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THE TRANSPORT SITUATION IN AFRICA

I. INTRODUCTION

Transport is an indispensable element of development and socio-economic growth. As engines of economic integration, transport infrastructure and service facilities constitute a precondition for facilitating trade and the movement of goods and persons. Long perceived as a tool for accessing national and regional trade in a radically changing global environment, transport infrastructure remains a pillar of development with a view to accelerating growth and reducing poverty. Given the challenges of globalization, Africa is lagging significantly behind in the development of regional trade, particularly because of the lack of reliable and adequate transport. Indeed, the existing transport facilities for trade are completely outward-looking with the result that transport infrastructure and services have been little developed and the physical network poorly integrated.

It was for this reason that at the instance of African countries, the United Nations proclaimed two Transport and Communication Decades in Africa (1978-1988 and 1991-2000) with a view to focusing the efforts of African States and their development partners on the specific issues of transport and communications in Africa. A review of those 20 years of effort devoted to transport showed that the existing transport infrastructure and services are still far from enabling Africa to achieve socio-economic development and integration.

Aware of the importance of this sector, African Ministers of Transport held on 6 April 2005 in Addis Ababa, a conference on the role of transport in achieving the Millennium Development Goals and adopted objectives and indicators whose achievement would enable Africa to make significant progress. The outcome document of that conference was adopted by the African Union Summit of Heads of State and Government held on 4 and 5 July 2005 in Sirte, Libya and subsequently transmitted to the Secretary-General of the United Nations.

The purpose of this report, therefore, is to describe the current situation of transport and the related challenges facing Africa. It seeks to inform policy-makers about the appropriate measures that need to be taken so that the transport sector can contribute effectively to the socio-economic development of Africa.

II. SITUATION OF THE VARIOUS TRANSPORT MODES

2.1 Roads and road transport

The road transport system involves multi-dimensional issues including developing and maintaining infrastructure, vehicles, road safety, impact on human health and the environment, human and institutional capacity building and financing.

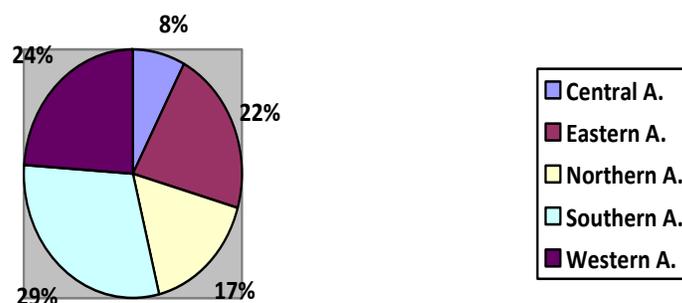
Road Network by Sub-region

African countries together had about 2.06 million km of roads in 2001, resulting in a road density of 6.84 km per 100 sq. km. The network had expanded to 2.42 million km by 2005, with a proportional growth in the road density to 8.3 km per 100 sq. km. Although the expansion of the African road network over the four years is encouraging, the density is still low.

As it can be seen in Figure 1, the highest proportion of roads in Africa is found in Southern Africa (29 per cent), Western Africa (24 per cent) and Eastern Africa (22 per cent). The three sub-

regions of Africa are also home to the highest road densities of the continent, with 12.3 km, 11.5 km and 8.4 km for every 100 sq. km of surface area, respectively, (Table 1).

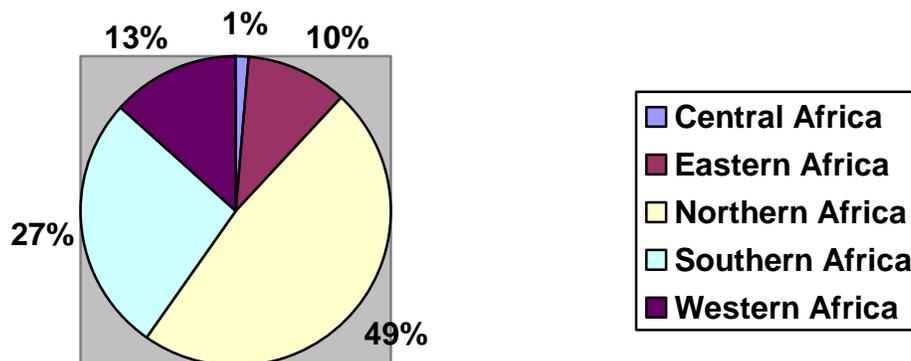
Figure 1: Share of Africa's road network by sub-region



Source: World Development Indicators 2008, The World Fact Book 2007, Final Evaluation Report: UNTACDA II, 2002 and AU. 2008, State of Transport Sector Development in Africa

Of the total African road network, only 580,066 Km or 22.7 per cent was paved in 2005. A look at the proportion of paved roads by sub-region shows a huge diversity. Whereas, Northern Africa had the highest share (49 per cent) of the continent's paved roads, leading the rest of the sub-regions by a wide margin, the second highest share (27 per cent) of the paved roads was found in Southern Africa. The share of paved roads in the other sub-regions ranged from 1 to 13 per cent.

Figure 2: Share of paved roads in Africa by sub-region



Source: World Development Indicators 2008 and the World Fact Book 2007

Road construction and maintenance standards are not uniform for all African countries. Whereas few countries have relatively adequate financial and human resources to build roads and maintain them to international standards, many African countries are not in position to do so.

Overall, road network development has been inadequate in many African countries. Of even greater concern is the poor maintenance of existing roads, resulting in many sections of the network to be unusable during the wet season.

The Trans-African Highway (TAH) program, launched with the objective of linking Africa's capitals and other commercially important centers of production and consumption was first included in the UN Transport and Communication Decade in Africa. The TAH consists of eight major routes: Cairo-Gaborone, Lagos-Mombasa, Dakar-Djamena-Djibouti, Algiers-Lagos, Beira-Lobito, Tripoli-Windhoek, Lagos-Nouakchott, and Cairo-Dakar. The total length of these highways is 54,962 km, of which 72 per cent is paved and the remaining 28 per cent is classified as secondary or feeder roads.

According to the Evaluation Report of UNTACDA II (2002), lack of adequate resources and absence of properly functioning coordination and monitoring mechanism, among others reasons, had hampered the implementation of the program.

A study jointly conducted by ECA and AfDB to review the implementation status of TAH network identified the missing links to be 21 per cent of the total TAH network. The missing links are indicated in Figure 2.3 by dotted lines.

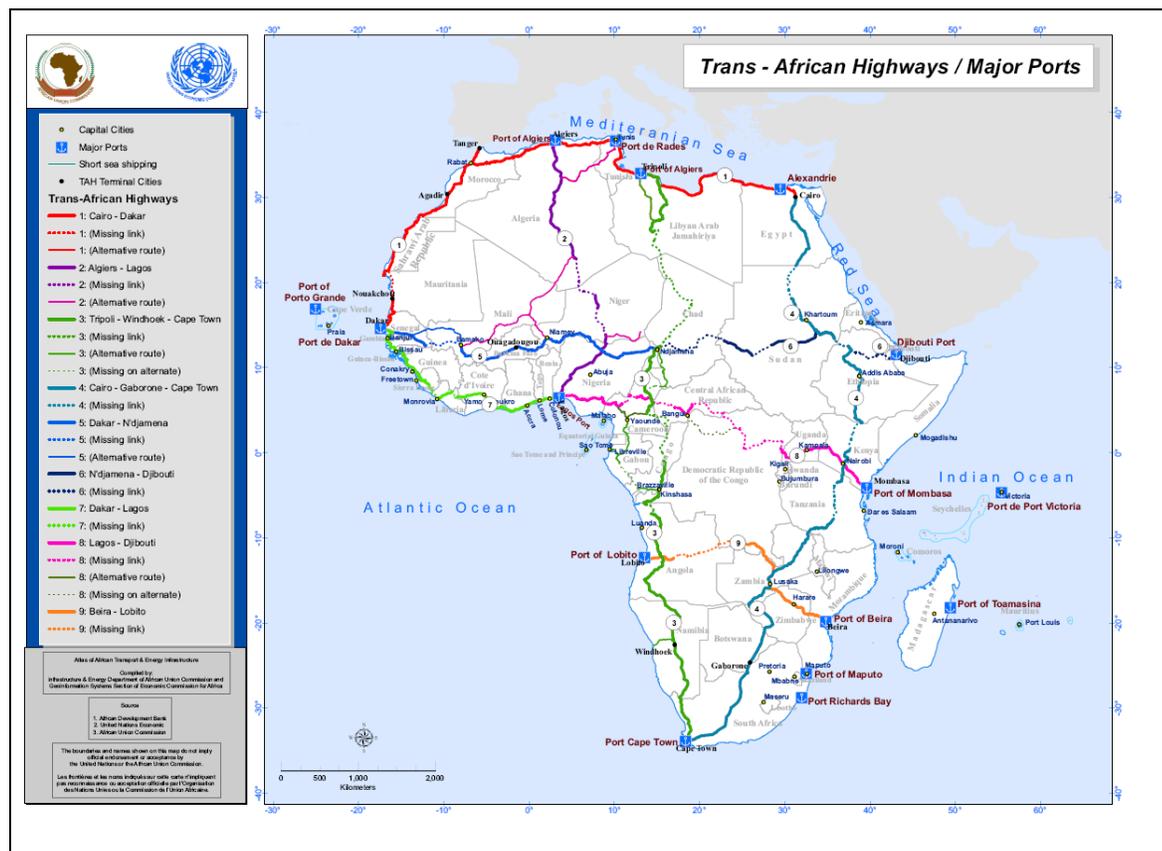
Table 1: The TAH missing links by sub-region

Region	Total TAH Network (km)	Paved sections (km)	% of missing Links
Northern Africa	13,292	13,195	1
Eastern Africa	9,932	8,201	17
Southern Africa	7,988	6,817	15
Central Africa	11,246	3,891	65
Western Africa	11,662	10,581	9
Total Africa	54,120	42,665	21

Source: AU. 2008, State of Transport Sector Development in Africa

As the Republic of South Africa had been excluded from the TAH program during the Apartheid period, it is now recommended to extend the Cairo-Gaborone TAH section to Pretoria, and the Tripoli-Windhoek to Cape Town.

Figure 3: Map of TAH, dotted lines showing missing Links



Road Transport: vehicle fleet and operation

Road transport is the most dominant mode of motorized transport in Africa, accounting for 80 per cent of the goods and 90 per cent of the passenger traffic within the continent.

A study by NEPAD in 2006 indicated that there were about 20 million road vehicles both public and private in Africa, of which Central Africa accounted for 2 per cent, Eastern Africa for 11 per cent, Northern Africa for 9 per cent, Southern Africa for 58 per cent and Western Africa for 21 per cent.

The average age of commercial road vehicles (buses and trucks) is 20 years or higher, against the 8 to 12 years for developing countries as a whole and less than 10 years for industrialized countries. The combined effect of the poor condition of the commercial vehicles and roads in Africa, results in the low utilization rate of 65,000 km/year compared to 100,000 km in Asia and 250,000 km in Europe.

Transit times on African transport corridors are unduly long due to a number of reasons, including unclear and sometimes conflicting rules and regulations, inefficient service providers, road blocks, as well as cumbersome administrative and customs procedures.

The existence of roadblocks and numerous checkpoints on African corridors has created a serious challenge to transport facilitation and trade in the continent. It leads to excessive traffic delays thus resulting in substantial increase in transport costs. As it can be seen in Table 2 in 2008 the major corridors in West Africa had 1.7 to 2.40 roadblocks on every 100 km route. The Tema-Ouagadougou corridor had the most frequent check points, with 2.40 per 100 km.

Table 2: Checkpoints on selected West African highways

Corridors	Number of Checkpoints per Corridor		Ratio of Checkpoints per 100 km	
	27/05/07 To 31/12 /07	1/01/08 To 15/06/08	27/05/07 To 31/12 /07	1/01/08 To 15/06/08
Tema-Ouagadougou	29	25	2.40	2.4
Ghana	23	21	2.50	2.41
Burkina Faso	6	40	3.30	2.39
Ouagadougou-Bamako	24	19	2.70	2.09
Burkina Faso	4	6	0.80	1.27
Mali	20	13	4.80	3.01
Lomé-Ouagadougou	17	23	1.7	2.22
Togo	11	18	1.50	2.35
Burkina Faso	6	5	2.20	1.84

Source: Report of Observatory of Abnormal Practices, UEMOA (June 2008)

A SADC report on implementation status of Trans-Africa Highways estimated that about 3.3 million vehicle-hours are spent annually for passing through the borders in that sub-region, the cost of which was estimated at USD 4.8 million.

2.2 Ports and maritime transport

Sea ports are fundamental outlets of international trade for both coastal and land-locked countries. Sea transport has a significant cost advantage over surface transport for dry and liquid bulk cargoes or containerized cargo.

The importance of maritime transport emanates from the fact that over 90 per cent of the world international trade transits through ports. Maritime transport is even more dominant in Africa as it accounts for 92 to 97 per cent of Africa's international trade. However, poorly maintained port infrastructure and inefficient operations remain major bottlenecks for African trade.

With a total coastline of 30,725 km, Africa has 90 major ports, accounting for over 95 per cent of its international import and export trade, six of which are island countries and fifteen landlocked countries. Africa's major ports are shown in Figure 3 (i.e., on the Map showing the Trans-African highways). These ports handle only 6 per cent of global traffic, of which only 6 ports, 3 in Egypt and 3 in South Africa, handle about 50 per cent of Africa's container traffic.

The Africa Infrastructure Country Diagnostic, in its study of 73 ports in SSA, has identified port capacity limitations and lack of institutional reforms as two important constraints that must be

addressed without delay for African ports to effectively contribute to Africa's international trade. Africa's port productivity is low compared to the rest of the world. It is estimated that the average productivity in African ports is about 30 per cent of international norm. Poor management, and limited and poorly maintained equipment account for the low productivity.

An important performance indicator of port operations is the dwell time for vessels. According to NEPAD-AU studies, the average dwell time in a number of major African ports is about 11 days, which is three times that of average dwell times in the ports of other developing regions. Douala in Central Africa, Dar-es-salaam in Eastern Africa, Beira and Maputo in Southern Africa and Guinea in Western Africa have the highest dwell times. Dwell times in each of the selected major ports of Africa are indicated in Table 3.

Table 3: Dwell times of major African corridor ports

Sub-regions/ports	Dwell-time(in days)
Central Africa	
Douala	19
Gabon	15
Congo DRC	6
Eastern Africa	
Djibouti	10
Mombasa	12
Dar-es-salaam	15
Southern Africa	
Durban	5
Beira	10
Maputo	10
Western Africa	
Banjul	5
Conakry	15
Dakar	9

Source: NEPAD-MLTSF study, 2004

According to UNCTAD's Maritime Review for 2006, the volume of goods loaded and unloaded in African ports is estimated to be 860 million tones per year, resulting in the continent's share of about 2.1 per cent of the world's total. Similarly, container ships account for less than two per cent of the African merchant fleet; the vast majority being conventional cargo ships. The shipping lines that principally service long-distance sea routes consider most of Africa's coastal traffic as mere subsidiary to their traditional overseas activities.

2.3 Airports and air transport

Africa had about 4,000 airports and airfields in 2007, of which only 20 per cent had paved runways. The vast majority of airports serve only smaller aircrafts for domestic services. A significant number of Africa's airports do not meet ICAO standards and recommended practices. Runways, taxiways, parking spaces, passenger and freight terminals as well as cargo handling and electro-mechanical equipment are in such a poor condition that they require major rehabilitation and upgrading. Only 117 of Africa's airports are classified as international airports.

Africa's share of global air transport services remains modest at about 5.2 per cent of the two billion passengers carried by 190 Member States of ICAO and approximately 3.6 per cent of freight for the year 2006.

Although Africa's global share of air transport services remains low in absolute terms, the growth rate of air traffic in the continent is higher than that of the world's average. According to the International Air Transport Association (IATA), in 2005, Africa's air traffic had a growth rate of 11 per cent for passengers and 8 per cent for freight, compared to the global figures of 8.3 per cent and 3 per cent, respectively.

Passengers carried to and from African airports grew from 30 million in 2001 to 40 million in 2006, which is an average annual growth of 6 per cent. South Africa, with 12.9 million passengers in 2006 has by far the largest share of passengers carried.

Africa's air transport sub-sector is also expected to continue on a strong growth path in the coming years. The forecast indicates a growth of more than 5% for the passengers and 6% for the freight.

According to NEPAD's study on transport infrastructure (2006), out of a total of 1167 aircrafts operated by African Airlines, the vast majority (about 80 per cent) were 10 years old or higher, with nearly half of the total (48 per cent) falling in the age group of 20 years or higher.

Table 4: Average age of the African air fleet

Age Bracket (years)	0-10	10-20	20-30	Over 30	Total
Number of Aircrafts	236	366	322	243	1167
Share in Percentage	20.2	31.4	27.6	20.8	100

Source: NEPAD Infrastructure Development Gaps Report, 2006

Africa's aircraft fleet average age of 20 years compares unfavorably with 12 years of that of North America, nine years of that of Europe and seven years of that of Asia.

The Yamoussoukro Decision

The most radical step to-date in liberalizing air transport in the continent was taken in 1988 when African Ministers responsible for civil aviation, adopted the Yamoussoukro Declaration on a New African Air Transport Policy. This Declaration was a response to the deregulation and liberalization policies that had been implemented in USA and Europe since the late 1970's. The Yamoussoukro Declaration was aimed at creating a conducive environment for the development of intra-African and international air services in Africa.

To accelerate the implementation of the Yamoussoukro Declaration, the African Ministers Responsible for Civil Aviation adopted the "Decision" related to the implementation of the

“Yamoussoukro Declaration” for the liberalization of access to air transport markets in Africa at their meeting in Yamoussoukro in November 1999.

The Heads of State and Government of the Organization of the African Unity (OAU) (now AU) at the summit held in July 2000 in Lome, Togo, endorsed the Decision of the Ministers. The Decision reaffirmed the commitment of African countries to gradually eliminate non-physical barriers to intra-Africa air transport and restriction linked to: the granting of traffic rights, particularly the fifth freedom traffic right; aircraft capacity of African airlines; traffic regulation; designation of operating instruments; and operation of cargo flights.

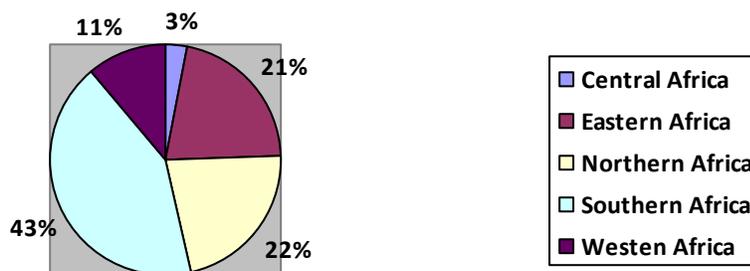
Since the adoption of this Decision, African countries in collaboration with African regional organizations, have implemented a limited number of air transport liberalization policies; therefore the full implementation of the Yamoussoukro Decision still remains a challenge to most African countries.

2.4 Railways and rail transport

Railways are the most cost-effective mode of transport for moving bulk cargo for long distances over land. They are suited to container traffic between ports and capitals. The relative importance of the rail system compared to other modes is the advantage it has gained from recent economic and technological trends including higher energy prices, the growth of container stations and new increases in flows of bulk trade and traffic. However, the railways in Africa carry only 1 per cent of the global railway passenger traffic and 2 per cent of the goods traffic.

The railways connectivity is very low. In 2005 Africa had a total railway network of 90,320 km or 3.1 km of per 1,000 sq. km. The sub-regional distribution of the railway network at the time is shown in Figure 4.

Figure 4: Share of Africa’s railway network by sub-region

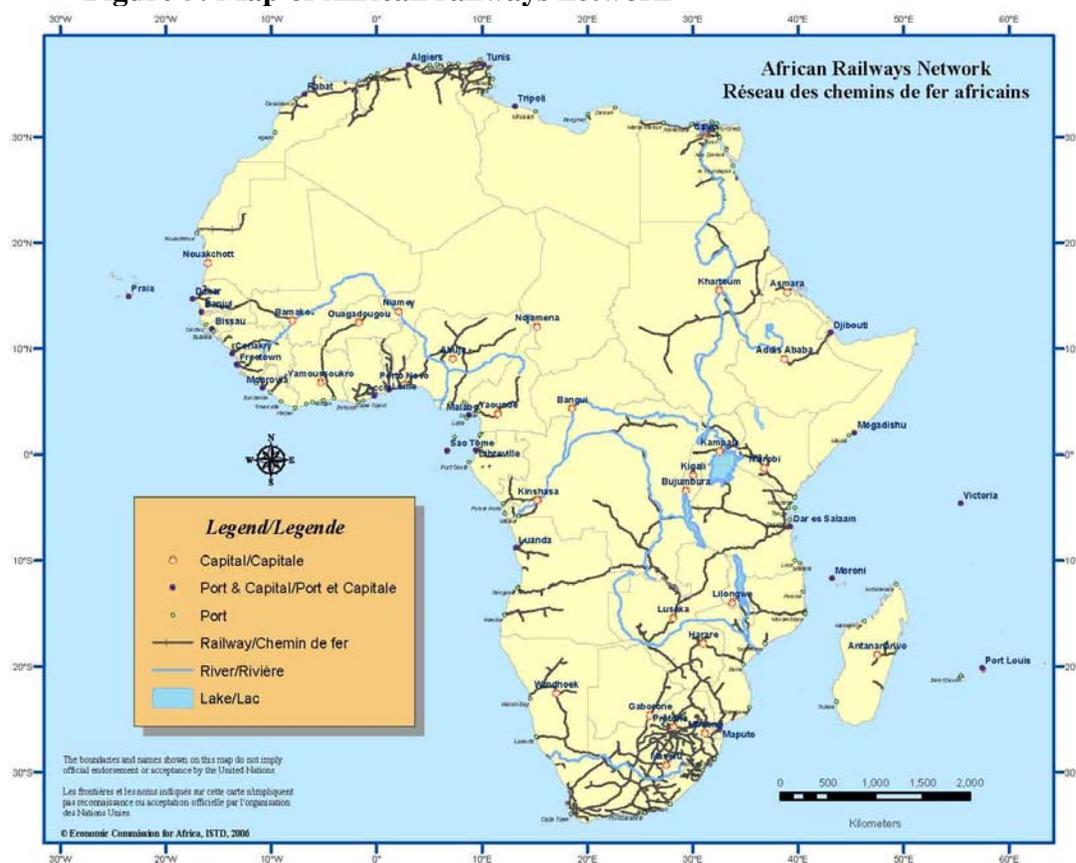


Source: a) World Development Indicators 2008
 b) The World Fact Book 2007
 c) Final Evaluation Report: UNTACDA II, 2002

Most of the network, having been built at the end of the nineteenth century or the beginning of the twentieth century, when the most important demand for transport emanated from the need to link ports to the hinterland producing primary commodities for export.

Poor management, old and poorly maintained track, rolling stock and other facilities has left railways in Africa in a poor state. The only exceptions are, Tazara, the Trans-Gabonese, the Trans-Cameroonian and the mining lines which were built in the late 1970s. Of the total number of the Africa Union member countries, seventeen have no railway. These are: Burundi, Cape Verde, Central African Republic, Chad, the Comoros, Equatorial Guinea, the Gambia, Guinea Bissau, Libya, Mauritius, the Niger, Rwanda, Sao Tome & Principe, the Seychelles, Sierra Leone (the railway no longer works) and Somalia.

Figure 5: Map of African railways network



African Railway lines use nine different gauges. The following three are widely used:

- The 1.067 m gauge is the most widely used gauge, representing 61.3 per cent of the continent's network, mainly in Sub Sahara African countries.
- The 1.000 m gauge representing 19.2 per cent of the continent's network and,
- The 1.435 m gauge representing 14.5 per cent of the continent's network (dominating in Northern Africa.)

The above physical characteristic of the rail networks in Africa form major hindrances to the introduction of modern trains, having high speed and carrying capacity.

In spite of the major investments made over the 1970s and 1980s in infrastructure and rolling stock, the role of railways, both in the transport of goods and of persons, has continued to decline nationally and subregionally.

The poor maintenance of rail infrastructure and the paucity of available rolling stock have contributed to the deterioration of rail service quality. In addition, railways are facing competition from road transport over the long haulage distances in which they enjoyed a comparative advantage. Moreover, railway companies were (and some still continue to be) characterized by bureaucracy, over-staffing and low productivity.

The situation called for reform in a number of African countries through privatization, commercialization or simply the closure of some railways. The railway companies in North Africa, on their part, have been revamped, giving them greater management autonomy.

2.5 Inland water transport

The inland water transport mode is little used in Africa despite the fact that it is an excellent way of opening up remote areas. Africa has this cheap energy and environment friendly mode of transport but its development and exploitation have been slow over the past decade at a time when its importance in other regions of the world has increased. This is because Africa has only a few internationally navigable inland waterways in the Congo, the Nile and Zambezi basins while the greater part of its rivers have remained undeveloped with depths that vary seasonally and remain unpredictable. Lakes offer the best options for inland water transport, particularly in East and Central Africa.

The major constraints of inland waterway transport are the following: poor safety and security due to lack of communications and SAR system; poor infrastructure at terminals; difficulties arising from seasonal blockages caused by water weeds that often close in land waterways routes and terminals; and lack of modern fleet to provide reliable transport services.

III REVIEW OF PROGRESS MADE IN THE DEVELOPMENT OF TRANSPORT SECTOR

Significant transport infrastructure development and services, including roads, railways, airports and seaports has taken place.

To support efforts by individual countries, sub-regional, regional and international organizations, ministerial conferences and heads of state summits adopted decisions and resolutions with the view to accelerating the development of the transport system.

In road sub-sector, in addition to their efforts in increasing the road network, many African countries have established road funds and road agencies with the aims of providing a predictable and sustainable funding for road maintenance. By 2007, twenty seven countries put in place road funds.

African countries also adopted road transport development plans some embarked in the initiative of integrating transport strategies with the poverty reduction goals; in 2007, eighteen countries completed their Poverty Reduction and Transport Strategy Review (PRTSR).

At the political level, the first AU Conference of Ministers in Charge of road transport, was held in Durban (South Africa) in October 2007 and adopted a resolution and an action plan aiming at fostering the road transport development.

With regard to railways, efforts at developing and harmonizing policies at the regional level have been made in recent years. One example is the Brazzaville Declaration and Plan of Action on African Railways adopted by the first conference of Africa's Ministers responsible for railway transport system, held in Brazzaville during April 13-14, 2006. At the conference, issues related to developing an effective railway system that will promote Africa's Development and Integration were discussed.

As a follow up to the Brazzaville Declaration and Plan of Action, a conference was organized by the African Union Commission in collaboration with the Department of Transport of the Republic of South Africa for railway professionals to look into issues such as interconnection and interoperability of Africa's railway networks. The conference of the railway professionals held in Johannesburg in November 2007 also discussed and made recommendations on harmonization of standards for infrastructure, equipment, practices and procedures.

As part of the mandates assigned to RECs regarding the implementation of the Plan of Action, the COMESA Authority agreed at its Twelfth Summit, held in Nairobi, on May 22 & 23, 2007 to develop a Model Agreement for Railways Concessioning within the COMESA region.

African railway enterprises have undergone some reforms aimed at bringing about competition, efficiency and financial viability. The reforms have even created an enabling environment for the private sector to enter into the railway transport market. Management contract of publicly owned railway enterprises has been a major form of private sector participation in the sub sector.

In line with this, a number of African countries have introduced a wide range of reforms aimed at stemming the declining performance of their railways and improving efficiency and safety.

Since 1993, fourteen railway concessions, costing US\$0.4 billion to private investors have been registered. The AICD study reported that frequent renegotiations, low traffic and costly public service obligations (PSO) have kept private investment in the railways below expectations. The trend of African railways concessioning since 1993 is shown in Table 3

Table 5 : Railway concessioning since 1993

Country	Year Awarded	Concessionaire	Year Commenced
Ivory coast/Burkina Faso	1995	Sitarail	1995
Cameroon	1998	Camrail	1999
Gabon	1999	Transgabonaise	1999
Malawi	1999	CEAR	1999

DRC	1995	CEAR	1999
Zimbabwe	1997	BBR	1997
Togo	N.A.	WACEM/Spoornet	2002
Maputo Corridor	2002	NLP/	
Senegal/Mail	2003	Transrail	2003
Zambia	2003	RSZ	2003
Madagascar (North)	2003	Madarail	2003
Mozambique (Beira)	2004	CCFB (Rites)	2004
Mozambique (Nacala)	1999	CDN(CEAR)	2005
Kenya	2006	Sheltam-comazar	2004
Uganda	2006	Sheltam-comazar	2004

Source: Richard Bullock, Results of Railway Privatization in Africa updated by information from CPCS Transcom, Canada (2006). The world Bank Group, Report No. 36005, Sept. 2005

In an effort to address the challenges facing Africa's maritime transport, the first AU Conference of Ministers responsible for maritime transport held its Meeting in Abuja, Federal Republic of Nigeria, during February 22-23, 2007 on the theme "The role of maritime transport in the development of Africa." At the end of the meeting, the Abuja Declaration and Plan of Action on Maritime Transport of Africa was adopted.

In the inland water transport, the following actions in relation to the management and development of inland waterways have been taken at regional and bilateral levels.

- (i) The establishment of the International Commission of the Congo-Ubangi-Sangha basin (CICOS) with the objective of improving safety of the waterways has been established.
- (ii) The improvement of the navigability of the Niger by building additional ports and facilities for handling cargo along the most navigable section of about 1,000 km.
- (iii) Joint formulation and implementation of a frame work in respect of development of a ten-year program (2004-2013) for Lake Victoria has been drafted with the aim of providing a sustainable regional marine based safety support for all projects and programs under the auspices of the East African Community (EAC).
- (iv) Establishment of the Permanent Committee of National Transport Administrators, Comité Permanent des Responsables Nationaux du Transport Lacustre (COPTRALAC) under the auspices of the Economic Community of the Great Lakes countries (CEPGL) and the Permanent Technical Committee (CTC) responsible for navigation on lake Tanganyika in regard to the implementation of inland water transport cooperation operations in the south corridor project of COMESA.

In air transport, infrastructure have been improved in some countries, institutional reforms are undergoing with the separation of responsibilities for the development and management airport infrastructure and the regulatory function.

With regard to the liberalization of the access to air transport market in Africa, some efforts have been made by African countries to implement the Yamoussoukro Decision.

To give a renewed impetus to the implementation of the Yamoussoukro Decision, African Ministers Responsible for Air Transport have held three meetings since the beginning of 2005: the first in Sun City, South Africa, in 2005, the second in Libreville, Gabon in 2006 and the third one in Addis Ababa, Ethiopia in 2007. The following decisions were made in their last meeting in Addis Ababa.

In the 3rd meeting, the ministers decided among other things to create the Executing agency of the Yamoussoukro Decision and to entrust it to AFCAC. To that end, the AU commission should work out modalities for accomplishing the undertaking;

The most recent addition to the efforts towards the implementation of the Yamoussoukro Decision on the liberalization of access to the air transport markets in Africa is the decision made by Central and Western African Ministers responsible for aviation. During their meeting held in Accra, Ghana on November 7, 2008, the Ministers agreed to accelerate the liberalization of the markets in the two sub-regions.

3.1 *Transport and trade facilitation*

A multitude of international agreements and protocols aimed at simplifying and harmonizing trade and transport between states have been signed in Africa. In addition to these, numerous bilateral agreements on international road transport have been signed by several Africa countries.

In Central Africa, for example, several conventions governing international transport have been signed including: (i) the inter-state convention for the transportation of miscellaneous goods by road; (ii) the inter-state convention for multi-modal transport; and (iii) the regulation of transport of dangerous goods and the Inter-State Transit Agreement for Central African countries. CEMAC countries have: (i) adopted a community highway code and a civil aviation code; (ii) created an international commission for the Congo, Oubagui and Sangha Basin; and (iii) signed a protocol on maritime cooperation as well as an agreement on air transport between member states. An agreement on transport master plan, including transport facilitation was also adopted.

The CEMAC Trade Corridor Project approved by member States in 2006, aims at facilitating efficient regional trade among member states and improved access to world trade. Financing for the three-country (Chad, the Central African Republic and Cameroon) corridor project being undertaken by CEMAC has been secured from the World Bank (USD201 million), AfDB (USD67 million grant), both signed in 2007. There was also plan for USD76 million loan agreement between AfDB and CAR.

To facilitate interstate freight traffic, ECOWAS and UEMOA are working towards the full implementation of the two conventions adopted in 1982: the Inter-state Transport convention (TIE) and the Inter-state Road Freight Transit convention (TRIE). The conventions, which have already taken effect, provide the guideline to be followed with regard to road transport services and allow uninterrupted transit across country boundaries.

Similarly, efforts are been made to improve the implementation of the common vehicle insurance scheme known as the Brown Card. The scheme covers third-party liability and medical expenses, the Automated System for Customs Data (ASYCUDA) as an e-commerce approach

towards overcoming delays in reporting of traffic movements and location. Presently, ECOWAS and UEMOA are working on the establishment of joint border posts, which, among other things, would accelerate the traffic and address issues of variations in working hours at adjacent border posts. They are also in the process of establishing corridor management committees and observatories for monitoring abnormal practices along major transit transport corridors.

As part of the transport facilitation effort, an initiative aimed at improving road transport governance has been launched in West Africa. A major component of the initiative is the preparation and dissemination of a quarterly report on road corruption along three (Tema - Ouagadougou, Ouagadougou - Bamako and Lomé - Ouagadougou) primary trade corridors. The report is expected to help fight road corruption by providing timely information to decision makers and other stakeholders.

In Southern Africa efforts to improve trade facilitation include the launching of the Regional Trade Facilitation Program (RTFP), a key component of which is the One Stop Border Post (OSBP). The OSBP involves measures including harmonization of customs clearance procedures at border crossing points. A pilot OSBP has been put in place at Chirundu border post (between Zambia and Zimbabwe), with others to follow. Similarly, in Eastern Africa, an OSBP aimed at improving the efficiency of rail traffic between Kenya and Uganda has been established at Malaba¹.

In the Eastern and Southern Africa sub-region, COMESA and SADC have adopted a number of protocols related to transport facilitation. They have also adopted measures for facilitating transport and transit between their member states. At its Twelfth Summit, held in Nairobi, on May 22 and 23, 2007, the COMESA Authority urged COMESA member states to implement the trade and transit facilitation instruments approved at earlier Summits.

At bilateral level, agreements have been signed between countries to promote transport facilitation. Uganda and Rwanda, for example, recently agreed to extend their working hours at their border post to 22.00hours. A recent conference in Kampala, Uganda, with the theme 'Seamless Transport Services' focused on the reduction of NTBs between the port of Mombasa and the landlocked neighboring countries. Following the recommendation of the Workshop, the Kenyan Government decided to change the daily working hours at the Port of Mombasa to 24 hours.

In an effort to further reduce NTBs the Kenyan government has decided to open border posts to neighboring landlocked countries, 24 hours every day, which is an enormous improvement from the existing practice of an eight-hour working day. There are also plans to bring down the number of road blocks between Kenya and Uganda on its Northern Corridor (which comprises a rail and road network that links Kenya to the Great Lakes countries of Burundi, Democratic Republic of Congo, Rwanda, Southern Sudan and Uganda) from the current 47 to 17.

In a similar move aimed at improving transport and trade facilitation, a corridor management mechanism of the Central Corridor linking the great lake countries to the port of Dar es Salaam was put in place in 2005. During the same period, preparations were underway to establish corridor management groups for the North-South Corridor, linking DR Congo, Zambia, Zimbabwe, Malawi

¹ ICA Annual Report, 2007

and Botswana to Durban port as well as the Bamako-Ouagadougou-Tema and Niamey-Ouagadougou-Lomé Corridors.

Following the implementation of the corridor management initiative important results have been achieved. The journey time from Mombasa to Kampala, for example, fell from 10 to 6 days.

In 2003 the Almaty Program of Action addressing the Special Needs of Landlocked Developing Countries within a New Global Framework for Transit Transport Cooperation for Landlocked and Transit Developing Countries was launched by the UN General Assembly. As a follow-up to this international initiative, African Governments have developed the African Program of Action focusing on the development of major transit corridors that were selected at a preparatory meeting on the Almaty Program of Action (APoA) in 2003 in Addis Ababa. An African review meeting was held from 17-20 June 2008 to assess progress made in establishing efficient transit transport systems on the continent, and to agree on what needs to be done to further galvanize global partnerships to assist African landlocked and transit developing countries to effectively implement the APoA.

3.2 *Transport safety and security*

Having recognized the significant health hazard and economic cost of poor road safety, African governments are working with ECA, SSATP, WHO and NGOs to formulate transport policies that will improve road safety.

In an effort to bring together stakeholders at the regional level, the African Road Safety Conference, which drew more than 250 delegates was held in Accra, Ghana from 5 – 8 February 2007. The Conference was jointly organized by the Government of Ghana, the World Health Organization and the UN Economic Commission for Africa to review the progress made by African countries in improving road safety and the development of national action plans.

At the end of the Conference, the Accra Declaration of African Ministers responsible for transport and health was issued which called upon developed countries to recognize the urgent need to improve road safety in Africa, particularly in Sub-Saharan Africa and systematically include road safety in the transport development programme and strategies.

The Declaration also highlighted the commitments of the African governments represented at the Conference, inter alia, to work together to stop the growing epidemic of deaths and injuries on African roads (targeting to reduce road traffic fatalities by half by 2015); set and achieve measurable national targets for road safety; mainstream road safety into new and existing road infrastructure development programs; improve the collection, management and use of data on road deaths and injuries so as to formulate evidence-based policies; and to ensure the enactment and enforcement of laws associated with driving under the influence of alcohol and drugs, inappropriate and excessive speeding, non-use of helmets, driver licensing, roadworthy vehicles, and the use of mobile phones while driving.

Recently, ECA, in collaboration with FIA Foundation, organized 8-10 July in Dar es Salaam, Tanzania, an African Road Safety Seminar whose objective was to assist African countries to

develop regional and national road traffic casualty reduction targets and provide them with examples of good road safety practices in setting up and monitoring these targets.

As part of the support being given by Africa's development partners to address the critical issue of road safety, the Global Road Safety Facility has been created by the World Bank with initial contribution of USD5 million from the Bank and Federation Internationale de l'Automobile (FIA) Foundation.

In the water transport sub-sector, a number of measures have been taken in the past few years to address the important issues of safety and security. With regard to inland water transport, the IMO has developed model safety regulations for inland waterway vessels and non-conventional craft, including fishing vessels operating in Africa.

To combat the increasing threat of maritime piracy in the Horn of Africa and the Gulf of Aden, many governments in cooperation with the IMO are taking steps. The UN Security Council has authorized naval powers of the world to conduct patrols off Somalia. Since then warships including those from NATO, EU members, Russia and India have been patrolling the sea off the coast of Somalia and in the Gulf of Aden.

A code of conduct aimed at combating acts of piracy and armed robbery against ships was adopted following a high-level meeting held in Djibouti on 26 January 2009 under the auspices of the IMO and attended by representatives of 17 states from across the western Indian Ocean, Gulf of Aden and Red Sea.

With regard to air transport safety, the Standards and Recommended Practices (SARPs) initiated by the International Civil Aviation Organization (ICAO) has been serving as the basis for safety standards in the air transport industry for several years. To enhance air transport safety, the ICAO has also embarked on a project referred to as the Universal Safety Oversight Audit Program (USOAP). The lessons learned from the ICAO safety audits have led to the commitment by the Directors of Civil Aviation to implement an action plan aimed at strengthening their capabilities with respect to safety oversight, particularly with regard to the areas of licensing, airworthiness and the operation of aircraft. Its worth mentioning the implementation of the Cooperative Operational Safety and Continuing Airworthiness Development Programs – COSCAP

In West Africa, the COSCAP Projects include:

- Conducting inspections and airline audits at the request of States
- Undertaking mock audits of CAAs at the request of States
- Harmonization of regulations and procedures through safety working groups comprising representatives of participating States and project personnel
- Training of regional and national inspectors in the application of the harmonized regulations and procedures
- Provision of a wide range of supplemental technical assistance by industry.

With the favorable response to the COSCAP Program in the West and Central African sub-region, the concept was subsequently extended to the Eastern and Southern African sub-region.

At the continental level: the initiative referred to as '*Program for Infrastructure Development in Africa*' (PIDA) is currently at its initial stage. In addition to its lead role, the AUC is mandated to develop regional sector policies and master plans based on the regional policies and master plans developed by the RECs, which are in turn designated as the pillars of the initiative.

A coordination mechanism has also been established, whereby the AUC, the African Development Bank and the NEPAD Secretariat on the one hand and the different African stakeholders, on the other, can engage in consultation among themselves. The mechanism is also expected to serve as an instrument of dialogue and interaction with Africa's development partners.

The PIDA, whose major objectives are establishment of a strategic framework for the development of sub-regional and regional infrastructure and an infrastructure investment program as well as the preparation of an implementation strategy, is expected to address issues including, the continent's deficiency in information, need for the prioritization of development needs and the poor implementation of initiatives and programmes observed in the past.

IV CHALLENGES AND CONSTRAINTS

In spite of the efforts made by African governments and their development partners in formulating and implementing measures, policies, strategies and programmes to develop adequate, safe, secure and affordable transport system that supports efforts to eradicate poverty and bring about sustainable development, a wide gap still exists between planned targets and the level of achievement. This can be attributed to the numerous challenges and constraints that the region faces in relation to the development of sustainable transport systems. The major challenges and constraints include the following.

Inappropriate national policies and limited implementation of national, sub-regional and regional agreements

The lack of appropriate and well formulated policies and strategies as well as the slow implementation of sub-regional and regional agreements remain major obstacles to the development of sustainable transport in Africa. Many African countries do not have policies that allow and promote private sector participation in transport infrastructure development and operation. Liberalization and privatization in rail, air and maritime transport is still in its infancy. Efforts to harmonize policies and regulations pertaining to cross border movement of goods, services and people have not yet been effective, as many African countries have not fully implemented agreements aimed at facilitating cross border movement of goods and passengers by road and rail as well as the much anticipated and long overdue Yamoussoukro Decision in relation to air transport.

Low transport network connectivity and poor state of network

In many African countries transport networks are characterized by several missing links within each country and between countries, forcing a significant percentage of the rural population to live without access to market and essential economic and social services. Coupled with the problem associated with the missing links in the road, rail, inland waterway and air transport system, a large proportion of the existing infrastructure is aging and in a poor state.

Inadequate human and institutional capacity

Although the number of workers in African public transport enterprises and agencies is relatively high, the availability of skilled personnel is limited in most transport organizations. As it is true for other critical capacities, managerial and technical skills are in short supply in Africa. In addition to lack of adequate skilled human resources, institutions that have appropriate powers and technical capacity to formulate, plan and manage infrastructure development and services as well as to regulate and enforce policies and regulations are lacking in many African countries.

Negative impact of transport on the environment

Despite the critical importance of the transport system in economic development and poverty reduction, it is also associated with significant adverse effects on the environment. The most serious environmental concerns usually associated with the construction of roads, railways, airports and seaports are the destruction of forests and other ecosystems including wildlife habitats; land degradation particularly through soil erosion on land adjacent to the infrastructure; and changes made on the drainage systems and geological formations.

Other typical serious environmental problems arising from transport operation include emissions of carbon dioxide and other greenhouse gases from vehicles, trains and aircrafts, as well as congestion of streets and ports. The role of these emissions in causing air and noise pollution, ozone layer depletion and climate change, which in turn pose human health hazard and negative impact on the economy, is well documented.

High transport costs

Africa has its transport costs among the highest in the world. Transport services are unaffordable to many African citizens as transport costs are high compared to the average incomes of the citizens. Travel costs in African cities have a share of 21.7 per cent of GDP, compared to 14.3 per cent in Latin America and even lower in other parts of the world. Similarly, freight costs in Africa are significantly higher than the average cost in Asia. The high transport cost in Africa is mainly attributable to poor infrastructure, high fuel prices, aging and inefficient fleet, as well as limited completion and low level of trade volumes on some routes. The already high transport costs have been exacerbated in the past few years by the energy crisis associated with the high and volatile oil prices. Factors, including limited skills of managerial and operational staff as well as poor transport facilitation play significant roles in the high transport costs in Africa.

Poor transport safety and security

The prevailing poor state of road safety remains a serious challenge in Africa, as accidents and the resulting loss of life and destruction of property has assumed intolerable proportions. A major weakness in this area is the absence in some countries and the weakness in other countries of lead institutions that are responsible for road safety. Coupled with this, there appears to be a lack of consistent enforcement of traffic regulations. In most cases, the major constraint common to all the weaknesses in the management of road safety is the lack of adequate financial resources. The poor safety record of many African airlines is another area of major concern in Africa.

Poorly developed transport information systems

Statistical information is a key input at every stage of the development process, including in the planning and implementation of programs and projects. Adequate and well organized data collect and management system, statistical information provides tools for making informed decisions in identifying gaps, formulating policies and strategies, developing effective investment programs as well as for monitoring and evaluation. However, in Africa such data is at best limited and poorly organized. Likewise, despite the importance of ICT in facilitating decision making through rapid data processing, storing, retrieving, transferring over long distances, the transport sector has not taken full advantage of the technology due to, mainly, lack of proper policy for the development of the ICT as well as limited financial and human capacity.

Limited Financial Resource: Despite efforts by African governments as well as their international and domestic development partners to mobilize financial resources for financing investment in transport infrastructure and maintenance of existing facilities, huge gaps remain between the demand and available resources. Sustainable transport development requires huge financial outlays to build infrastructure, provide energy-efficient and environmentally-friendly transport equipment, among others.

V. CONCLUSION AND RECOMMENDATIONS

Africa is lagging far behind in transport infrastructure efficient and reliable services. For transport to sustain economic growth and economical integration and to promote Africa's economic and social development genuine policy commitment, tremendous and sustained efforts will have to be invested in this sector.

Accordingly, it is recommended that:

- An integrated approach to transport development policy should be adopted, taking all transport modes into consideration;
- The transport sector should continuous the reforms;
- The building of missing links in transport infrastructure should be promoted;
- The financing of transport infrastructure should be promoted with emphasis on innovative approach;
- A regulatory framework should be instituted providing for broader participation of the private sector in transport management and financing;
- Greater safety and security should be provided in all transport modes;
- Human institutional capacities should be strengthened and training institutions rehabilitated;
- Databases should be created for measuring progress made in transport sector development;

- Further use should be made of ICTs in transport development; and
- Gender, HIV/AIDs and STD control issues should be taken into account in transport policy and strategy formulation.