

AFRICA ROAD SAFETY CORRIDOR INITIATIVE – ENHANCING THE SAFETY AND EFFICIENCY OF AFRICA’S TRADE CORRIDORS

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ABSTRACT

The Northern corridor is the primary and major corridor of the East Africa Community (EAC). It links Mombasa to Nairobi, Kampala, Kigali and Bujumbura. It is 1,670 km long, including 485 km between Mombasa and Nairobi, 663 km between Nairobi and Kampala, 522 km between Kampala and Kigali, and there is further 285 km to Bujumbura. There is competition on the Mombasa - Nairobi segment of the corridor with the longer Dar-Es-Salaam –Nairobi route, yet there is no viable alternative to the five EAC member countries of Kenya, Tanzania and the landlocked Uganda, Rwanda, and Burundi, all together representing a market of 124 million people (16% of Sub Saharan Africa SSA population) with an average income of less than US\$ 270 per annum (2007 estimates). The corridor is also the primary access for part of Central African Republic(CAR), Eastern Democratic republic of Congo (DRC), Sudan and Southern Ethiopia, countries which together account for 223 million people. Transportation costs are 80% higher than in the USA and Europe, and the potential for developmental impact of decreasing the cost of travel and of improving safety and security is huge.

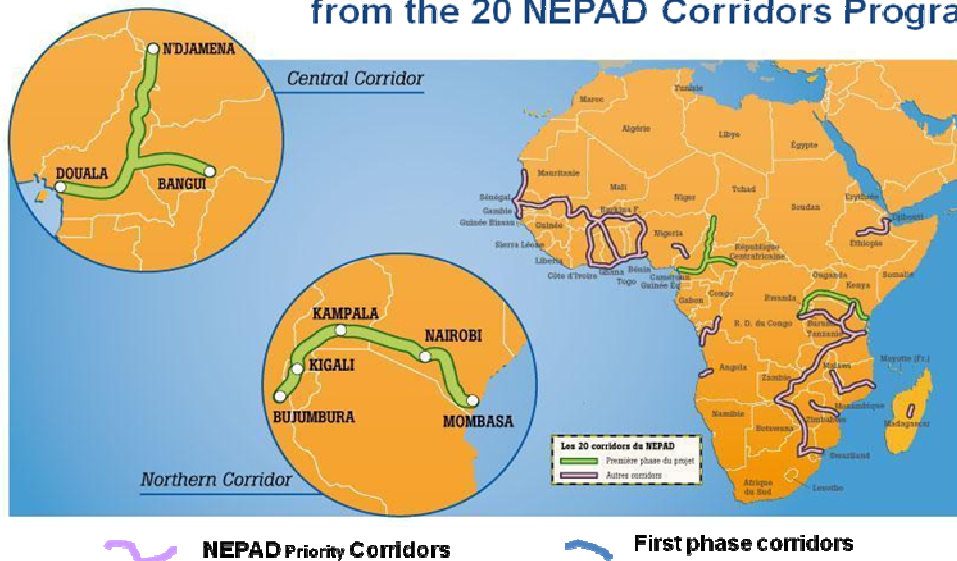
1. INTRODUCTION AND PROJECT BACKGROUND

Transportation costs are 80% higher than in the USA and Europe, and road safety is a development as well as a poverty issue. Underestimated fatality rates are at 28 deaths per 100,000 populations yearly, and car crashes in some countries represent the first or second cause of death for boys and young men. Fatalities per vehicles reach 100 to 200 times those of the UK. The cost of road crashes in Sub-Saharan Africa, estimated at US\$10 billion per year is larger than the sum of all the development aid for infrastructure. Road Casualties affect disproportionately the poor, pedestrians, economically active young adults and passengers in mass transportation. Poverty surveys repeatedly point to crash related death and injury of a family member as a cause of catastrophic impoverishment.

In January 2010, World Bank and Total entered into a partnership agreement to launch the initiative for road safety in Africa along the major and main transit and transport development corridors as identified in the New Partnership for African Development (NEPAD). The partners identified two priority corridors as shown in the diagram above. The Northern Corridor is the primary and major corridor of the East Africa Community (EAC). It links Mombasa to Nairobi, Kampala, Kigali and Bujumbura. It is 1,670 km long, including 485 km between Mombasa and Nairobi, 663 km between Nairobi and Kampala, 522 km between Kampala and Kigali, and there is further 285 km to Bujumbura. There is

a competition on the Mombasa - Nairobi segment of the corridor with the longer Dar-Es-Salaam –Nairobi route, yet there is no viable alternative to the five EAC member countries of Kenya. The Initiative builds on the principle that road crash injuries are predictable and preventable, road safety is for all road users, an accountable national lead agency prompts encourages and assists the road safety stakeholders for evidence-based road safety action, with targets, monitoring and evaluation. Progressively stakeholders build and share knowledge and increase the ownership of an Africa-specific road safety experience.

Two initial Priority Corridors: Northern & Central from the 20 NEPAD Corridors Program



Source from UNFCA 2007

Figure 1 Priority Corridors

1.1 Criteria for selection of the Priority Corridors

The priority corridors' mandate is governed by three policy initiatives: (1) The New Partnership for African Development (NEPAD) strategy focuses on 20 international transit corridors: the Initiative deals with them. (2) The 2007 Accra Declaration by the African ministers resolved to half the number of road accident fatalities by 2015; the Initiative brings the private and public partners towards this goal. (3) The UN General Assembly launched a 2011-2020 Decade of Action for Road Safety; the Initiative constitutes its African flagship.

The intention is to replicate the project in sequence along the 20 NEPAD corridors, starting with the Northern Corridor, in the Kenya - Uganda segment, then the Central Corridor linking Cameroon, Chad and CAR. Further sequencing will be made in consultation with partners. The Project outcomes are expected to include a partnership with visibility and a 10% reduction of casualties, or 240 lives and over 1,000 injuries in Kenya alone.

The Northern Corridor presents favorable conditions for serving as a pilot project for an Africa corridor road safety program. The Northern Corridor is benefiting from many recent investments and projects. The East Africa Community (EAC) has also received considerable donor support, and it presents a positive environment for reforms, with an accelerating pace of regional integration. In addition some recent projects, such as the 2004 Northern Corridor Transport Improvement project and its follow up additional

financing, and the Great Lakes Initiative on HIV-AIDs have built institutional frameworks and have accumulated achievements which are usable assets for road safety interventions.

In addition, the Northern Corridor is a critical access route for a vibrant and organized private sector with large interests at stake, and real commitment to improved road safety. Humanitarian programs use the Northern Corridor extensively to deliver relief in Central and Eastern Africa, from South Ethiopia to Sudan, Northern Uganda, and Eastern Congo and have also initiated action to improve their fleet safety performance.

The Northern Corridor combines poor or worsening road safety situation with high potential for improvement, Today, Kenya is the African country for which the estimated cost of road fatalities is the highest as a proportion of GDP (5%), and it continues to suffer from poor commitment to, and coordination of, road safety. Yet Kenya has experienced two episodes of observed diminution of road crash fatalities and has considerable institutional potential. The road safety situation in Uganda is characterized by rapidly increasing traffic, with larger trucks, faster speeds and continued mixed traffic, and a government and stakeholders not yet focused with consistency and continuity on the road safety agenda, yet presenting a favorable platform of recent initiatives and institutional improvements. .

The road safety situation in Rwanda is characterized by recent improvements due to well focused actions, legislative reform and enforcement, and political will, yet the difficult topography and population distribution throughout the territory renders the challenge more difficult. The Government of Rwanda has built a commitment to making roads safer in support of the rehabilitation of a nation traumatized by the 1994 genocide.

The proposed Decade of Action for Road Safety to be announced at the November Moscow Conference at the same time provides a favourable framework and places additional onus, on the proposed program. The replication of the Northern Corridor project to all twenty NEPAD priority trade and transit corridors would constitute an Africa ten years effort, thereby fitting the time frame of the Decade of Action. The Decade of Action requires strong leadership at the continental level and the proposed program needs to be responsive to the needs and priorities of Africa-wide as well as sub-regional institutions

2. MANAGEMENT PROCESS FOR AFRICA ROAD SAFETY CORRIDOR INITIATIVE

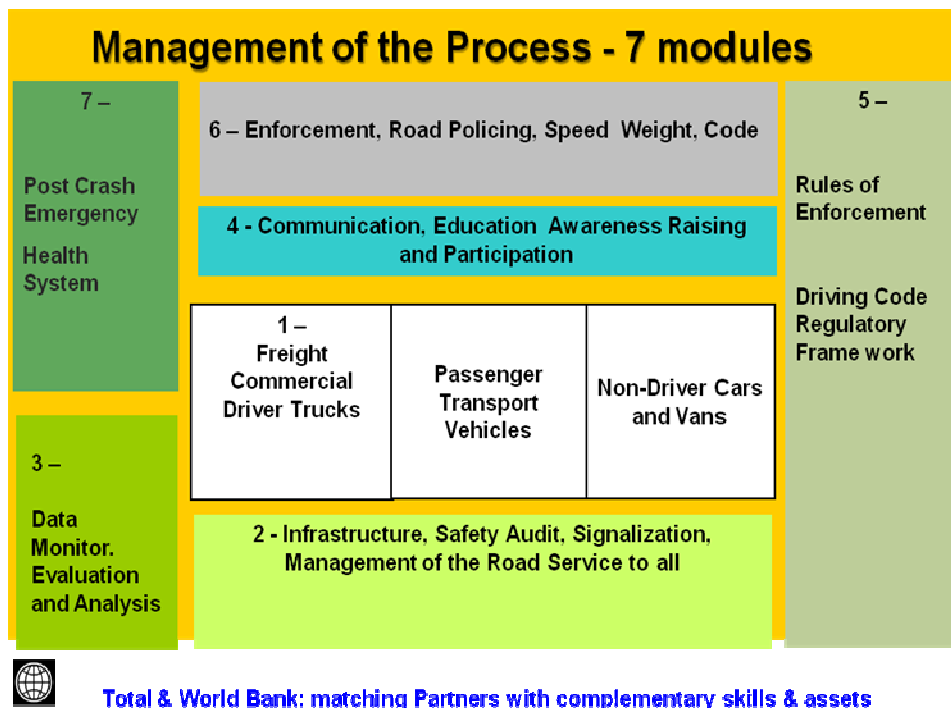


Figure 2 Project Management Frameworks

The way forward to effectively address road safety in Africa is to apply the fundamentals of the best practice new road safety model, based on a system approach, while at the same time building on the specific regional experience and taking into account the institutional capacity constraints. The underpinning principles of the project and program which bring together the findings of best practice and the specifics of the regional context include the following:

Road safety is for all users, motor vehicle drivers and passengers, pedestrians and cyclists, animal traction users, public transport users. It builds on the premise of the vulnerability of the human body. Road safety is produced like other goods and services. It is the responsibility of all, users and producers of safety, and partnerships are critical in its process. Synergies are constantly sought and reinforced, and communication with all stakeholders is a core and continued activity.

The system approach organizes around a lead agency, with adequate legislative or statutory authority to Implement National Road Safety Plans including the safe and expeditious flow of traffic along the Northern Corridor and its entry and exit points

The Road Safety project is evidence based, with targets, monitoring and evaluation. It builds on a scientific, fact-based definition of the problems, on the design of strategies, the setting of targets and the monitoring the performance towards these targets.

The stakeholders continue the successful knowledge building and sharing practices of Sub Saharan Transport Policy (SSATP) for cross-country exchanges, documentation of policy

advance and Africa best practices. The learning by doing approach allows fine-tuning of recommendations and progressively increasing ownership by African governments and stakeholders, as an Africa-specific experience is accumulated.

2.1 Project Management Framework

The 7 Modules were designed to put in place a framework for various levels of intervention that will address road safety management in a holistic manner. The initial focus is to identify opinion formers and stakeholders that will drive each module in an objective and measurable manner. It is for this reason that we have held consultations with stakeholders to assess what they are already doing, how it is being done, the modalities for implementation, target beneficiaries and the finance mechanism.

2.1.1 Target Road Users

The module one deals with the Safety Practice of Vehicles Management and of vehicle driving. It covers freight and passenger transport. The module includes: (a) sharing of information on transport fleet management, truck driver selection, employment, training, and performance management; sharing safety performance data, including safety incidents, lessons and retrofitting of procedures; sharing procedure manuals; (b) defining and setting, implementing and monitoring high performance standards of fleet safety management, and; (c) promoting and advocating road safety among stakeholders – such as the Kenya Transporters Associations – to develop institutional knowledge, capacity and a safety strategy.

The module also includes the designing of a program of support to the smaller freight transport operators lacking the appropriate capacity to finance equipment upgrades and meet the requirements of the necessary regulatory authorities. It also seeks to initiate, with appropriate stakeholder participation, the identification and preparation of a passenger transport safety program, through engaging and strengthening professional associations of passenger transport, while developing and enforcing appropriate safety regulations. In Kenya for example, all public service vehicle operators are now required to become registered members of Savings and Credit Cooperative Organisations (SACCOS). These SACCOs will form the basis for ensuring improved fleet management and driver training systems as well as provide opportunities for operators to obtain the necessary finance for vehicle replacement.

2.1.2 Management of Road Services

The Module concerns the critical Infrastructure Safety Management along the Northern Corridor. Within the Safe System Approach, it promotes appropriate planning, design, maintenance and operation of road infrastructure. A Kenya Northern Corridor International Road Assessment Program I-RAP safety audit was concluded 2009 under the leadership of a Steering Committee including representatives of the Ministries of Transport and of Roads, KRB, the Nairobi City Council, the University of Nairobi, the Kenya Institute of Public Policy Research and Analysis, and UNEP. The audit survey was conducted on over 2,000 km of highly trafficked roads, mostly, but not exclusively, along the Northern Corridor, and covering most of the segments Mombasa – Nairobi - Eldoret. The cost per fatality avoided was found to be extremely low - at least for the first set of

countermeasures, and the initial results ensure that the proposal is affordable as well as politically and institutionally viable.

The preliminary findings of the audit point to the critical importance of speed management, the hazards generated by a combination of relatively good road surface and poor delineation, and by the lack of segregation of vehicles from pedestrians especially in urban and peri-urban areas. About half of the severe casualty reduction along the segment audited, could be achieved by measures that could be part of routine maintenance work. In particular, maintenance work on shoulders is recommended on some 1,500 km of roads. It is envisaged that less than US\$ 15 million expenditure on shoulder widening would allow more than 1,000 lives to be saved by year, and the proposed additional maintenance effort suggested amounts to US\$2 million per annum. Efforts have been made to engage the corridor operators, the national and regional authorities and the donor community to promote and allocate funding - mostly from the large approved investment programs, for the generalization of the Network Safety Management and its harmonization along the entire Kenya segment of the corridor. The module also takes into consideration the promotion of appropriate follow-up of the safety audit by the International Road assessment Program I-RAP, and the funding of the identified priority countermeasures. The World Bank and the African Development Banks have confirmed their intention to ensure the funding of the proposed countermeasures as part of their ongoing investment projects

2.1.3 Data Monitor Evaluation and Analysis

The module focuses on the generation of consistent standard road safety data, setting of safety performance objectives, monitoring safety along the Corridor, Evaluation and Analysis of results for feedback in the project and program. The module seeks to identify and prepare a package of activities and seek appropriate funding. Real time information, monitoring, analysis, evaluation and communication are critical to the process and are at the core of an effective pursuit of safety improvements. While focusing on reliable data generation and analysis according to internationally recognized norms, the module gives attention to the dynamic feedback process between monitoring results, decision making and communication. Of more significance is the need to develop a consistent and measurable baseline data for monitoring and evaluation of planned interventions.

2.1.4 Education, Information and Communication

The module deals with Education, Information and Communication (EIC) at national and at regional level, along the corridor. The focus is on the development of a component of EIC with active stakeholder participation, including from the education sector, the roads authorities, the traffic police, local authorities, the civil society at large and the private economic sector. It also builds on the considerable work already done with respect to communication awareness raising and information of the truck drivers and trucking industry with respect to HIV-AIDs through the Great Lakes Initiative on HIV-AIDs which has achieved notable results with respect to HIV prevalence and risk behaviour along the corridor. This was achieved through careful analysis of the truckers business practice, and leading to the investment in truck parking areas and

wellness centres, information booths along the corridor, information and communication campaigns, and the effective targeting of information and service to commercial drivers and the communities providing services to them. The road safety sensitization and training reflects existing programmes on reducing the spread of HIV-AIDS program by long distance drivers plying the corridor. It also identifies and coordinates with specialized NGOs programs and internationally financed campaigns such as “*Arrive Alive Uganda*”, and seeks to develop an EIC strategy and plan with the corresponding appropriate financing. The IEC module frames its activities within the Safe System Approach and communicates and disseminates to all stakeholders using the corridor.

2.1.5 Rules of Enforcement – Driving Code Regulatory Framework

The Module is concerned with the vision, policy, legislation, regulations, and the corresponding institutional framework setting the road safety program at national level, and its harmonization in the Eastern Africa Community region. It is based on the Safe System Approach and is informed by the “Vision Zero” principle. Building on the “*Kenya Plan of Action for Road Safety 2006-2010*”, the module supports the implementation of the existing policy by stakeholders, including national institutions, local governments, civil society and the donor community through its various activities and its relevant project financing. It supports the finalization and launch of the driving code, the ways to set up of an accreditation system for driving schools and curriculum, the rules of entry and exit for drivers and vehicles, and the rules and responsibilities for enforcement and penal code in particular along the Northern Corridor. Of particular concerns are the technological and institutional options to improve governance and the appropriate governance of driving. Another issue is the absence, in the institutional set up of the current road safety policy, of a National Road Safety Authority, with a proactive leadership multi sector mandate and a financing capacity to spearhead road safety implementation.

The module develops target and seeks to promote, among participants and stakeholder agencies, an accountability framework that provides the real incentive of best practice system approach. It seeks to communicate the road safety vision, document the project activities, achievement and challenges, and ensure the overall communication strategy of the project, to engage the civil society and stakeholders, promote awareness and keep the safety agenda alive in public debate, foster partnership and facilitate learning and replicating.

2.1.6 Enforcement and Road Policing

The module deals with the enforcement of the driving code and vehicle safety standards along the corridor. This includes developing activities and seeking funding and institutional arrangements for the upgrading of traffic police capacity, possible support from sister police institutions and twinning arrangements, police equipment modernization, corruption control and governance enhancement. The option of corridor dedicated special safety police should be considered. Recent efforts and success in speed limit and seat belt enforcement in Rwanda should be considered for expansion and replication along the rest of the corridor. It also seeks to document and communicate its activities to promote awareness, foster partnership and facilitate learning and replicating.

Traffic enforcement along the corridor is expected to be provided through use of Information and Communication (ICT) technology such as improved traffic signals supported by speed cameras and other highway engineering improvements such as improved lane demarcation using luminous traffic studs, installation of rumble strips at accident prone areas with mixed usage i.e. pedestrians; non motorised transport and motorcyclists.

2.1.7. Post Crash Emergency and Health Systems

The module deals with post crash emergency medical interventions along the Corridor, and with the interface between the traffic police, traumatic care and safety data recording and analysis. The module focuses on on-sight emergency care, and pick up of victims at crash sites along the corridor, appropriate post traumatic treatment, and rehabilitation of the injured, and coordination with the traffic police and data statistical capacity to make possible the reliable and consistent fatality and injury data recording. The module works seeks place the Health authorities in the lead role of identifying a package for activities, and seeking the corresponding financing for preparation and execution. Like all other modules, module five seeks to document and communicate its activities to promote awareness, foster partnership and facilitate learning and replicating.

The aim of post-crash care is to prevent death and disability, limit the severity of the injury and the suffering caused by it, and ensure the crash survivor's best possible recovery and reintegration into society. Kenya has witnessed some major road accidents involving fuel tankers that have resulted in significant loss of life. Notable among these was the Sachang'wan disaster on January 31, 2009 resulting in over 90 deaths. The reports from the various agencies that provided support for accident victims at the time is been evaluated to ensure that a timely and cost effective response is provided should such an incidence re-occur in the immediate futures

3. PARTNERSHIP STRATEGY

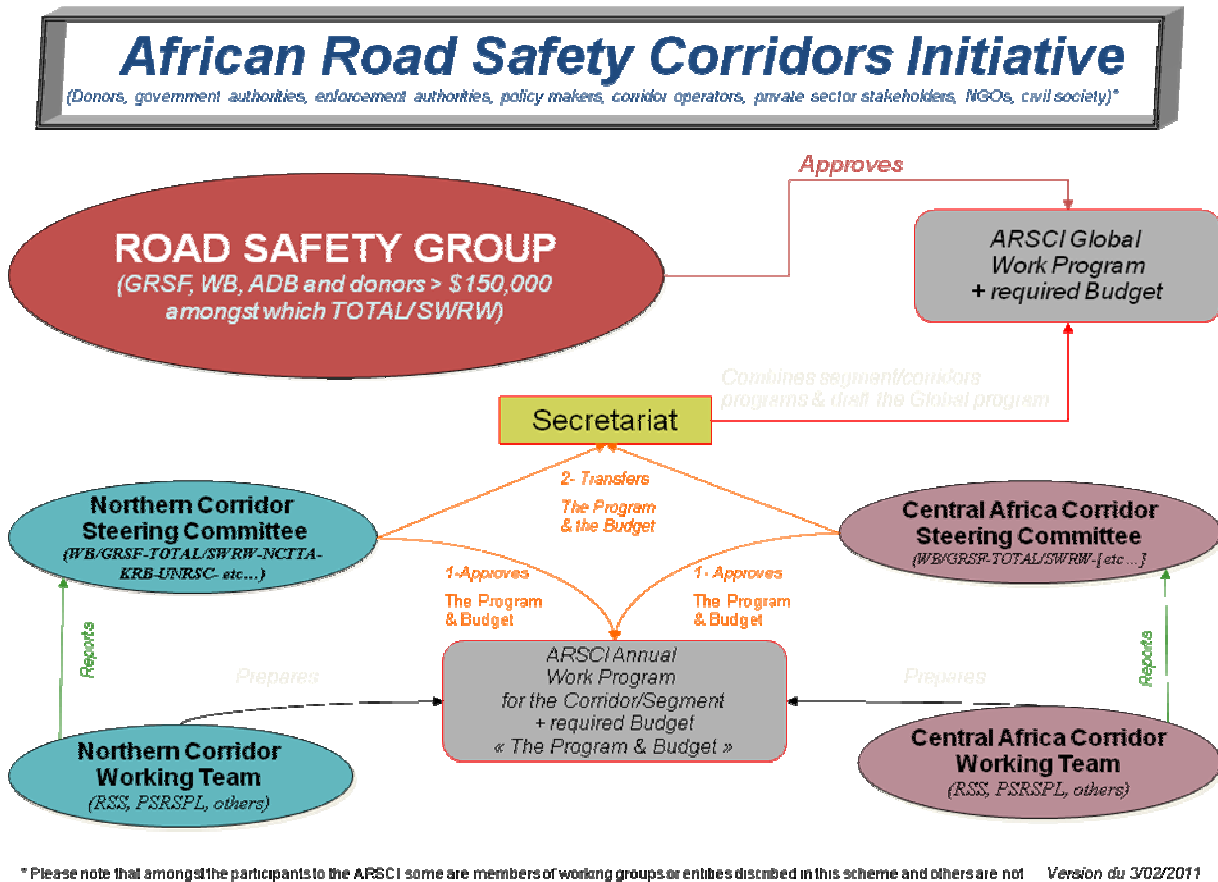


Figure 3 Partnership Structure

The partnership structure is based on the principle that such an initiative should have a proper flow of information, finance, communication and execution at global, regional and national levels. A governance Framework Document has been developed to ensure that the initiative is carried out at each corridor (or segment of a corridor) level by a Working Team that will report to a Steering Committee at regional and national levels. In the case of the former, a Public Interest Entity (PIE) comprising of representatives of the private and civil society sectors with an independent board, technical staff and adequate finance provided by the Total and other private sector partners. The PIE will work in collaboration with civil society partners such as Association of Safe International Travellers (ASIRT), Chariots of Destiny, Pamoja, Kenya Red Cross and the North Star Alliance. Other partners include trade associations (Petroleum Institute of East Africa, African Petroleum Producers Association) and the FIA East Africa chapter.

3.1 Governance Framework

The Africa Corridor Road Safety initiative (ACRSI) has been in operation since January 2010. The initial partnership agreement between World Bank and Total was generic in nature but was geared towards the development of a safe systems approach to road safety management. At the time the partners agreed to provide the following:

- (i) Recruitment of a World Bank Road Safety Specialist, a private sector Project Leader and a private sector road safety project assistant
- (ii) Making available equipped premises and associated services to kick start the implementation of the Northern Corridor Road safety Initiative
- (iii) Providing and financing an appropriate Information and Communications Technology System
- (iv) Development of a public awareness and education strategy and campaign that culminated in the organisation of the first National Road Safety Week and observation of the Remembrance Day for Road Accident Victims in Kenya and Uganda (21 November 2010)

The partnership has since been renewed to take into consideration the need to include other global partners such as the African Development Bank (AfDB) that are likely to contribute to the reduction of road accidents in Africa in line with the doctrines and targets set by the United Nations Decade of Action for Road Safety (2011 – 2020). At the global level the World Bank has put in place the modalities for the establishment of a Road Safety Group (RSG) that includes bilateral and multilateral agencies involved in infrastructure development in the continent.

The RSG is directed by a technical Steering Committee that would plan and monitor a Programme of Action that will be implemented at regional levels (i.e. East and Central Africa) through a dedicated project Working Team headed by a Road Safety Specialist (RSS) provided by the World Bank and a Private Sector Team Leader. The Working Team's activities would be directed by the targets set by the Decade of Action, regional priorities for improving the safe and expeditious flow of traffic along the corridors and National Road Safety Plans.

3.2 Project Implementation at National Level

The partners have constituted and established a Public Interest Entity (PIE) that will be managed by a Board of Directors representing stakeholders in the transport and logistics sector to work in partnership with Government Ministries and Agencies. The Board is expected to meet four times a year and would be charged with overseeing Entity's business and setting the strategic objectives. The Board will use a committee structure comprising finance and audit, government/public affairs, personnel, and policy to assist in its management. These committees meet as and when necessary. Committees would be chaired by Board Members, and membership of committees includes both board members and executive staff. Liaison The day to day operation will be carried out by specialist staff appointed through open competition and would include but not limited to the following:

- (i) Project Coordinator with relevant experience in the management and operation of a not-for-profit organization and be conversant with relevant legal and statutory instrument relating to NGO Governance.
- (ii) Finance/Information Technology Specialist
- (iii) Government/Public Affairs Specialist
- (iv) Private Sector Program Assistant

4. CONCLUSION AND WAY FORWARD

The project represents the first three year phase of a program to be expanded over the entire length of the Northern corridor through Uganda Rwanda and Burundi, and to be replicated along the other international transport and trade corridors of the continent. The replication of the Northern corridor road safety project along each of the twenty major transport priority corridors identified by NEPAD would be sequenced to optimize lessons learnt and the momentum generated by the Decade of Action for Road Safety, under African regional leadership. The launching of a second corridor project, timed as soon as capacity and financing permit, would bolster the initial momentum of the project.

The sharing of experience between corridor projects would also help refine the project design, and would provide added visibility and stature to the road safety effort, also paving the way towards a coordinated continent-wide program under a dedicated leadership. It would finally help balance the experience and benefits between East and West Africa and promote collaboration between Regional Economic Communities (RECs). The Douala – N’Djamena and Bangui corridor has been identified as a potential second corridor candidate in the Western region because of the significance of the petroleum product traffic along the corridor, the catastrophic safety situation along the corridor especially between Douala and Yaoundé, and the substantial donor interest and involvement in regional trade, transport and facilitation.

A comprehensive assessment of road safety between Douala and Yaoundé has also been recently completed. The subsequent launching of two new corridor projects per year over the next seven years, would also allow all twenty main African corridors to be improved

within the span of the proposed Decade of Action for Road safety 2010 to 2020.

Year	09	10	11	12	13	14	15	16	17	18	19	20
2009	2	4	6	7	9	10	9	8	5	4	2	
2010		4	6	7	9	10	9	8	5	4	2	
2011			6	7	9	10	9	8	5	4	2	
2012				7	9	10	9	8	5	4	2	
2013					9	10	9	8	5	4	2	
2014						10	9	8	5	4	2	
2015							9	8	5	4	2	
2016								8	5	4	2	
2017									5	4	2	
2018										4	2	
2019											2	
2020												
# projects	2	4	6	7	9	10	9	8	5	4	2	

Figure 4 Project Implementation Phase – Source GRSP Africa Corridor Safety Concept

4.1 Project Benefit and Monitoring Mechanism

The benefits of the Northern Corridor Road Safety project in Kenya include the development of full-fledged and sustainable corridor road safety project, ready to be implemented and with many elements of funding, the development of awareness and demand for road safety in the Kenya civil, and continued multi-media visibility of the road safety agenda. The Northern Corridor is estimated to be associated with about 80% of the road traffic and road casualties in Kenya. A conservative estimate of 10% improvement along the corridor points to 240 lives saved per year by the end of the project, and a corresponding number of about 1080 injuries avoided

The benefits of the Africa Regional Trade Corridor Road Safety Program include a higher visibility of the road safety agenda in Africa and the standard inclusion of road safety as an element of the development agenda of the 27 countries through which the priority corridors are running. The benefits would also include the ownership and promotion by lead regional agencies of the template of the Program as a branded Africa road safety project approach; the extension of road safety audits in the road investment and management of the corridor 27 countries, and the compliance with star rating standards among donor funded and selected government road investments in these countries. Overall, the number of deaths avoided per year is expected to be several thousands and to contribute to achieving the target set by the Accra Conference.

The set up of a monitoring and evaluation system is an important feature of the road safety program because it allows transparency, impact evaluation and meaningful communication with the civil society. Monitoring also feeds demand for safety and the fine-tuning of safety actions. The Corridor Authority has the mandate to monitor the performance of the corridor and should be supported in performing its role. Monitoring is also a feature of the United Nations Economic Commission for Africa (UNECA) Framework for Monitoring and Evaluation. In addition, the UK Department for International Development (DFID) project is focusing on generating analysis and data on the economic and social dimension of trade corridors in East Africa Region.

REFERENCES

1. Mengot V. (2011) Kenya Braces for UN Road Safety Decade, Kenya Today page 16
2. Bliss T & Breen J (1999) Country Guidelines for the Conduct of Road Safety Management Capacity Reviews and the Specification of Lead Agency Reforms, Investment Strategies and Safe Systems Projects, World Bank Global Road Safety Facility
3. International Transport Forum (2008) Towards Zero Ambitious Road safety Targets and the Safe System Approach, OECD
4. Pudiem M et al (2004) Report on Road Traffic Injuries, World Health Organisation
5. UNECA & WHO (2007) Africa Road Safety Conference Accra, Ghana
6. Plielsey Frassaid M (2009) Global Road Safety Partnership Africa Corridor Road Safety Initiative (Unpublished Report) World Bank
7. United Nations General Assembly (2010) Improving Global Road Safety, Draft Resolution A/64/L.44 64th Session