any activity that is under inspection when it is not necessary for them to fulfil their obligations. They are also required to adhere to professional secrecy.

Article 77: **In case persons mentioned in Article 74 discover an infringement, they shall prepare minutes of proceedings describing what they saw or seized and indicate where the seized objects were taken. Competent administrative authorities conduct prosecution without prejudice to the functioning of the Prosecution Service.**

Article 78: Appropriate measures for the conservation of the environment shall be taken and standardization and management services for the environment shall ensure strict compliance.

Article 79: Enterprises or operations that excessively pollute environment are subject to inspection by competent experts. The owner of the enterprise or operations meets expenses of such an inspection.

The procedure through which such an inspection is conducted is specified by the order of the Minister having environment in his or her attributions. Findings of such an inspection are transmitted to the competent authorities.

TITLE VI: PREVENTIVE AND PUNITIVE PROVISIONS

CHAPTER ONE: PREVENTIVE PROVISIONS

Article 80: Buildings, agricultural, industrial, commercial or artisan establishments, motor vehicles and other movable properties, that are productive owned either by a person or by a public or a private association, shall be constructed, exploited and used in conformity with existing technical standards approved or indicated by implementation of this organic law.

Article 81: The following are prohibited:

- 1 dumping or disposal of any solid, liquid waste or hazardous gaseous substances in a stream, river, lake and in their surroundings;
- 2 damaging the quality of air and of the surface or underground water;
- 3 non authorised bush burning;
- 4 smoking in public and in any other place where many people meet;
- 5 defecating or urinating in inappropriate place;
- 6 spitting, discarding mucus and other human waste in any place.

Article 82: It is prohibited to dump any substances, in any place, which may:

- 1 destroy sites and buildings of scientific, cultural, tourist or historic interest;
- 2 kill and destroy flora and fauna;
- 3 endanger the health of biodiversity;
- 4 damage the historical sites and touristic beauty at the lakes, rivers and streams.

Article 83: It is prohibited to dump in wetlands:

- 1 waste water, except after treatment in accordance with instructions that govern it;
- 2 any hazardous waste before its treatment.

Any activity that may damage the quality of water is prohibited.

Article 84: It is prohibited to keep or dump waste in a place where it may:

- 1 encourage the breeding of disease carriers;
- 2 disrupt the people and the property.

Article 85: With exception of activities related to protection and conservation of streams, rivers and lakes, an agricultural activities shall respect a distance of ten (10) meters away from the banks of streams and rivers and fifty (50) meters away from the banks of lakes. In such distances there shall be no agricultural activities permitted to be carried out. The order of the Minister having environment in his or her attributions determines a list of rivers mentioned in this article, and specifies other limits to be respected regarding streams.

Article 86: No pastoral activities that require agricultural activities in swamps that shall be carried out without respecting a distance of ten (10) meters away from the banks of rivers and fifty (50) meters away from the lake banks. Cattle kraals shall be built in a distance of sixty (60) meters away from the banks of streams and rivers and two hundred (200) meters away from the lake banks. The location of fish ponds as well as species of fish to be used in fish farming shall require authorisation from the Minister having environment in his or her attributions or any other person the Minister shall delegate.

Article 87: It is prohibited to construct houses in wetlands (rivers, lakes, big or small swamps), in urban or rural areas, to build markets there, a sewage plant, a cemetery and any other buildings that may damage such a place in various ways. All buildings shall be constructed in a distance of at least twenty (20) meters away from the bank of the swamp. If it is considered necessary, construction of buildings intended for the promotion of tourism may be authorised by the Minister having environment in his or her attributions.

It is also prohibited to carry out any activities, except those related to research and science, in reserved swamps.

The order of the Minister having environment in his or her attributions determines the list of plains in which construction is not permitted and the swamps that are reserved according to assessments of the experts.

Article 88: It is prohibited:

- 1 to dump, make flow, dispose of and store any substance in a place where it may cause or facilitate water pollution on the national territory;
- 2 to use natural resources in a degrading and illegal manner ;
- 3 release into the atmosphere poisonous gases, smoke, waste, soot, dust and any other chemical substances in an illegal manner.

Article 89: In accordance with regulations provided for by International Conventions signed and ratified by Rwanda, it is prohibited to dump, eliminate, immerse any chemical substance in water and in any other place where it may:

- 1 threaten general public health and biological resources;
- 2 harm navigation, fishing and others;

3 deteriorate the beauty of a place which is potential for its aquatic tourist interest.

Article 90: It is prohibited:

- 1 to pile waste on unauthorized public places including public lands defined by law;
- 2 to import waste in the country;
- 3 to immerse, burn or eliminate waste in wetlands by any process without respecting rules applied in Rwanda.

Article 91: Acts related to purchase, sale, import, export, transit, store and pile chemicals, diversity of chemicals and other polluting or dangerous substances are prohibited in the whole country. An order of the Prime Minister determines a list of chemicals and other polluting substances that are not permitted.

Article 92: It is prohibited to sell, import, export, store ordinary drugs or chemical substances with intention to sell or distribute even if it is free of charge except authorisation or temporary permission is issued by competent authorities.

An order of Prime Minister shall determine a list of prohibited drugs mentioned in this article.

Article 93: It is prohibited:

- 1 to use explosives, drugs, poisonous chemicals and baits in water that may intoxicate or even kill fish;

2 to use drugs, poisonous chemical substances and baits that may kill wild animals and which may render them unfit for consumption.

Article 94: It is prohibited:

- 1 to kill, injure and capture animals of the endangered species;
- 2 to destroy or damage habitats, larvae, pupae and the young animals of the endangered species;
- 3 to cause death, destroy protected plants, harvest and tear them a part ;
- 4 to transport or sale the remains of a whole or part of an animal as well as plants of the protected species;
- 5 to fell trees in forests and protected areas and in national parks.

CHAPTER II: PUNITIVE SANCTIONS

Article 95: Any one or association that does not carry out environmental impact assessment prior to launching any project that may have harmful effects on the environment is punished by suspension of his or her activities and closure of his or her association and without prejudice to be ordered to rehabilitate the damaged property, the environment, people and the property. Falsification and alteration of documents of environmental impact assessment is punished in the same manner as what is provided for in paragraph one of this article.

Article 96: Any one who, in a manner that is not provided for by the law that governs it, burns, cuts trees or who causes others to do so or kills animals in protected forests and other protected areas and in national parks, is punished by an imprisonment of two (2) months to two (2) years and a fine ranging from three hundred thousand (300,000) to two million (2,000,000) Rwandan francs or one of the two penalties. Accomplices are also liable for the same penalties.

Article 97: Any one who destroys a protected monument or damages a historical site is punished by a fine of one million (1,000,000) to five million (5,000,000) Rwandan francs and an imprisonment ranging from six (6) months to two (2) years or one of the two penalties.

Article 98: Any one who has an establishment that obstructs the functioning of the agents responsible for inspecting protected buildings is punished by an imprisonment ranging from one (1) month to six (6) months and a fine ranging from one million (1,000,000) to five million (5,000,000) Rwandan francs or one of these two penalties. In case of recidivism, the building may be temporarily closed.

Article 99: Any one who uses any protected building without respecting technical instructions determined by the order of the Minister having such a building in his or her attributions, is punished by an imprisonment ranging from one (1) month to one (1) year and a fine ranging from two hundred thousand (200,000) to two million (2,000,000) Rwandan francs or one of these penalties.

Article 100: Any one who persistently use an officially closed protected building, suspended or prohibited is punished by an imprisonment ranging from two (2) months to two (2) years and a fine ranging from five million (5,000,000) to ten million (10,000,000) Rwandan francs or one of these two penalties.

Article 101: Any one who undertakes illegal research or commercial activities of valuable minerals, is punished by a fine ranging from one million (1,000,000) to two million and five hundred thousand (2,500,000) Rwandan francs and an imprisonment ranging from six (6) months to two (2) years or one of these penalties.

Article 102: Any one who dumps in unaccepted manner or without authorisation any waste that is subject to prior authorisation provided for by this organic law is punished by a fine ranging from one million Rwandan francs (1,000,000) to five million (5,000,000) Rwandan francs and an imprisonment ranging from six (6) months to two (2) years or one of these two penalties.

Article 103: Any one who pollutes inland water masses by dumping, spilling or depositing chemicals of any nature that may cause or increase water pollution is punished by a fine ranging from two million (2,000,000) to five million (5,000,000) Rwandan francs and an imprisonment ranging from two (2) months to two (2) years or one of these penalties. In case of recidivism, such a penalty is doubled. The offender may be required to rehabilitate the polluted place. Competent authorities may, in case of negligence, refusal or resistance, proceed to rehabilitate it but at the expense of the offending party.

Article 104: any one who: imports waste on national territory without authorisation; immerses, burns or who employees any other means that may lead to fermentation of waste in wetlands, is punished with an imprisonment ranging from one (1) to five (5) years and a fine of five million (5,000,000) to fifty million (50,000,000) Rwandan francs.

Article 105: Any treatment plant which is authorised to treat waste products but which dumps it in inappropriate place is punished by a fine ranging from one million (1,000,000) to ten million (10,000,000) Rwandan francs. Any permission for collection of waste products in the country may be suspended at any time in case of non respect of contractual obligations.

Article 106: Any one who buys, sells, imports, carries in transit, stores, buries or dumps toxic wastes on national territory, or who signs an agreement authorizing him or her for such activities mentioned from article 92 to article 94 of this organic law, is punished by an imprisonment ranging from ten (10) to twenty (20) years and a fine ranging from fifty million (50,000,000) to two hundred million (200,000,000) Rwandan francs. The court that pronounces such a sentence may also:

- 1 seize all equipment which was used in that activity;

2 order the seizure and removal of the waste products at the expense of the owner of the waste.

Article 107: Any person who deposits, abandons or dumps waste, materials, or who pours sewage in a public or private place, is punished by a fine ranging from ten thousand (10,000) to one hundred thousand (100,000) Rwandan francs except if such a place has been designated by competent authorities. The person is punished by a fine of ten thousand (10,000) Rwandan francs or he or she may be compelled to clean the place where persons have polluted public or private property with human and domestic waste, except if such a place has been designated by the competent authorities.

Article 108: Any one who:

- 1 uses car horns and bicycle bells in highly populated areas, residential areas, around hospitals and schools; without any case of prevention of immediate danger;
- 2 uses excessively and unnecessarily car horns and bicycle bells in city outskirts;
- 3 uses unnecessarily car hootings and bicycle bells at night;
- 4 makes or facilitates in causing noise that may disturb road users and the neighborhood;
- 5 uses engine driven machines with hootings that are not in compliance with instructions determined by competent authorities ;
- 6 causes noise that may be harmful to the health of biodiversity and who excessively and in an intolerable manner disrupts the neighborhood and damages property; is punished by a fine ranging from ten thousand (10,000) to one hundred thousand (100,000) Rwandan francs.

Article 109: Anyone who :

- 1 burns domestic waste, rubbish, wheels and tires and plastic materials;
- 2 owns a car that emits smoke and noxious gases;
- 3 smokes in public and in any other place where many people meet; is punished by a fine ranging from ten thousand (10,000) to fifty thousand (50,000) Rwandan francs and in accordance with instructions determined by competent authorities.

Article 110: Any one who contravenes provisions of article 85, 86 and 87 of this organic law is punished by demolition of his or her building and a punishment ranging from an imprisonment of six (6) months to two (2) years and a fine ranging from two hundred thousand (200,000) to five million (5,000,000) Rwandan francs or one of those penalties.

In case of recidivism, such a penalty is doubled.

The offender may also be required to remove the waste and rehabilitate the damaged area.

Article 111: Mitigating circumstances and adjournment do not apply to offences provided for by this organic law relating to waste

and poisonous chemicals.

Article 112: Attempt to commit an offence and complicity provided for by this organic law are subject to the same penalties as the offence itself.

Article 113: In case penalties provided for by this organic law coincide with penalties provided for by other laws, the heavier penalty shall apply.

Article 114: Without prejudice to stipulations of article 111 of this organic law, the organs responsible for environment may compromise with the offender mentioned in this organic law at anytime before the court renders a decision. Request for a negotiated settlement is submitted to the competent authorities, which shall determine the appropriate amount in accordance with the penalties provided for by this organic law.

Article 115: Investigations of infringements provided for by this organic law shall respect provisions of the law on the rules of criminal procedure.

TITLE VII: TRANSITIONAL AND FINAL PROVISIONS

Article 116: Without prejudice to provisions of article 29 and 30 of the Constitution of the Republic of Rwanda of June 4, 2003, as amended to date, the owners of the existing activities that do not respect the requirements in this organic law are obliged to respect the requirements of this organic law in a period not exceeding two (2) years from the day it comes into force.

Article 117: All previous legal provisions contrary to this organic law are hereby abrogated.

Article 118: This law comes into force on the day of its publication in the Official Gazette of the Republic of Rwanda.

Kigali, on 08/04/2005

The President of the Republic KAGAME Paul (sé)

The Prime Minister MAKUZA Bernard (sé)

The Minister of Land, Environment, Forestry, Water and Mines MUGOREWERA Drocella (sé)

Minister of Local Government, Good Governance, Community Development and Social Affairs MUSONI Protais (sé)

The Minister of Foreign Affairs and Cooperation Dr. MURIGANDE Charles (sé)

The Minister of Agriculture and Animal Resources Dr HABAMENSHI Patrick (sé)

The Minister of Infrastructure BIZIMANA Evariste (sé)

The Minister of Commerce, Industry, Investment Promotion, Tourism and Cooperatives Prof. NSHUTI Manasseh (sé)

The Minister of Justice MUKABAGWIZA Edda (sé)

Seen and sealed with the Seal of the Republic: The Minister of Justice MUKABAGWIZA Edda (ssé)

UGANDA

STATUTORY INSTRUMENTS SUPPLEMENT No. 8 8th May, 1998

STATUTORY INSTRUMENTS SUPPLEMENT to the Uganda Gazette No. 28 Volume XCI dated 8th May, 1998 Printed by UPPC, Entebbe, by Order of Government

THE EIA REGULATIONS, 1998 ARRANGEMENT OF REGULATIONS

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STATUTORY INSTRUMENTS 1998 No. 13. The EIA Regulations, 1998
(Under section 108 of the National Environment Statute, 1995, Statute No. 4 of 1995)

IN EXERCISE of the powers conferred on the Minister responsible for the National Environment Statute, 1995 by Part V and section 108 of the National Environment Statute, 1995 and on the recommendation of the Board, these regulations are made **this 1st day of May, 1998.**

PART I - PRELIMINARY

1. *Citation* These Regulations may be cited as the EIA Regulations, 1998.
 2. *Interpretation* In these regulations unless the context otherwise requires;
 - "Authority" means the National Environment Management Authority established under section 5 of the Statute.
 - "Board" means the Board established under section 9 of the Statute.
 - "developer" has the same meaning as assigned to it under section 2 of the Statute and includes, for the purpose of these regulations, any person who proposes to undertake a new project or to repair, extend or maintain an existing project which falls within the projects provided for in the Third Schedule to the Statute.
 - "Executive Director" means the Executive Director appointed under section 12 of the Statute and includes, for the purpose of these regulations, any person who has been authorized by the Executive Director to act on his behalf or has been delegated to perform the functions of the Authority under subsection (2) of section 7 of the Statute.
 - "economic analysis" means the use of analytical methods which take into account economic, socio-cultural, and environmental issues on a common yardstick in the assessment of projects;
 - "environmental audit" has the same meaning assigned to it under section 2 of the Statute and carried out as provided in section 23 of the Statute.
 - "EIA" has the meaning assigned to it under section 2 of the Statute;
 - "EIS" means the statement described under sections 21 and 22 of the Statute and regulations 13,14, 15 and 16 of these Regulations;
 - "environmental impact study" means the study conducted to determine the possible environmental impacts of a proposed project and measures to mitigate their effects as provided under sections 20, 21, and 22 of the Statute and as described in regulations 10, 11, and 12 of these Regulations;
 - "guidelines" means the guidelines describing the methodology for implementation of EIA requirements adopted by the Authority under sub-section (8) of section 20 of the Statute;
 - "individual person" excludes corporate entities and means the human person;
 - "inspector" means an Inspector appointed under section 80 of the Statute;
 - "lead agency" means any agency on whom the Authority delegates its functions under subsection (2) of section 7 of the Statute;
 - "mass media" for the purpose of these regulations, includes publicly exhibited posters, newspapers, radio, television or other electronic media used for public communication;
 - "mitigation measures" include engineering works, technological improvements, management measures and ways and means of ameliorating losses suffered by individuals and communities including compensation and resettlement;
 - "project brief" has the meaning assigned to it in section 2 of the Statute and constitutes the first stage in the EIA process as described in section 20 of the Statute. Without prejudice to the definition contained in the Statute, reference to a project proposal in any other enactment or guidelines shall be construed as reference to a project brief under the Statute;
 - "proprietary information" has the meaning assigned to it under sections 2 and the protection guaranteed under subsection (3) of section 86 of the Statute;
 - "Statute" means the National Environment Statute 1995 and may, where the context so requires, include any other enactment;
 - "Technical Committee" means the technical committee on EIA established under section 11 of the Statute;
 - "transboundary impacts" means impacts beyond the borders of Uganda.
3. *Application of these regulations*
- (1) These regulations shall apply-
 - to all projects included in the Third Schedule to the Statute;
 - to any major repairs, extensions or routine maintenance of any existing project which is included in the Third Schedule to the Statute.
 - (2) No developer shall implement a project for which EIA is required under the Statute and under these regulations unless the EIA has been concluded in accordance with these regulations.
 - (3) Save as provided for in the Statute and these regulations, a licensing authority under any law in force in Uganda, shall require the production of a certificate of approval of EIA before issuing a licence for any project identified in accordance with sub-regulation (1) of this regulation.
 - (4) An inspector may at all reasonable times, enter on any land, premises, or other facilities to determine whether a project has complied with the requirements for EIA under the Statute.
4. *Functions of the Technical Committee*
- (1) The Technical Committee on EIA shall advise the Board and the Executive Director on technical issues related to the execution of EIAs as required under the Statute, and other relevant laws, and its specific shall include:
 - (a) reviewing and advising on the implementation procedures for EIA and making recommendations to the Board and the Executive Director;
 - reviewing and recommending guidelines to be issued by the Authority to developers;
 - reviewing and advising on the EISs, and audit reports;
 - considering potential conflicts that might arise through competing requirements for environmental resources;
 - recommending priority environmental controls, and management measures to be put in place during implementation of proposed projects;
 - advising on harmonization of EIA policy with sectoral policies on natural resources and environment;
 - advising and recommending mechanisms for ensuring effective communication of environmental concerns associated with development projects in order to promote multi-sectoral and public participation in implementation of environmental policy;
 - participating in public hearings related to adoption or modification of Uganda's EIA process; and
 - advising the Authority on any other issues related to EIAs.
 - (2) The Technical Committee shall prepare and submit to the Board annual reports on its activities.
 - (3) The meetings of the Technical Committee, which shall be held whenever necessary, shall be arranged in consultation with and facilitated by the Authority.
 - (4) The Technical Committee may co-opt any member of the staff of the Authority or any other person whom the technical committee deems necessary for its proper functioning.

Part II - PROJECT BRIEFS

5. Preparation of project briefs

- (1) A developer shall prepare a project brief stating, in a concise manner;
 - (b) the nature of the project in accordance with the categories identified in the Third Schedule of the Statute;
 - the projected area of land, air and water that may be affected;
 - the activities that shall be undertaken during and after the development of the project;
 - the design of the project;
 - the materials that the project shall use, including both construction materials and inputs;
 - the possible products and by-products, including waste generation of the project;
 - the number of people that the project will employ and the economic and social benefits to the local community and the nation in general;
 - the environmental effects of the materials, methods, products and by-products of the project, and how they will be eliminated or mitigated;
 - any other matter which may be required by the Authority.
- (2) In preparing the project brief the developer shall pay particular attention to the issues specified in the First Schedule to these Regulations.

6. Submission of project brief

- (1) The developer shall submit ten copies of the project brief to the Executive Director.
- (2) If the Executive Director deems the project brief to be complete, he may transmit a copy of the project brief to the lead agency for comments **within seven working days** of receiving the project brief.

7. Comments of the lead agency

- (1) The lead agency shall make comments and transmit them to the Executive Director **within fourteen working days** of receiving the project brief.
- (2) Where the lead agency fails to make comments and transmit them to the Executive Director within the period specified in sub-regulation (1), the Executive Director may proceed to consider the project brief.

8. Consideration of the project brief The Executive Director shall consider the project brief and the comments under sub-regulation (1) of regulation 7 made by the lead agency.

9. Approval of the project brief

- (1) If the Executive Director finds that the project will have significant impacts on the environment and that the project brief discloses no sufficient mitigation measures to cope with the anticipated impacts, he shall require that the developer undertakes an environmental impact study.
- (2) If the Executive Director is satisfied that the project will have no significant impact on the environment, or that the project brief discloses sufficient mitigation measures to cope with the anticipated impacts he may approve the project.
- (3) Where the Executive Director approves the project under sub-regulation (2), he shall issue a certificate of approval on behalf of the Authority in the form provided for in the Second Schedule to these regulations.
- (4) Where the Executive Director requires that the developer undertakes an environmental impact study under sub-regulation (1), he shall notify the developer in writing **within a period of twenty-one days from the date of the submission of the project brief** under regulation 6.

PART III- ENVIRONMENTAL IMPACT STUDIES

10. Terms of reference for environmental impact assessment study

- (1) An environmental impact study shall be conducted in accordance with terms of reference developed by the developer in consultation with the Authority and the lead agency.
- (2) The terms of reference shall include all matters required to be included in the EIS provided for in regulation 14, and such other matters as the Executive Director may in writing provide.
- (3) An environmental impact study shall be conducted in accordance with the guidelines adopted by the Authority in consultation with the lead agency under subsection (8) of section 20 of the Statute.

11. Approval of persons to conduct assessment

- (1) The developer, shall on the approval of the terms of reference under regulation 10 of these regulations, submit to Executive Director the names and qualifications of the persons who shall undertake the study.
- (2) The Executive Director may approve or reject the name of any person submitted under sub-regulation (1) of this regulation and require that another name be submitted within the period specified by the Executive Director in writing.
- (3) The persons undertaking the study shall conduct themselves in accordance with the guidelines, an established code of practice or the written directions issued by the Executive Director under sub-regulation (2) of regulation 10.
- (4) The code of practice established under sub-regulation (3) of this regulation shall be published in the *Gazette*.

12. Public participation in making the study

- (1) The developer shall take all measures necessary to seek the views of the people in the communities which may be affected by the project during the process of conducting the study under these regulations.
- (2) In seeking the views of the people under sub-regulation (1), the developer shall:
 - (c) publicize the intended project, its anticipated effects and benefits through the mass media in a language understood by the affected communities for a period of **not less than fourteen days**;
 - (d) after the expiration of the **period of fourteen days**, hold meetings with the affected communities to explain the project and its effects; and
 - (e) ensure that the venues and times of the meetings shall be convenient to
 - (f) the affected persons and shall be agreed with the leaders of local councils.

PART IV - THE EIS

13. EIS

- (1) Where the Executive Director has, under sub-regulation 13 (1) of regulation 9 determined that an environmental impact study be made under these regulations, the developer shall make an EIS on completing the study.
- (2) In making an EIS, the developer shall pay attention to the issues laid down in the First Schedule to these regulations.

14. Contents of the EIS

- (1) Without prejudice to the generality of the terms of reference a description of-
 - (g) the project and of the activities it is likely to generate;
 - (h) the proposed site and reasons for rejecting alternative sites;
 - (i) a description of the potentially affected environment including specific information necessary for identifying and

- assessing the environmental effects of the project;
- (j) the material in-puts into the project and their potential environmental effects;
- (k) an economic analysis of the project
- (l) the technology and processes that shall be used, and a description of alternative technologies and processes, and the reasons for not selecting them;
- (m) the products and by-products of the project;
- (n) the environmental effects of the project including the direct, indirect, cumulative, short-term and long-term effects and possible alternatives;
- (o) the measures proposed for eliminating, minimizing, or mitigating adverse impacts;
- (p) an identification of gaps in knowledge and uncertainties which were encountered in compiling the required information;
- (q) an indication of whether the environment of any other State is likely to be affected and the available alternatives and mitigating measures;
- (r) of how the information provided for in this regulation has been generated;
- (s) such other matters as the Executive Director may consider necessary.

15. Executive Summary of Statement An EIS shall contain an executive summary stating the main findings and the recommendations of the study.

16. Signature of Statement The EIS shall be signed by each of the individual persons making the impact study.

PART V - REVIEW PROCESS OF THE EIS

17. Submission of EIS

- (1) The developer shall submit twenty copies of the EIS to the Executive Director.
- (2) The Executive Director shall maintain a register of EISs submitted under sub-regulation (1) of this regulation.

18. Comments of the lead agency

- (1) The Executive Director shall transmit the EIS to the lead agency and request the lead agency to make comments on the statement.
- (2) The lead agency shall make comments on the EIS and transmit them back to the Executive Director **within thirty working days of receiving the EIS.**
- (3) Where the lead agency fails to make comments within the period specified in sub-regulation (2), the Executive Director may make the decision under regulation 21.
- (4) The lead agency in considering the EIS under this regulation may carry out any other procedures that the Technical Committee may consider necessary.
- (5) The lead agency shall not be required to make comments under sub-regulation (2) where that lead agency is the developer.
- (6) Where the lead agency is the developer, it shall be required to submit its EIS to the Executive Director who shall make comments or invite other lead agencies to make comments.

19. Invitation of general public comments

- (1) The Executive Director shall **within ten days of receiving the comments of the lead agency**, and if he is satisfied that the EIS is complete, invite the general public to make written comments on the EIS.
- (2) The invitation of the general public to make written comments shall be made in a newspaper having national or local circulation and shall be exhibited in the newspaper for such period as the Executive Director considers necessary.
- (3) The invitation under sub-regulation (2) shall state-
 - (t) the nature of the project;
 - (u) the location of the project;
 - (v) the anticipated negative and positive impacts of the project; and
 - (w) the proposed mitigation measures to respond to the negative impacts.
- (4) The comments under sub-regulation (1), shall be received by the Executive Director within a **period of twenty-eight days** from the date of the invitation issued under sub-regulation (2).

20. Invitation for comments from persons specifically affected by project

- (1) The Executive Director shall on receiving the comments of the lead agency under sub-regulation (2) of regulation 18 invite the comments of those persons who are most likely to be affected by the proposed project.
- (2) The invitation of the persons who are most likely to be affected by the project shall be made in a newspaper having local circulation in the area where the project shall be located and on other mass media and through the distribution of the necessary information through lower governments

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established under the Local Government Act, 1997 and shall be in languages understood by the majority of the affected persons.

- (3) The invitation under sub-regulation (2) shall state:
 - (x) the nature of the project;
 - (y) the location of the project;
 - (z) the benefits of the project to the local community ;
 - (aa) the anticipated positive and negative environmental impacts of the project; and
 - (bb) the proposed mitigation measures to respond to the negative impacts.
- (4) The individual or collective written comments of the persons likely to be affected by the project shall be received by the Executive Director **within a period of twenty one days from** the date of the invitation issued under sub-regulation (2).

21. Determination to make a decision or hold a Public Hearing

- (1) The Executive Director shall consider the EIS and all the comments received under regulations 18, 19, and 20 and make the decision under regulation 25 or determine whether a public hearing be held under regulation 22.
- (2) The Executive Director shall call for a public hearing under these regulations where there is a controversy or where the project may have transboundary impacts.

22. The public hearing

- (1) On the written request of the Executive Director, the lead agency shall hold a public hearing on the EIS if:
 - (a) as a result of the comments made under regulations 18, 19 and 20, the Executive Director is of the opinion that a public hearing will enable him to make a fair and just decision;
 - (b) the Executive Director considers it necessary for the protection of the environment and the promotion of good governance.
- (2) The public hearing shall be held within such period as the Executive Director in consultation with the lead agency may determine but which **period shall not be less than thirty days nor more than forty five days of receiving comments under regulations 18, 19 and 20.**

- (3) The public hearing shall be presided over by a suitably qualified person known as a presiding officer, appointed by lead agency in consultation with the Executive Director.
- (4) The person appointed under sub-regulation (3) shall serve on such terms and conditions as the lead agency and the person so appointed may agree.
- (5) Notwithstanding sub-regulation (3), the scope of the public hearing determined in the terms and conditions under sub-regulation (4) shall be commensurate with the nature and size of the project.
- (6) The public hearing shall be conducted at a venue, which shall be convenient and accessible to those persons who are likely to be specifically affected by the project.
- (7) The date and venue of the public hearing shall be advertised through the mass media, so as to bring it to the attention of persons most likely to be affected by the project and those persons making comments under regulation 20.
- (8) On the conclusion of the public hearing, the presiding officer shall make a report of the views presented at the public hearing and make factual findings to the lead agency and the Executive Director **within thirty days from the day on which the public hearing was concluded.**
- (9) The lead agency shall make a report to the Executive Director containing the findings and recommendations from the **public hearing within twenty one days from the day** the public hearing was concluded.

23. Persons eligible to make presentations at Public hearings

- (1) Any person may attend either in person or through a representative and make presentations at a public hearing provided that the presiding officer shall have the right to disallow frivolous and vexatious presentations which lead to the abuse of the hearing.
- (2) The developer shall be given an opportunity to answer to any presentation made at the public hearing and to provide further information relating to the project.
- (3) The Technical Committee shall advise on the procedure for the making of presentations at public hearings under these regulations.

PART VI - DECISION OF THE EXECUTIVE DIRECTOR ON EISS

24. Basis of decision

- (1) In making a decision regarding an EIA under these regulations, the Executive Director shall take into account;
 - (cc) the validity of the predictions made in the EIS under Part V of these regulations;
 - (dd) the comments made under these regulations;
 - (ee) the report of the presiding officer at a public hearing under regulation 22, where applicable;
 - (ff) analysis of the economic and social cultural impacts of the project; and
 - (gg) other factors which the Executive Director considers crucial in the
 - (hh) particular circumstances of the project.
- (2) The Executive Director shall make a decision under this regulation **within less than one hundred and eighty days from the date on which the EIS was submitted under regulation 17.**

22. Decision of the Executive Director

- (1) The Executive Director in taking into account the whole review process may-
 - (a) approve the project or part thereof;
 - (b) require that the project be redesigned including directing that different Technology or an alternative site be chosen,
 - (c) refer back the project or part thereof to the developer where there is Insufficient information for further study or submission of additional information as may be required to enable the Executive Director make a decision; or
 - (d) reject the project.
- (2) A decision of the Executive Director under this regulation shall be communicated to the developer **within fourteen days** of the decision.

26. Conditions of approval of a project In making his decision to approve the project, the Executive Director shall-

- (ii) give approval subject to such conditions as it deems necessary;
- (jj) state the period for which the approval shall remain valid;
- (kk) issue a certificate of approval of the project in the form contained in the Second Schedule to these regulations.

27. Reasons for rejecting the project

- (1) Where the Executive Director makes a decision to reject a project under paragraph (d) of sub-regulation (1) of regulation 25, he shall state the reasons in writing.
- (2) The decision of the Executive Director in accordance with paragraph (d) of sub-regulation (1) of regulation 25 and sub regulation (1) of this regulation shall be communicated to the developer **within fourteen days** of the decision.

28. Cancellation of approved EIA

- (1) At any time after the issuance of a certificate of approval of the project, the Executive Director may revoke the approval where:
 - (ll) there is non compliance with the conditions set out in the certificate;
 - (mm) where there is a substantial modification of the project implementation or operation which may lead to adverse environmental impacts;
 - (nn) where there is a substantive undesirable effect not contemplated in the approval.
- (2) Where a certificate of approval is cancelled under sub-regulation the developer shall stop any further development pending rectification of the adverse impact.

PART VII ACCESS TO EIA REPORTS AND INFORMATION

29. Documents deemed to be public documents

- (1) Subject to article 41 of the Constitution and subsection (3) of section 86 of the Statute, any project brief, environmental impact review report; environmental impact evaluation report, environmental impact statement, terms of reference, public comments, report of the presiding officer at a public hearing or any other information submitted to the Executive Director or the Technical Committee under these regulations shall be public documents.
- (2) Any person who desires to consult the documents described in sub-regulation (1) of this regulation shall, subject to section 86 of the Statute, be granted access by the Authority on such terms and conditions as the Authority considers necessary.

30. Protection of proprietary information

- (1) Where at any stage of the process of implementing these regulations, the developer claims in writing that any information submitted to the Authority is, under sub-section (3) of section 86 of the Statute, proprietary;
 - (a) the Executive Director shall review such claim and take adequate precautions to prevent disclosure of such information, and
 - (b) no person shall copy, circulate, publish or disclose such information.
- (2) The Executive Director after reviewing the claim, may request the developer to submit such additional information to determine whether the information is proprietary or not.

- (3) Where the Executive Director determines that the information is proprietary, such information will be excluded from the project brief or the EIS, whichever the case it may be, but shall remain available to the Authority and the Authority shall take all measures to maintain the confidentiality of the information.
- (4) Where the Executive Director rejects the claim that the information is proprietary, he shall communicate to the developer and request the developer to either;
 - (oo) waive the claim and continue with the assessment and review process under these Regulations, or
 - (pp) withdraw the information submitted from the assessment and withdraw from the review process under these Regulations.

PART VIII - POST-ASSESSMENT ENVIRONMENTAL AUDITS

31. Self-auditing

- (1) In executing the project, after the Executive Director has approved the EIA, the developer shall take all practicable measures to ensure that the predictions made in the project brief, or EIS are complied with.
- (2) Within a period of not less than twelve months and not more than thirty six months after the completion of the project or the commencement of its operations, whichever is earlier, the developer shall undertake an initial environmental audit of the project, provided that an audit may be required sooner if the life of the project is shorter than the period prescribed under this sub-regulation.
- (3) The initial environmental audit under sub-regulation (2) shall be carried out by persons whose names and qualifications have been approved by the Executive Director for the purpose.
- (4) Subsequent to the initial environmental audit, the Executive Director may require the developer to carry out such other audits at such times as the Executive Director considers necessary.
- (5) An environmental audit report shall be prepared after each audit and shall be submitted to the Executive Director by the developer.

31. Audit by the Authority

- (1) An inspector designated under section 80 of the Statute may, at all reasonable times, enter on any land, premises or other facility related to a project for which a project brief, or an EIS has been made under these regulations, to determine how far the predictions made in the project brief, or the EIS, whichever the case may be, are complied with.
- (2) An inspector acting pursuant to this regulation may examine and copy records and exercise all or any of the powers provided for under section 81 of the Statute.
- (3) A member of public, after showing reasonable cause, may petition the Executive Director, to cause an audit to be carried out on any project.

32. Mitigation Measures

- (1) After studying the audit report made under regulations 31 and 32, the Executive Director may require that the developer takes specific mitigation measures to ensure compliance with the predictions made in the project brief, or EIS whichever the case may be.
- (2) The mitigation measures in sub-regulation (1) shall be communicated to the developer in writing, specifying the period within which the measures shall be taken.
- (3) Where a developer fails to implement the mitigation measures communicated under sub-regulation (2), an inspector may issue against such a person an improvement notice under Section 81 of the Statute and commence such criminal and civil proceedings provided for under the Statute as are appropriate.

PART IX - MISCELLANEOUS PROVISIONS

34. Environmental impact assessment of policies projects and similar projects

- (1) An EIA of a policy under these regulations does not exclude the need to assess the environmental impact of specific projects proposed in accordance with the policy.
- (2) The Executive Director may, in approving the terms of reference of an environmental impact study for a project under regulation 10, exclude those general matters which have already been covered in the assessment of a policy.
- (3) A previous EIA of a similar project under these regulations does not exclude the EIA of a later project.

35. Effect of approval or rejection of project

- (1) No civil or criminal liability, in respect of an approval of a project or consequence resulting from an approved project, shall be incurred by the Executive Director or any person acting on his behalf, by reason of the approval, rejection or denial or any conditions attached to the approval.
- (2) The fact that an approval is made in respect of an EIA shall afford no defense to any civil action or to a criminal prosecution under any enactment concerning the project or the manner it is operated or managed.

36. Offences

- (1) Notwithstanding any licence, permit or approval granted under any enactment, any person who commences, proceeds with, carries out, executes or conducts or causes to commence, proceed with, carry out, execute or conduct of any project without approval from the Authority under the Statute or these regulations, commits an offence contrary to section 97 of the Statute and on conviction is liable to a penalty prescribed under the section.
- (2) Any person who:
 - (qq) fails to prepare and submit a project brief to the Executive Director contrary to regulations 5 and 6;
 - (rr) fails to prepare and submit an EIS contrary to regulations 13, 14, 15 and 16;
 - (ss) is in breach of any condition of approval of the EIA; commits an offence contrary to section 97 of the Statute and on conviction, is liable to the penalty prescribed under the section.
- (3) Any person who:
 - (tt) fraudulently makes a false statement in a project brief, impact statement contrary to these regulations;
 - (uu) fraudulently alters project brief, or an EIS contrary to these regulations;
 - (vv) fails, in the development of a project, to abide by the conditions of approval under regulation 26;
 - (ww) fraudulently makes a false statement in an environmental audit contrary to these regulations; commits an offence contrary to section 97 of the Statute and on conviction, is liable to the penalty prescribed under the section.

37.

Fees

- (1) For the purpose of giving full effect of these regulations, and by virtue of subsection (1) of section 108 and paragraph (c) of subsection (2) of section 89, the Authority shall, depending on the size of the project in question and on the circumstances of each particular case, charge a fee on the developer for the following activities:
 - (xx) for a project brief or an EIA the fees payable shall be as specified in Schedule Four to these regulations.
 - (yy) access to records under subsection (1) of section 86;
 - (zz) any other amount that is necessary.

- (2) The developer shall, in addition to the fees under sub-regulation (1) of this regulation, pay for any advertisements required under regulations 19, 20 and sub-regulation (5) of regulation 22.
- (3) The Minister may, on the recommendation of the Executive Director, amend the Schedule referred to in sub-regulation 1.
- 38. **Appeals** Notwithstanding the provisions of section 105, any person who is aggrieved by any decision of the Executive Director may, **within thirty days** of the decision, appeal to the High Court.
- 39. **Delegation of powers and functions** The Executive Director may, where necessary, delegate any of the functions and powers under these regulations to any other Officer of the Authority or to a lead agency.

FIRST SCHEDULE r.5 (2)

ISSUES TO BE CONSIDERED IN MAKING ENVIRONMENTAL IMPACT ASSESSMENT

The following issues may, among others, be considered in the making of EIAs.

- (1) **Ecological Considerations;**
 - a) Biological diversity including:
 - (I) effect of proposal on number, diversity, breeding habits, etc. of wild animals and vegetation.
 - (ii) gene pool of domesticated plants and animals e.g. monoculture as opposed to wild types.
 - b) Sustainable use including:
 - (I) effect of proposal on soil fertility.
 - (ii) breeding populations of fish and game.
 - (iii) natural regeneration of woodland and sustainable yield.
 - (v) wetland resource degradation or wise use of wetlands.
 - c) Ecosystem maintenance including:
 - (I) effect of proposal on food chains.
 - (ii) nutrient cycles.
 - (iii) aquifer recharge, water run-off rates etc.
 - (iv) area extent of habitats.
 - (v) fragile ecosystems.
- 2. Social considerations including:
 - (I) effects of proposal on generation or reduction of employment in the area.
 - (ii) social cohesion or disruption
 - (iii) effect on human health
 - (iv) immigration or emigration
 - (v) communication - roads opened up, closed, re-routed.
 - (vi) local economy.
 - (vii) effects on culture and objects of cultural value.
- 3. Landscape:
 - (I) views opened up or closed.
 - (ii) visual impacts (features, removal of vegetation, etc.)
 - (iii) compatibility with surrounding area.
 - (iv) amenity opened up or closed, e.g. recreation possibilities.
- 4. Land Uses:
 - (I) effects of proposal on current land uses and land use potentials in the project area.
 - (ii) possibility of multiple use.
 - (iii) effects of proposal on surrounding land uses and land use potentials.

SECOND SCHEDULE RR.9 (3), 26

REPUBLIC OF UGANDA

THE NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY

The National Environment Statute, No. 4 of 1995

CERTIFICATE OF APPROVAL OF ENVIRONMENT IMPACT ASSESSMENT

(The EIA Regulations, 1997 regulation 9 (3), 26)

Certificate No. NEA/EA./1

This is to certify that the Project Brief/EIS (EI)** received from:

M/Sof
submitted in accordance with the National Environment Statute to the National Environment Management Authority (NEMA) regarding:

(Title of Project):

briefly described as
..... *(Nature, Purpose)*

located at
(District/sub county/City/town/ward):

has been reviewed and was found to:

** have no significant environmental impacts and was approved.

** have significant environmental impacts and the following appropriate mitigation measures were identified and made a condition precedent for approval and implementation:

.....
.....
.....

(Attach relevant details where necessary)

Dated at on19

Seal

Signed

.....
Executive Director
NEMA

*** To be issued in Quadruplicate: Original to Developer: Duplicate to Lead Agency: Triplicate to the Authority: Quadruplicate to any other relevant agency. ** Delete whichever is not applicable.**

SCHEDULE THREE FEES

Fees payable of project briefs and EIA under sub-regulation (10 of regulation 37.

1. Where the total value of the project does not exceed Shs. 50,000,000/= the amount payable shall be Shs. 250,000/=;
2. Where the total value of the project is more than Shs. 50,000,000/= but does not exceed Shs. 100,000,000/= the amount payable shall be Shs. 500,000/=;
3. Where the total value of the project is more than Shs. 100,000,000/= but does not exceed Shs. 250,000,000/= the amount payable shall be Shs. 750,000/=;
4. Where the total value of the project is more than Shs. 250,000,000/= but does not exceed Shs. 500,000,000/= the amount payable shall be Shs. 1,000,000/=;
5. Where the total value of the project is more than Shs. 500,000,000/= but does not exceed Shs. 1,000,000,000/= the amount payable shall be Shs. 1,250,000/=;
6. Where the total value of the project is more than Shs. 1,000,000,000/= but does not exceed Shs. 5,000,000,000/= the amount payable shall be Shs. 2,000,000/=; and
7. Where the total value of the project is more than Shs. 5,000,000,000/=, the amount payable shall be 0.1% of the total value of the project.

GERALD SENDAULA

Minister responsible for the

National Environment Statute, 1995.

TANZANIA

(PDF File)

TANZANIA

Environmentally sensitive areas (ESAs) and ecosystem

These includes:

1. Areas prone to natural disasters (geological hazards, floods rain-storms, earthquakes, landslides, volcanic activity, etc.)
2. Wetlands:
(Flood plains, swamps, lakes, rivers etc.) Water bodies characterized by one or any combination of the following.
 - a. Tapped for domestic purposes; brick making
 - b. Within the controlled and/or protected areas;
 - c. Which support wildlife and fishery activities
 - d. Used for irrigation agriculture, livestock grazing
3. Mangroves swamps characterized by one or any combination of the following conditions:
 - a. With primary pristine and dense growth;
 - b. Adjoining mouth of major river systems;
 - c. Near or adjacent to traditional fishing grounds;
 - d. Which act as natural buffers against shore erosion strong winds and storm floods
4. Areas susceptible to erosion e.g.
 - a. hilly areas with critical slopes
 - b. unprotected or bare lands
5. Areas of importance to threatened cultural groups
6. Areas with rare/endangered/or threatened plants and animals
7. Areas of unique socio-cultural, history archaeological, or scientific in tourists and areas with potential tourist value
8. Polluted areas
9. Area subject to desertification and bush fires
10. Coastal areas and Marine ecosystems:-
 - Coral reef
 - Islands
 - Lagoons and estuaries
 - Continental shelves
 - Beach fronts etc.
 - Intertidal zones

Areas declared as:- National Park, Watershed reserves, forest reserves, wildlife reserves and sanctuaries, sacred areas, wildlife corridors, hot - spring areas

Mountainous areas, water catchment areas and Recharge areas of aquifers

Areas classified as prime agricultural lands or range lands

Green belts or public open spaces in urban areas

Burial sites and graves

BURUNDI

PRINCIPAUX TEXTES REGLEMENTAIRES ET LOIS REGISSANT LA GESTION DE L'ENVIRONNEMENT AU BURUNDI.

SUR LE PLAN NATIONAL

Textes anciens antérieur à l'Indépendance, concernant

- La pêche (1932, 1937,1961) ;
- La chasse (1937) ;
- Les réserves forestières (1934, 1951,1954)
- Les établissements dangereux insalubres ou incommodes (1956)

Décret n°100/010 du 16 janvier 1989 portant organisation du **Ministère de l'Aménagement du Territoire et de l'Environnement.**

Décret n°100/188 du 05 octobre 1989 portant organisation de l'**Institut National pour l'Environnement et la Conservation de la Nature (INECN).**

Décret n°1/010 du 30 juin 2000 portant le **Code de l'Environnement de la République du Burundi.**

Document de **Stratégie Nationale de l'Environnement du Burundi** : 1997

Loi n°1/02 du 25 mars 1985 portant **Code Forestier** (en cours d'actualisation).

Loi n° 1/008 du 1^{er} septembre 1986 portant **Code Foncier du Burundi** (en cours d'actualisation)

Décret-loi n° 1/6 du 3 mars 1980 portant **création de Parcs nationaux et de Réserves Forestières de la République du Burundi.**

Décret-loi n° 1/138 du 17 juillet 1976 portant **Code Minier et Pétrolier.**

Décret 100/62 du 6 décembre 1979 portant règlement général sur la **recherche et l'exploitation des mines et carrières.**

Décret-loi n°1/40 du 18/12/1992 portant **modification de la réglementation en matière de gestion technique et administrative des carrières au Burundi.**

Ordonnance Ministérielle n° 740/760/770/236/2006 **fixant la contribution annuelle pour la réhabilitation des sites d'exploitations artisanales des substances minérales.**

Loi 1/6 du 25 mai 1983 portant sur la **protection du patrimoine culturel national.**

Ordonnance ministérielle n° 720/CAB/810/2003 du 28/05/2003 portant **actualisation des tarifs d'indemnisation des terres et cultures en cas d'expropriation pour cause d'utilité publique.**

Décret n°100/241 du 31 décembre 1992 portant **réglementation de l'évacuation des eaux usées en milieu urbain.**

Décret-loi n° 1/41 du 26 novembre portant **institution et organisation de domaine public hydraulique**

Décret de 1998 portant modification du décret-loi n°1/16 du 17 mai 1982 portant **code de la santé publique.**

Schéma directeur **d'aménagement des marais, 2000**

Document de **politique sectorielle du Ministère de l'Aménagement du Territoire, du Tourisme et de l'Environnement.**

Document de **politique nationale de gestion des ressources en eau et plan d'action, 2001.**

Document sur **les stratégies et plan d'action pour la mise en œuvre de certaines conventions spécialement la convention cadre sur les changements climatiques, la convention sur la biodiversité et la convention sur la lutte contre la désertification.**

Projet de **loi sur les marais, 2000.**

Ordonnance 52/160 du 16 novembre 1995 réglementant la **pêche dans les lacs.**

Rapport national **d'évaluation des dix ans de mise en œuvre de l'Agenda 21 au Burundi, 2002.**

SUR LE PLAN REGIONAL

Le Burundi est partie prenante de :

- ✓ La convention sur la gestion durable du Lac Tanganyika.
- ✓ La Conférence sur les Ecosystèmes des Forêts Denses et Humides d'Afrique Centrale (CEFDHAC).
- ✓ L'Initiative du Bassin du Nil (IBN).

SUR LE PLAN INTERNATIONAL.

Ratification de la **Convention Cadre des Nations-Unies sur les Changements Climatiques et son Protocole de Kyoto.**

Ratification de la **Convention sur la lutte contre la Désertification.**

Ratification de la **Convention sur la Diversité Biologique.**

Ratification de la **Convention de Vienne relative à la protection de la couche d'ozone et son protocole de Montréal.**

Ratification de la **Convention de RAMSAR sur les zones humides d'intérêt international**

Ratification de la **convention des Nations-Unies sur le droit de la mer.**

Ratification de la **convention de Rotterdam sur la procédure préalable en connaissance de cause applicable à certains produits chimiques et pesticides dangereux faisant l'objet d'un commerce international.**

Ratification de la **convention sur les Polluants Organiques Persistants (POP)**

Ratification de la **convention sur l'interdiction d'importer des déchets dangereux et le contrôle de leurs mouvements transfrontaliers en Afrique** (Convention de Bamako).

Ratification de la **convention de Paris sur la protection du patrimoine mondial, culturel et naturel.**

Ratification de la **Convention de Washington sur le commerce international des espèces de faune et de flores sauvages (CITES)**

Partnership Project for the Development of Environmental Laws and Institutions in Africa (PADELIA)

The Partnership for the Development of Environmental Laws and Institutions in Africa (PADELIA) is a flagship UNEP pilot project. It is sponsored by Belgium, Germany, Norway, Switzerland, Luxembourg, and The Netherlands, and it is currently in its second Phase since 2001. [Phase I ran from 1994 to 2000.] PADELIA seeks to support the development of environmental law as well as the corresponding national and regional institutions to ensure effective enforcement. Thirteen States are currently benefiting from the Project, namely: Mozambique, Sao Tome & Principe, **Kenya, Tanzania, Uganda**, Botswana, Lesotho, Malawi, Swaziland, Mali, Niger, Burkina Faso, and Senegal.

Phase I of PADELIA benefited Mozambique, Sao Tome & Principe, Malawi, and Burkina Faso (which all focused on country-specific issues of environmental law) and **East African States (Kenya, Uganda, and Tanzania) (which focused on issues of transboundary environmental law)**. Now, activities in East Africa (Kenya, Tanzania, and Uganda), the Sahel (Mali, Niger, and Senegal), and the Southern African Development Community (SADC) (Botswana, Lesotho, and Swaziland) are directed at issues of sub-regional character with the objective of developing and harmonising laws. While the East Africa sub-regional project has participated in the PADELIA since Phase I, the Sahel and SADC sub-regional projects joined in this Project during the current Phase.

The first important feature of the project is that it is country-driven and highly participatory in nature. Topics for legislation are selected by stakeholders constituted as a National Task Force or Coordinating Committee. Second, the project operationalises the concept of capacity building and has coached nationals on how to identify problems requiring legal intervention and then assisting them in writing the draft laws. Third, the **draft laws are subjected to national consensus building workshops** and thus enhancing broad public acceptance and ownership. Each of the States during Phase I was able to move at its own pace to reach concrete and quantifiable results. Over 58 draft laws have been developed by the Project countries since 1996.

In addition, the project has conducted and continues to conduct trainings on specific topics, such as **Environmental standards; Environmental impact assessment; Judiciary and their role; Legal practitioners on access to environmental justice; Legal protection of biodiversity; Implementation of conventions related to biodiversity; Environmental law theory and practice; General for Environmental law and policy for Lusophone countries; Industrialists; Training by attachment; and Development and harmonisation of laws**, to mention but few.

Publications were and are prepared for key areas and have been and continue to be distributed widely. These include a **Compendium of environmental laws (10 volumes); Compendium of judicial decisions (4 volumes); Handbook on implementation of environmental conventions; Guidelines for compliance by industries; and procedures for harmonisation of laws in East Africa.**

The project is a unique partnership where activities are overseen by an independent inter-agency Steering Committee comprising the World Bank, UNDP, IUCN, FAO, the donors (see above), UNEP, and an African lawyer representing a neutral African voice. The management of the Project is currently under a Task Manager within UNEP's Division of Environmental Policy Implementation (DEPI). The partnership has been a unique experience for the agencies themselves.

For more information on PADELIA, see <http://www.unep.org/padelia/> or contact padelia.africa@unep.org

REFERENCES

Legislation Reviewed

- Tanzania, EMA No. 20 2004
- Kenya, EMCA 1999
- Kenya, Draft EIA Guidelines and Administration Procedures, 2002
- Burundi, Ministère de l'Aménagement du Territoire et de l'Environnement (not reviewed)
- Burundi, Code de l'Environnement de la République du Burundi, 2000 (not reviewed)
- Uganda, The National Environment Statute, No. 4 of 1995
- Uganda, The EIA Regulations, 1998
- Rwanda, Organic Law No. 4, 2005

REFERENCES alphabetical

- Kenya, State of the Environment, 2003
- UN, Economic Commission for Europe, Current Policies, Strategies and aspects of EIA in a transboundary aspect, ECE/CEP/9, 1996
- Secretariat of the Commission for Environmental Cooperation, North American Inter governmental group on transboundary EIA, repository, Draft North American Agreement on Transboundary Environmental Impact Assessment, undated www.cec.org
- Secretariat of the Commission for Environmental Cooperation, repository, Transboundary EIA provisions and initiatives in selected regional and multilateral environmental Agreements
- Secretariat of the Commission for Environmental Cooperation, North American Agreement on Environmental Cooperation between the government of Canada the government of the United Mexican States and the government of the United States of America, 1993
- Baker, N.E. & Baker, E. 2002. Important Bird Areas of Tanzania. Wildlife Conservation Society of Tanzania.
- Beakbane, A.J. & Boswell, E.M. 1986 Nocturnal, Afrotropical Migrants at Mufindi, Tanzania. *Scopus* 8: 124-127.
- Benun, L. & Njoroge, P. 1999. Nature Kenya, Nairobi.
- Biharamulo, Burigi and Rubondo Island Game Reserves. *Tanzania Notes and Records* 79: 26-42.
- Boothroyd, B. 1987 The attraction of Palaearctic migrants to light at Kiambere, Kenya. *Scopus* 11: 38-41.
- Burgess, N., Butynski, T.M., Cordeiro, N.J., Doggart, N.H., Fjeldsa, J., Howell, K.M., Kilahama, F.B., Loader, S.B., Lovett, J.C., Mbilinyi, B., Menegon, M. Moyer, D.C., Nashanda, E., Perkin, A., Rovero, F., Stanley, W.T. & Stuart, S.N. 2006 Biological Importance of the Eastern Arc Mountains of Tanzania and Kenya. *Biological Conservation* 134: 207-231.
- Byaruhanga, A., Kasoma, P. & Pomeroy, D. 2001, Nature Uganda, Kampala.
- Clyde, D.F. 1962 Chapter Four, Plague and Polio (1948-1956). Pp. 174-179, in *History of the Medical Services of Tanganyika*. Government Press, Dar es Salaam.
- Coe, M., McWilliam, N., Stone, G. & Packer, M. (eds.) 1999 Mkomazi: the Ecology, Biodiversity and Conservation of a Tanzanian Savanna. Royal Geographical Society (with the Institute of British Geographers), London.
- Coulter, G.W. (ed) 1991 Lake Tanganyika and its Life. Natural History Museum Publications, Oxford University Press, London, Oxford & New York.
- Du Plessis, M.A. 1997 The effects of fuel wood removal on the diversity of some cavity nesting birds and mammals in South Africa. *Biological Conservation* 74: 77-82.
- Fischer, E. & Hinkel, H. 1992 La Nature et l' Environnement du Rwanda. Materialien zur Partnerschaft Rheinland-Pfalz/Rwanda. Rheinland-Pfalz, Mainz: Ministerium des Innern und für Sport.
- Fishpool, L.D.C. & Evans, M.I. (eds) Important Bird Areas in Africa and Associated Islands, Priority sites for conservation. Birdlife conservation Series No. 11. Newbury and Cambridge, UK. Pisces Publications and Birdlife International.
- Fuggles-Couchman, N.R. 1986 Birds visiting a recently filled dam in Tanzania. *Scopus* 10: 54-57.
- Golder Associates Ltd, 2006 Tanzania Scoping Study, Environmental and Socio-economic Impact Assessment. Kabanga Nickel Project. Environment, part 1.
- Goldman, M. 2003 Partitioned Nature, Privileged Knowledge: Community-based conservation in Tanzania. *Development and Change* 34: 833-862.
- Hinde, R. J., Corti, G.R., Fanning, E. & Jenkins, R.K.B. 2001 Large mammals in miombo woodland, evergreen forest and a young teak (*Tectona grandis*) plantation in the Kilombero Valley, Tanzania. *African Journal of Ecology* 39: 318-321.
- Homewood, K.M. & Rodgers, W.A. 1991 Maasailand Ecology: Pastoralist development and wildlife conservation in Ngorongoro, Tanzania. Cambridge University Press, Cambridge.

- Howell, K.M. & Msuya, C.A. 1993 Bird Hazards to Aircraft at Dar es Salaam International Airport, Tanzania. Pp. 3-8 in Proceedings VIII Pan African Ornithological Congress, Bujumbura Burundi, 30 Sept 2005-5 October 1992.
- Howell, K.M., Msuya, C.A., Kihale, P.M. 1997 Baseline studies and environmental Impact Assessment Wildlife, Kahama Mining Corporation Limited, Bulyanhulu Project. A Consultancy report of the Department of Zoology & Marine Biology, University of Dar es Salaam.
- Hughes, R.H. & Hughes, J.S. 1992 A Directory of African Wetlands, IUCN, Gland, Switzerland and Cambridge, UK.
- IFC, Kenya railways Corporation Environmental Due Diligence , Technical and financial Audit Report, FINAL, April 2003, revised May 2005
- Institute of Resource Assessment Dar es Salaam Tanzania in collaboration with the International Institute for Environment and Development, UK. February 1996. Guide to the Environmental Impact Assessment Process in Tanzania. Downloaded from environment@newafrica.com, 2000
- International Council for Bird Preservation (ICBP) 1987 A review of the problems affecting palearctic migratory birds in Africa. Cambridge, UK.
- IUCN, 2006. 2006 IUCN Red List of Threatened Species. <www.iucnredlist.org>. Downloaded on 19 July 2007.
- Kilonzo, B., Mhina, J., Sabuni, C., Mgode, G. 2005 The role of rodents and small carnivores in plague endemicity in Tanzania. Belg. J. Zool. 135: 119-125.
- Kjekshus, H. 1996. *Ecology Control & Economic Development in East African History, the Case of Tanganyika 1850-1950*, 2nd edition. James Curry, London. 222 pp.
- Lagarde, E. 2007 Road traffic injury as an escalating burden in Africa and deserving proportionate research efforts. PLOS medicine 4 (6): e170.
- Lawyers' Environmental Action Team (LEAT). 1999. Report on Institutional Mandates and Legal Framework for Environmental Management in Tanzania. Prepared for the Institutional and Legal Framework for Environmental Management Project (ILFEMP) under the Vice President's Office, Dar es Salaam
- Lawyers' Environmental Action Team (LEAT). *Environmental Law Handbook for Businesses* in Microsoft Word format, downloaded (21 March 2002) from web-site <http://www.lead.or.tz/publications/env.handbook/>
- Lovett *in press* cited in *Tanzanian forest laws* downloaded 1st February 2003 from web-site <http://www.york.ac.uk/res/celp/webpages/projects/laws/introduction.htm>
- Lovett, Jon C. *In press*. Statute Note: The Forest Act, 2002. Journal of African Law
- Lovett, Jon C. *In press*. Tanzania Forest Law. In: Chaytor, B and Gray, K. Environmental Law and Policy in Africa, Kluwer Law International, The Hague
- Milledge, S.A.H., Gervas, I.K. & Ahrends, A. 2007 Forestry, Governance and National Development: Lessons Learned from a Logging Boom in Southern Tanzania. TRAFFIC East/Southern Africa/Tanzania Development Partners Group/Ministry of Natural Resources of Tourism, Dar es Salaam, Tanzania.
- Ministry of Foreign Affairs, DANIDA. Environment, Peace and Stability Facility Environmental Support Programme: Project Document; Sustainable and integrated management of the Malagarasi-Muyovozi RAMSAR Site, Tanzania **Ref. No. 104. Tanzania.1.Mika.1.e November 1999**
- Mittermeier, R.A, Gil, P.R., Hoffman, M. Pilgrim, J. Brooks, T. Mittermeier, C.G., Lamoreaux, J., da Fonesca, A.B. 2004 Hotspots revisited: Earth's biologically richest and most threatened terrestrial ecoregions. Connex, Mexico City.
- Myers, N., Mittermeier, R.A., Mittermeier, C.G. da Fonesca, G.A.B., Kent, J. 2000 Biodiversity hotspots for conservation priorities. Nature 403: 853-858.
- NEMC. 1997. Tanzania Environmental Impact Assessment Procedure. Volume 1. General Environmental Impact Assessment Guidelines and Procedures. National Environment Management Council, Dar es Salaam
- Newmark, W.D. 1991 Tropical Forest Fragmentation and the Local Extinction of Understorey Birds in the Eastern Usambara Mountains, Tanzania. Conservation Biology 5: 67-78.
- Newmark, W.D. 2006 A 16-year Study of Forest Disturbance and Understorey Bird Community Structure and Composition in Tanzania. Conservation Biology 20: 122-134.
- Newmark, W.D. & Hough, J. L. 2000 Conserving Wildlife in Africa: Integrated Conservation and Development Projects and Beyond. Bioscience 50: 585-592.
- Newmark, W.D. 1996 Insularization of Tanzanian Parks and the Local Extinction of Large Mammals. Conservation Biology 10: 1549-1556.
- Newmark, W.D., Boshe, J Sariko, H.J. & Makumbule, G. 1996 Effects of a Highway on large mammals in Mikumi National Park, Tanzania. African Journal of Ecology 34: 15-31.
- Owino, A.O. & Ryan, P.G. 2007. Recent papyrus swamp habitat loss and conservation implications in western Kenya. Wetlands Ecology and Management 15:1-12.
- Perkin, A., and S. Bearder. 2004. Minziro Forest reveals new galago and bat records for Tanzania. The Arc Journal. Tanzania Forest Conservation Group 16:9-10.

- Plumptre, A.J., Behangana, M., Ndomba, E., Davenport, T., Kahindo, C., Kityo, R., Ssegawa, P., Eilu, G., Nkuutu, D., Owiunji, I. 2003 The Biodiversity of the Albertine Rift. Albertine Rift Technical Reports No. 3, Conservation International.
- Rodgers, W.A. 1979 The Ecology of Large Herbivores in the Miombo Woodland of South East Tanzania. PhD Thesis, University of Nairobi.
- Rodgers, W.A. 1996 Chapter 12, The Miombo Woodlands, pp. 299-325. In McClanahan, T.R. & Young, T.P. (eds), East African Ecosystems and their Conservation. Oxford University Press, New York.
- Rodgers, W.A., Ludanga, R.I. and DeSuzo, H.P. 1979. An ecological survey of
- Rummel-Bulska and Seth Osafo (eds). 1991. Selected Multilateral Treaties in the Field of the Environment. Volume 2. UNEP, Nairobi, and Grotius, Cambridge
- Rüster, Bernd and Bruno Simma. 1991. International Protection of the Environment. Treaties and Related Documents. Second Series. Continuation of Volumes I - XXX (1754-1981). In 3 binders. Oceana, New York
- Schmidt, P.R. 1974 An Investigation of Early and Late Iron Age Cultures through Oral Tradition and Archaeology: an interdisciplinary Case Study in Buhaya, Tanzania. PhD Thesis, northwestern University, Evanston, Illinois. (cited in Kjekshus, H. 1996 Ecology Control and Economic Development in East African History. James Currey, London.
- Sinclair, A.R.E. & Arcese, P. (eds). 1995 Serengeti II. Dynamics, Management and Conservation of an Ecosystem. University of Chicago Press, Chicago.
- Sinclair, A.R.E. & Norton-Griffiths, M. 1979 Serengeti Dynamics of an Ecosystem. University of Chicago Press, Chicago and London.
- TRAFFIC. 2002. Bush Meat Utilization - A Critical Issue in East and Southern Africa. <http://www.traffic.org/cop11/newsroom/bushmeat/html>.
- Tulawaka Gold Project, environmental baseline: report to WEGS consultants, Ltd. 2002.
- Tulawaka Gold Project, inputs to EMP (Environmental Management Plan), 2003 (18)
- Ulfstrand, S. & Lamprey, H. 1960 on the birds of the Kungwe-Mahari area in western Tanzania. Journal of the East Africa Natural History Society 23: 223-232.
- United Nations Environment Programme. 1991. Register of International Treaties and other Agreements in the Field of the Environment. UNEP/GC.16/Inf.4, Nairobi
- United Republic of Tanzania 1998 Tanzania Country Study on Biological Diversity. Pp. 1-163.
- Vande Weghe, J-P. 1992 New records for Uganda and Tanzania along the Rwandan and Burundian borders. Scopus 16: 59-60.
- Vesey Fitzgerald, D.V.F. 1964 Mammals of the Rukwa Valley. Tanzania Notes and Records 62: 61-72.
- Vesey-Fitzgerald, D.V.F. & Beesley, J.S.S. 1960 An annotated list of the birds of the Rukwa Valley. Tanganyika Notes and Records 154: 93-110.
- VPO. 1997. The National Environmental Policy, United Republic of Tanzania. Division of Environment, Vice President's Office
- WHO, 2004 Dept of Communicable Disease, Surveillance and Response, Report of a cross-border intercountry meeting on diseases surveillance and response in the Great Lakes Region, Kampala, Uganda, 31 May-2 June 2004.
- World Bank. October 1991. Operational Directive 4.01, Environmental Assessment
- World Wildlife Fund (Content Partner); Mark McGinley (Topic Editor). 2007. "Itigi-Sumbu thicket." In: Encyclopedia of Earth. Eds. Cutler J. Cleveland (Washington, D.C.: Environmental Information Coalition, National Council for Science and the Environment). [Published in the Encyclopedia of Earth March 19, 2007; Retrieved November 27, 2007]. http://www.eoearth.org/article/Itigi-Sumbu_thicket

References: sorted by general topics:

Historical:

- Hill, M.F. 1949 first edition, 1961, 2nd ed. 1976 reprint edition seen.
- The Permanent Way. The story of the Kenya and Uganda Railway, being the official history of the development of the Transport System in Kenya and Uganda. Vol. I. E.A. Literature Bureau, Nairobi.
- Hill, M.F. 1957 The Story of The Tanganyika Railways. E. A. Railways and Harbors, Nairobi.

Important Bird Areas:

- Baker, N.E. & Baker, E. 2002. Important Bird Areas of Tanzania. Wildlife Conservation Society of Tanzania.
- Benun, L. & Njoroje, P. 1999. Nature Kenya, Nairobi.
- Byaruhanga, A., Kasoma, P. & Pomeroy, D. 2001, Nature Uganda, Kampala.

Bird Migrants:

- Beakbane, A.J. & Boswell, E.M. 1986 Nocturnal, Afrotropical Migrants at Mufindi, Tanzania. Scopus 8: 124-127.
- Boothroyd, B. 1987 The attraction of Palaearctic migrants to light at Kiambere, Kenya. Scopus 11: 38-41.

Eastern Arc Values:

Burgess, N., Butynski, T.M., Cordeiro, N.J., Doggart, N.H., Fjeldsa, J., Howell, K.M., Kilahama, F.B., Loader, S.B., Lovett, J.C., Mbilinyi, B., Menegon, M. Moyer, D.C., Nashanda, E., Perkin, A., Rovero, F., Stanley, W.T. & Stuart, S.N. 2006 Biological Importance of the Eastern Arc Mountains of Tanzania and Kenya. *Biological Conservation* 134: 207-231.

Wildlife, Human disease interaction:

Clyde, D.F. 1962 Chapter Four, Plague and Polio (1948-1956). Pp. 174-179, *In* History of the Medical Services of Tanganyika. Government Press, Dar es Salaam.

Kilonzo, B., Mhina, J., Sabuni, C., Mgone, G. 2005 The role of rodents and small carnivores in plague endemicity in Tanzania. *Belg. J. Zool.* 135: 119-125.

National Parks: Protected Areas Network

Mkomazi is now a park (as of 2007)

Coe, M., McWilliam, N., Stone, G. & Packer, M. (eds.) 1999 Mkomazi: the Ecology, Biodiversity and Conservation of a Tanzanian Savanna. Royal Geographical Society (with the Institute of British Geographers), London.

Sinclair, A.R.E. & Norton-Griffiths, M. 1979 Serengeti Dynamics of an Ecosystem. University of Chicago Press, Chicago and London.

Sinclair, A.R.E. & Arcese, P. (eds). 1995 Serengeti II. Dynamics, Management and Conservation of an Ecosystem. University of Chicago Press, Chicago.

Aquatic habitat values:

Coulter, G.W. (ed) 1991 Lake Tanganyika and its Life. Natural History Museum Publications, Oxford University Press, London, Oxford & New York.

Fuggles-Couchman, N.R. 1986 Birds visiting a recently filled dam in Tanzania. *Scopus* 10: 54-57.

Hughes, R.H. & Hughes, J.S. 1992 A Directory of African Wetlands, IUCN, Gland, Switzerland and Cambridge, UK.

Owino, A.O. & Ryan, P.G. 2007. Recent papyrus swamp habitat loss and conservation implications in western Kenya. *Wetlands Ecology and Management* 15:1-12.

Rwanda Natural history

Fischer, E. & Hinkel, H. 1992 La Nature et l' Environment du Rwanda. Materialien zur Partnerschaft Rheinland-Pfalz/Rwanda. Rheinland-Pfalz, Mainz: Ministerium des Innern und für Sport.

Vande Weghe, J-P. 1992 New records for Uganda and Tanzania along the Rwandan and Burundian borders. *Scopus* 16: 59-60.

Wildlife human habitat interaction

Du Plessis, M.A. 1997 The effects of fuel wood removal on the diversity of some cavity nesting birds and mammals in South Africa. *Biological Conservation* 74: 77-82.

Goldman, M. 2003 Partitioned Nature, Privileged Knowledge: Community-based conservation in Tanzania. *Development and Change* 34: 833-862.

WHO, 2004 Dept of Communicable Disease, Surveillance and Response, Report of a cross-border intercountry meeting on diseases surveillance and response in the Great Lakes Region, Kampala, Uganda, 31 May-2 June 2004.

Gold Mines:

Golder Associates Ltd, 2006 Tanzania Scoping Study, Environmental and Socio-economic Impact Assessment. Kabanga Nickel Project. Environment, part 1.

Howell, K.M., Msuya, C.A., Kihale, P.M. 1997 Baseline studies and environmental Impact Assessment Wildlife, Kahama Mining Corporation Limited, Bulyanhulu Project. A Consultancy report of the Department of Zoology & Marine Biology, University of Dar es Salaam.

Tulawaka Gold Project, environmental baseline: report to WEGS consultants, Ltd. 2002.

Tulawaka Gold Project, inputs to EMP (Environmental Management Plan), 2003 (18)

Wildlife habitat

Hinde, R. J., Corti, G.R., Fanning, E. & Jenkins, R.K.B. 2001 Large mammals in miombo woodland, evergreen forest and a young teak (*Tectona grandis*) plantation in the Kilombero Valley, Tanzania. *African Journal of Ecology* 39: 318-321.

Homewood, K.M. & Rodgers, W.A. 1991 Maasailand Ecology: Pastoralist development and wildlife conservation in Ngorongoro, Tanzania. Cambridge University Press, Cambridge.

Rodgers, W.A. 1979 The Ecology of Large Herbivores in the Miombo Woodland of South East Tanzania. PhD Thesis, University of Nairobi.

Rodgers, W.A. 1996 Chapter 12, The Miombo Woodlands, pp. 299-325. *In* McClanahan, T.R. & Young, T.P. (eds), East African Ecosystems and their Conservation. Oxford University Press, New York.

Rodgers, W.A., Ludanga, R.I. and DeSuzo, H.P. 1979. An ecological survey of Biharamulo, Burigi and Rubondo Island Game Reserves. *Tanzania Notes and Records* 79: 26-42.

Bird hazards, aircraft

Howell, K.M. & Msuya, C.A. 1993 Bird Hazards to Aircraft at Dar es Salaam International Airport, Tanzania. Pp. 3-8 in Proceedings VIII Pan African Ornithological Congress, Bujumbura Burundi, 30 Sept 2005-5 October 1992.

Birds:

International Council for Bird Preservation (ICBP) 1987 A review of the problems affecting palearctic migratory birds in Africa. Cambridge, UK.

Newmark, W.D. 1991 Tropical Forest Fragmentation and the Local Extinction of Understorey Birds in the Eastern Usambara Mountains, Tanzania. *Conservation Biology* 5: 67-78.

Newmark, W.D. 2006 A 16-year Study of Forest Disturbance and Understorey Bird Community Structure and Composition in Tanzania. *Conservation Biology* 20: 122-134.

Endangered species

IUCN, 2006. *2006 IUCN Red List of Threatened Species*. <www.iucnredlist.org>. Downloaded on 19 July 2007.

Human use of natural resources:

Kjekshus, H. 1996. *Ecology Control & Economic Development in East African History, the Case of Tanganyika 1850-1950*, 2nd edition. James Curry, London. 222 pp.

Milledge, S.A.H., Gelas, I.K. & Ahrends, A. 2007 Forestry, Governance and National Development: Lessons Learned from a Logging Boom in Southern Tanzania. TRAFFIC East/Southern Africa/Tanzania Development Partners Group/Ministry of Natural Resources of Tourism, Dar es Salaam, Tanzania.

Newmark, W.D. & Hough, J. L. 2000 Conserving Wildlife in Africa: Integrated Conservation and Development Projects and Beyond. *Bioscience* 50: 585-592.

TRAFFIC. 2002. Bush Meat Utilization - A Critical Issue in East and Southern Africa. <http://www.traffic.org/cop11/newsroom/bushmeat/html>.

Road, effects of

Lagarde, E. 2007 Road traffic injury as an escalating burden in Africa and deserving proportionate research efforts. *PLOS medicine* 4 (6): e170.

Newmark, W.D. 1996 Insularization of Tanzanian Parks and the Local Extinction of Large Mammals. *Conservation Biology* 10: 1549-1556.

Newmark, W.D., Boshe, J Sariko, H.J. & Makumbule, G. 1996 Effects of a Highway on large mammals in Mikumi National Park, Tanzania. *African Journal of Ecology* 34: 15-31.

Biodiversity Values

Mittermeier, R.A, Gil, P.R., Hoffman, M. Pilgrim, J. Brooks, T. Mittermeier, C.G., Lamoreaux, J., da Fonesca, A.B. 2004 Hotspots revisited: Earth's biologically richest and most threatened terrestrial ecoregions. Connex, Mexico City.

Myers, N., Mittermeier, R.A., Mittermeier, C.G. da Fonesca, G.A.B., Kent, J. 2000 Biodiversity hotspots for conservation priorities. *Nature* 403: 853-858.

Plumptre, A.J., Behangana, M., Ndonga, E., Davenport, T., Kahindo, C., Kityo, R., Ssegawa, P., Eilu, G., Nkuutu, D., Owiunji, I. 2003 The Biodiversity of the Albertine Rift. Albertine Rift Technical Reports No. 3, Conservation International.

General

Perkin, A., and S. Bearder. 2004. Minziro Forest reveals new galago and bat records for Tanzania. *The Arc Journal*. Tanzania Forest Conservation Group 16:9-10.

Schmidt, P.R. 1974 An Investigation of Early and Late Iron Age Cultures through Oral Tradition and Archaeology: an interdisciplinary Case Study in Buhaya, Tanzania. PhD Thesis, northwestern University, Evanston, Illinois. (cited in Kjekshus, H. 1996 *Ecology Control and Economic Development in East African History*. James Currey, London.

Ulfstrand, S. & Lamprey, H. 1960 on the birds of the Kungwe-Mahari area in western Tanzania. *Journal of the East Africa Natural History Society* 23: 223-232.

United Republic of Tanzania 1998 Tanzania Country Study on Biological Diversity. Pp. 1-163.

Vesey Fitzgerald, D.V.F. 1964 Mammals of the Rukwa Valley. *Tanzania Notes and Records* 62: 61-72.

Vesey-Fitzgerald, D.V.F. & Beesley, J.S.S. 1960 An annotated list of the birds of the Rukwa Valley. *Tanganyika Notes and Records* 154: 93-110.

The Albertine Centre for Biodiversity and Environmental Conservation in Central Africa (CABEAC in French) has been founded in **Bunia**, on Lake Albert. www.spc.int/pps/Bionet/Bulletin%2017%20-%20December%202001.doc