



Study on Improvement of Road Safety and Health through Road Side Station Services along the Northern Corridor

Final Report

Volume 1 of 2

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In Partnership with



Study conducted by



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List of Abbreviations

ARSCI	African Road Safety Corridor Initiative
ARTIN	African Regional Safety Transport Infrastructure Network
ARVs	Anti-Retroviral Viral
AU	African Union
BP	Blood Pressure
CAMT	Conference of Ministers
CSR	Community Social Responsibility
DANIDA	Danish International Development Agency
DLS	Driver League Scheme
DRC	Democratic Republic of Congo
EAC	East African Community
EU	European Union
FGDs	Focused Group Discussions
GB	Global Fund
GRSP	Global Road Safety Partnership
HCT	HIV counseling and Testing
HCV	Heavy Commercial Vehicles
HGV	Heavy Goods Vehicles
HIV/AIDS	Human Immuno Virus/Acquired Immune Deficiency Syndrome
HSSE	Health Safety Security Environment
ICT	Information Communication Technology
ILO	International Labour Organisation
KMP	Kampala Metropolitan Precinct
KTA	Kenya Transport Association
MoH	Ministry of Health
MoWT	Ministry of Works and Transport
MSDS	Material Safety Data Sheets
MTEF	Medium Term Expenditure Framework
NC	Northern Corridor
NCTA	Northern Corridor Transit Agreement
NGO	Non-governmental Organisations
NSA	North Star Alliance
NTTCA	National Transit Transport Coordination Authority
OBC	On Board Computers
PIEA	Petroleum Institute of East Africa
PIT	Project Implementation Team
PPE	Personal Protective Equipment
RSS	Road Side Stations
RWC	Roadside Wellness Centre
SADC	South African Development Community
SSATP	Sub-Saharan African Transport Policy
STIs	Sexually Transmitted Infections

SWRW	Safe Way Right Way
TC	Testing and Counseling
TMEA	Trade Mark East Africa
TNT	TNT Express
ToR	Terms of Reference
NCTTA	Transit and Transport Coordination Authority
UHVI	Uganda Helmet Vaccine Initiative
UN	United Nations
UNAID	United Nations AIDS
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNRA	Uganda National Roads Authority
USA	United States of America
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing
WFP	World Food Programme
WHO	World Health Organisations
WRO	World Rescue Organisation

Executive Summary

A. Introduction

The purpose of this study is to design the road safety and health component of the RSS Programme. This particular Programme component seeks to design interventions aimed at nurturing the right attitude and behaviour among Northern Corridor road users and communities with regard to road safety particularly around Road Side Stations (RSS). Other road safety interventions will be selectively targeted based on their potential in supporting improved safety and health around RSSs. On the health sub-component, the interventions to be designed will focus on mitigating the spread of HIV/AIDS and other communicable diseases and alleviating their socio-economic impact on the lives of people who work and live along the northern transport corridor.

The rationale for establishment of roadside stations along the Northern Corridor has been due to firstly, support cost effective, reliable and safe transport secondly, enhancement of road safety, health and protection of environment and thirdly improvement of safety and income generation for communities along the corridor.

B. Study Approach

This study commenced with preliminary activities of reviewing literature on safety and health issues; an assessment of safety and health initiatives along the corridor was undertaken and; policy and regulatory environment assessment was also undertaken. Field-level discussions were also held with stakeholders from public, private sector, civil society and transport associations and owners across the region.

The interim report was presented to stakeholders in Kigali on the 13th June 2014. The comments of the stakeholders have been incorporated into this Draft Final Report.

C. Road safety situation

The road safety situation in countries served by the northern corridor is poor and unacceptable. The corridor has a severe road safety challenge due to the high volumes and nature of long-distance transport operations, a challenge compounded by the presence of roadside human settlements in addition to high levels of traffic volumes, an unmanaged mix of motorized and non-motorized users, and mixed speed road environments. Key driver of crashes along the corridor include: human factors, infrastructure, vehicle, and environment factors.

D. Lessons Learned from road safety best practices

Despite the poor road safety situation along the Northern Corridor, there are best practices lessons that reveal that if interventions are strategically implemented, significant road safety improvements and minimal road traffic crashes at organisational and national levels can be achieved. In addition experiences from elsewhere have been revealed for the same purposes. These best practices found along the corridor and elsewhere that can be replicated for enhanced road safety at RSS level. The best practices are in the following main areas: Behavioural change, Partnership building, Fleet safety/workplace safety Management, Training and Capacity building, Post-crash emergency response and; Sustainable funding

E. Gaps identified in road safety

There are gaps that have been identified in the road safety management practices. The gaps include: inadequate provision of parking spaces for long distance trucks, driver fatigue and inadequate provision of rest stops, low level of safety awareness, non-compliance of road users with traffic rules and regulations, inadequate emergency response services, corruption and bribery, inadequate funding for road safety and inadequate infrastructure, absence of heavy cranes to remove broken down vehicles from the corridor and lack of political will

F. Proposed road safety interventions

In addition to the gaps identified, this study has identified proposed interventions to specific challenges to be addressed. The proposed road safety interventions are based on the lessons learned RSS level and applicability of the interventions at RSS level. The interventions include among others:

- Construction of parking spaces at RSS
- Production of IEC materials developed on black spot maps
- Sensitize the Drivers against over speeding and reckless driving
- Conduct anti speeding campaigns
- Disseminate dangers of Drink driving and drug abuse
- Develop a charter on rules and responsibility and code of conduct for various stakeholders including drivers
- Build capacity of Unions to do their work better and do advocacy
- Promote mind set change and sharing good practices
- Promotion of two drivers per truck to reduce on fatigue
- Fire emergency plan in areas where the RSS will be constructed

G. Health Situation along the Northern Corridor

The countries served by the Northern Corridor suffer from several communicable and non-communicable diseases that affect safe travel. These problems are compounded by widespread poverty, high morbidity from malaria and other communicable diseases like tuberculosis. There are four main health issues of malaria, HIV/AIDS, occupational health, and road traffic injuries that have been identified.

H. HIV/AIDS along the Northern Corridor

The Northern Corridor is characterized by high HIV prevalence levels; there is heavy and frequent movement of people across the Corridor, and there are challenges in the health systems to meet the demand for HIV and AIDS services. Key Drivers of HIV and AIDS pandemic along the Corridor include structural, bio medical and structural reasons.

I. Gaps and challenges identified

Gaps identified include poor access to health services, low level of HIV prevention awareness, tight working schedules, stigma and discrimination, alcohol and drug abuse, ignorance of ones HIV status, poverty, presence of commercial sex workers, irregular condom supply and inadequate funding.

J. Best Practice in HIV/AIDS care along the NC

There are several lessons learned from the health interventions along the Corridor that can be replicated for use at the RSS. Some interventions that were found along the corridor include: Behavioural change and

communication interventions; Partnership building; Workplace HIV Policy; Training and capacity building; HIV and AIDS care; Information Technology and Management and; Funding for HIV/AIDS activities.

K. Proposed HIV/AIDS interventions

The proposed interventions for improving health along the Northern Corridor have been outlined. These include best practices in the region and elsewhere. The proposed interventions include among others:

- Explicitly exposing the dangers of sex workers to drivers and communities found along the NC.
- A small poverty alleviation fund for SWs to promote income generating ventures for SWs to encourage them to leave the trade.
- Skills training for SWs to equip them with skills for self- supporting lives.
- Target programmes for educated young women in this programme
- Linkages with Micro Finance Institutions for training and financial support where applicable
- Carry our further research into the sex trade.
- Promotion of HTC services
- Self-testing kits should be provided for people who do not want to go to laboratory for privacy purposes
- HIV services provided through outreach and other user-friendly modalities such as moonlight, camp-based services to go where the mobile populations are and be tailored to fit within their work patterns.
- Build capacities of transport unions and companies for safety and health

L. Programme Packaging

Following the identification of the safety and health proposed interventions, both prioritizing and ranking was undertaken in regard to interventions that can be implemented particularly at RSS level. The packaging process ensures that the proposed interventions could be implemented through projects at RSS level. As a result a number of projects were identified. The identified projects are as follows:

L1 Road safety sub programme

L1a. RSS Infrastructure Development Project

- Provision of adequate parking and rest areas for drivers
- Expansion and upgrade of Wellness Centres
- Provision of adequate sanitary services

L1b. Harmonization and standardization of services project

- Guidelines and protocols
- Review of national traffic laws
- Harmonization of the traffic regulations
- Build the capacity of different actors to implement the harmonized legislations, laws and protocols.

L1c. Behavioural change communication project

- Road safety behavioural change communication
- Defensive driving training
- IEC materials that address issues of free wheeling
- Develop CD ROMS for drivers
- Design driver handbooks that explain good practice behaviours
- Address issues of truck drivers courtesy etc.

L1d. Strengthening safety work place policies on Road safety and HIV/health issues

- Promoting workplace policy on Road safety
- Advocacy for Road safety and Occupational health incorporated and implemented within the workplace and environment
- Care for accident victims at workplace
- RSS Safety and Health Charter promotion
- Capacity building of unions and transport companies
- Promotion of self-regulations
- Occupational health

L1e. RSS Emergency Response Project

- Emergency rescue system
- Ambulance services
- First Aid services

L1f. Knowledge Management Project

- Information management
- Data management, reporting, best practices documentation
- Share driver data

L2 Health sub Programme

L2a. HIV prevention, care and treatment project

- Treatment for minor illnesses
- HTC,
- ARVs, TB
- STI/screening and treatment,
- Condoms supply and distribution
- Other health issues
- Workplace policy on HIV/AIDS
 - Advocacy for HIV/AIDS workplace and environment
 - Care for HIV/AIDS victims care at workplace

L2b. Behavioural change communication project

- Sexual behaviour change communication (IEC Material development, Peer Education, health education etc.)
- IEC materials development and production
- Radio programme
- Educational outreach programmes
- Life-saving caravans
- Promotion HIV/AIDS through Trade Union activities
- Mass campaigns
- Promotion of condom use
- Bill boards

L2c. Expansion and upgrade of wellness centres Project

- Equip and rearrange health centres and facilities
- Expand wellness centres along the Corridor for provision of comprehensive health package

L2d. Knowledge Management Project

- Develop standard indicators and partnerships
- Setting up a standard IT monitoring system
- Establishing Electronic Data base, Data sharing and Reporting
- Sharing of best practices

L2e. Economic Empowerment and livelihood project

- income generation amongst the SW
- Fund to provide micro finance for drivers, SW and other community members
- Create a livelihood fund for SW and drivers
- Enhance support for HIV/AIDS orphans

M. Proposed Safety and Health Programme

The Safety and Health Programme of RSS seeks to implement interventions aimed at nurturing the right attitude and behaviour among Northern Corridor road users and communities with regard to road safety particularly around Road Side Stations (RSS). The health interventions will focus on mitigating the spread of HIV/AIDS and other communicable diseases.

M1 key projects of safety and health programme

Key activities are highlighted for the programme. These include the following projects:

1. RSS Infrastructure Development Project
2. Expansion and upgrade of wellness centres Project
3. Harmonization and standardization of services Project
4. Behavioural change communication Project
5. Strengthening work place policies on Road safety and HIV/health issues Project
6. RSS emergency response Project
7. HIV prevention, care and treatment Project
8. Knowledge management, information management Project
9. Economic empowerment and livelihood Project

M2 Projected Programme costs

The programme cost is estimated to be US\$ 13,563,912 million. In the first year US\$ 4,733,304 million will be required and US\$ 8,830,608 million in the second year. The detail of the costs is as follows: Programme management \$1,511,982; Establishment and upgrade of wellness centres \$ 2,430,000; Harmonization and standardization of services project \$315,858; Road safety Behavioural change and communication \$1,418,580; Sexual Behavioural change and communication \$1,418,580; Emergency response\$ 1,944,000; Strengthening of Workplace policies \$184,716; HIV prevention, care and treatment project \$3,952,782 and; Economic empowerment project \$387,414.

This cost has been calculated on the assumption that within first year of the Programme, 6 wellness centres will be established and fully operational and in the second year an additional 12 centres will be set up across the corridor.

M3 Mapping of wellness centres at Road Side Station locations

The main RSS study has made recommendations suitable locations for the development of Road Side Stations across the Northern Corridor. However, not all RSS shall have wellness facilities. Wellness centres have been proposed according to the following criteria.

- The choice of wellness centres location by Member States like Kenya
- The distance between RSS. The distance should not be less than 100 km
- The size of the wellness; the largest centre will prevail and;
- The appropriateness of the location (land, number of population deserved and also where those facilities exist to improve them)

The recommended wellness centres include

- Bugarama and Kayanza in Burundi;
- Goma, Beni, Bunagana and Bukavu in DRC;
- Salgaa, Sultan Hamud, Jua Kali, Awasi and Miritini in Kenya;
- Ruhango, Nyacyonga, Rugende and Ryabega in Rwanda;
- Packwach, Idudi, Mbiko, Lyantonde, Migeera and Kabale in Uganda and;
- Nimule and Nasitu in South Sudan

M4 timeline

This Safety and Health Programme has been designed initially for a two year horizon. 18 Road Side Stations wellness centres will be established or upgraded within this timeframe. It is recommended that the safety and health component can commence with improvised structures as full infrastructural developments are being undertaken.

N. Proposed Institutional Setting for of the RSS wellness centres Management

It is recommended that at regional level, a regional steering committee comprising of NCTTA, SWRW, NSA and selected regional agencies to coordinate the RSS activities at regional level. This S&H committee will be coordinating with the Main RSS Committee which oversees the infrastructure development as suggested in the TYPASA report.

At the national level, it is recommended that a national taskforce to oversee the implementation of RSS roll out is established.

This report recommends that the delivery of services at RSS management at local level should be entrusted to either the private sector or NGO sector as shown in the region by agencies providing wellness services. Public Sector including the National Taskforce should focus on oversight, monitoring and guidance function rather than actual day to day implementation of wellness centres.

O. Sustainability of the Programme

It is recommended in order to ensure the sustainability of the programme the following is implemented:

- Consider self- paying schemes for services provided at RSS. These include laboratory services and Defensive driving courses among others.
- Consider creation of safety and health fund that could be used to pool funds for the programme.

- Mainstream RSS wellness budget into Government budgets through the development of long term funding proposals and associated prioritization and financial management systems with clear RSS funding streams in government budgets.
- Develop proposals for funding from development partners in regard to wellness centres on a regular basis.

P. Implementation Strategy

This report has outlined the implementation strategy for the programme. The strategy covers oversight and management arrangements, intervention areas, general objective, operational objectives, strategies, key indicators, participating stakeholders, expected results, timeframe and projected costs.

1. Introduction

The overall objective of the project is to design safety and health interventions aimed at nurturing the right attitude and behaviour among Northern Corridor road users and communities with regard to road safety particularly around roadside stations. On the health sub-component, the interventions to be designed will focus on prevention or minimizing the spread of HIV/AIDS and other communicable diseases and alleviating their socio-economic impact on the lives of people who work and live along the northern transport corridor.

1.1 Study Approach

This study commenced with preliminary activities of reviewing literature on safety and health issues; an assessment of similar initiatives along the corridor was undertaken and; policy and regulatory environment assessment was also undertaken.

Field-level discussions were also held with stakeholders from civil society, public, private and transport association representatives and owners across the region. Interactions with drivers and commercial sex workers that live at truck stop centres were met in form of FGDs. Also discussions with NGOs that work on road safety and HIV/AIDS in different countries along the northern corridor provided further information on the behaviour of the truckers, their knowledge; attitude and behavior towards both road safety and HIV/AIDS. Specifically, the wide consultations were held in Burundi, D.R. Congo, Kenya, Rwanda and Uganda with officials in areas of safety and health. The list of officials met is attached as *Annex 3*.

In addition, the report also incorporates the comments from the stakeholders on the RSS who attended the workshop in Kigali on the 13th June 2014.

1.2 Structure of the Draft Final Report

The Draft Final Report has two volumes:

Volume 1 covers the Main Draft Final Report. It covers a review of the Road safety situation; lessons learned on best practice in road safety; challenges and proposed interventions in safety; review of the health situation; lessons learned on best practice in health and; the proposed areas of intervention for RSS. It also covers an overview of the programme packaging process.

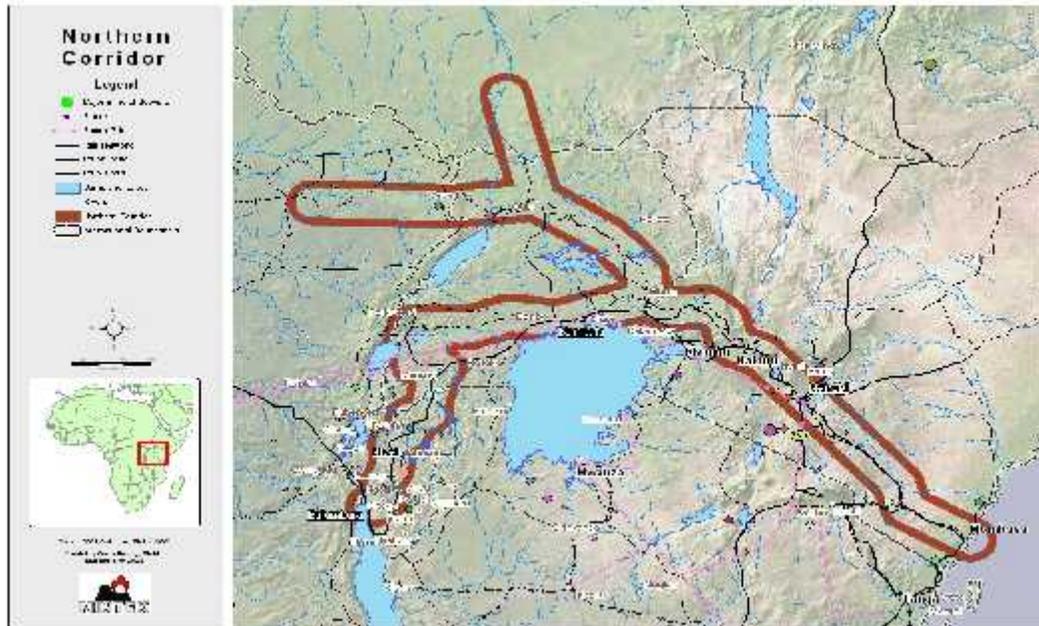
Volume 2 comprises of background information on Safety and Health programme. This largely includes Programme details and the Programme implementation strategy.

1.3 Study Area

The study involved countries served by the Northern Corridor. These include Burundi, D.R. Congo, Kenya, Rwanda, Uganda and South Sudan. Figure 1 shows the Northern Corridor Map. The road corridor runs from Mombasa in Kenya to Kampala in Uganda, Kigali in Rwanda, Bujumbura in Burundi and Kisangani in the Democratic Republic of the Congo. It also includes the road from Uganda to the border

of South Sudan and from there to Juba. The Northern Corridor road network covers approximately 8,800 Kms¹ and this accounts for some 70% of all the cargo transported along the Northern Corridor. The key transit route runs from Mombasa to Bujumbura and is a distance of some 2,000 Kms, while the extension from this route to Kisangani is approximately 3,000 Kms and the extension to Juba is around 500 Kms from Ugandan Border.

Figure 1 Northern Corridor



1.4 Justification for investment into the RSS

The rationale for promotion of investment in the construction of roadside stations /wellness centres along the Northern Corridor has been due to firstly, support cost effective, reliable and safe transport secondly, enhancement of road safety, health and protection of environment and thirdly improvement of safety and income generation for communities along the corridor.

The investment in RSS is further justified due to the following factors that characterize the corridor:

- Travel speeds and road accidents are many (leading to low truck turnaround time) due to poor travel environment
- Poor security of cargo and crews
- HIV/AIDS rampant among truck drivers and their clients at truck-stops.

RSS are important for the following benefits:

¹ www.ttcanc.org Infrastructure /Road network

- *Rest facility*, addresses challenges for rest and recovery, maintenance, parking and sanitation. RSS contributes towards facilitating rest stop centres for addressing driver fatigue issues which if not checked result into road crashes.
- *Public information* this is important because it provides information on health care, education, training and cultural activities. Absence of such information results in high incidences of HIV and AIDS, road crashes, the prevalence of prostitution and exposure to robbery and corruption.
- *Local trade promotion* RSS's are linked into the local economies and markets for local products and guaranteed outlets for farmers and small scale producers. They would be an efficient tool for promoting the regional image. RSS's are built with the involvement of the local communities and are designed not solely for the use of the truckers but also to stimulate the local economies.

2.0 Road safety situation

2.1 Introduction

This chapter assesses the road safety situation that sets out justification of the safety intervention at RSS level. The intention is to identify the magnitude of the challenge.

2.2 Road Safety situation along the Northern Corridor

The road safety situation in all countries served by the northern corridor is poor and unacceptable. The corridor has a severe road safety challenge due to the high volumes and nature of long-distance transport operations, a challenge compounded by the presence of roadside human settlements in addition to high levels of traffic volumes, an unmanaged mix of motorized and non-motorized users, and mixed speed road environments.

Table 1 Road Accident data in countries served by the Northern Corridor

No	Country	Fatalities*
1	Burundi	275
2	DRC	309
3	Kenya	3,179
4	Rwanda	308
5	Uganda	2,937
6	South Sudan	96

*2013 figures

The corridor is risky with several black spots that require remedial measures to eliminate them and improve on the road safety situation

In all countries the Northern Corridor has the highest fatalities compared to other roads. This implies that if well-developed road safety interventions are implemented, it is more likely that crashes can be reduced along the corridor and within the region.

2.3 Key Drivers of Road crashes along the Corridor

Key driver of crashes along the Corridor include: Human factors, Infrastructure, Vehicle, and Environmental factors. Outline of the key factors is shown in Table 2.

Table 2 Key drivers of road crashes along the corridor.

	Human Factors	Infrastructure	Vehicle	Environmental
1	Speeding resulting from reckless and dangerous driving	Two lane highway too narrow for heavy traffic	Vehicle Maintenance culture	Underdeveloped roadside traffic-support amenities and services

2	Driver fatigue	Congestion	Fake spare parts	Traffic conflicts
3	Drink driving	Many sections with long down/uphill stretches	Poor enforcement	In adequate land use planning
4	Pedestrian safety challenges	Inadequate roadside parking space	Lack of strict enforcement of safety standards	Absence of enforcement of environmental standards
5	Non seat belt use	Inadequate road safety audits		
6	Non helmet use			
7	Overloading			
8	Poor vehicle maintenance			
9	Indiscipline			

2.4 Road Safety Actors

In all countries served by the Northern Corridor, there exist road safety interventions. These interventions are largely by public agencies that are provided in the *Table 3* below. However generally, in all these agencies there is need for enhancement of the efforts if the challenge of crashes is to be reduced.

2.4.1 National road safety actors

Table 3 Institutional set up for Road Safety Actors in countries served by Northern Corridor

No	Burundi	D.R.C	Kenya	Rwanda	Uganda	S. Sudan
1	Ministry of Transport, Public Works and Equipment	Ministry of Transport	Ministry of Transport and Infrastructure	Ministry of Infrastructure (MININFRA)	Ministry of Works and Transport	Ministry of Transport and Roads
2	Ministry of Health	Police services	National Transport and Safety Authority	Rwanda Transport Development Agency	Ministry of Health	Ministry of Internal Affairs
3	Burundi National Police	Road Authorities	Kenya Police Services	Rwanda National Police	National Road Safety Council	South Sudan Police Service
4			Nairobi City Council		Uganda National Road Authority	
5			Ministry of Health		Transport Licensing Board	
6					Uganda Police Force	
7					Kampala Capital City Authority	
8					Safeway Right	

					Way	
9					Uganda Helmet Vaccine Initiative	

2.4.2 Regional Road Safety Actors

There are a number of regional road safety actors in largely global and regional road safety policy and advocacy issues. The Table below shows the key actors.

Table 4 Institutional set up for road safety actors in countries served by Northern Corridor

Organisation	Burundi	D.R.C	Kenya	Rwanda	Uganda	S. Sudan
SSATP						
GRSP						
UNECA						
EAC						
NCTTA						
SWRW						
Automobile Association						
Bloomberg Foundation						

3.0 Lessons Learned from road safety best practices

3.1 Introduction

Despite the poor road safety situation along the Northern Corridor, there are best practices that reveal if road safety interventions are strategically implemented, can lead to significant road safety improvements. This chapter reveals some of the best practices which can be replicated at RSS level. In addition experiences from elsewhere have also been revealed for the same purposes.

3.2 Best practices along the Northern Corridor

The best practices are in the following areas:

- Behavioural change
- Partnership building
- Fleet safety/workplace safety Management
- Training and Capacity building
- Post-crash emergency response
- Sustainable funding

3.3 Behavioural change

3.3.1 Key Behavioural Risk Factors

In road safety the key risk factors include; excessive and inappropriate speed; non-use of helmets; non use of seat belts and drinking and driving behaviour. This requires changing behaviour through a combination of education, awareness and enforcement campaigns. Effective campaigns should be based on a good understanding of the complexities of Human behaviour.

The sections below explain the tools used to understand the human behaviour.

3.3.1.1 Social Psychological Model of Human Behaviour

In order to have a good understanding of the complexities of human behaviour, it is important to realise that human behaviour is compounded of many issues including personal, social, local and wider environment issues as shown in Figure 2 below.

Figure 2 The Social Psychological model of human behaviour



Personal ‘micro’ factors - that are intrinsic to the individual such as their level of knowledge or their belief in their ability to change their behaviour and habits;

Social ‘meso’ factors - which are concerned with how individuals relate to each other and the influence of other people on their behaviour;

Environment ‘macro’ factors - that include both local factors such as the area an individual lives and wider factors such as the economic and technological development of the society as a whole over which individuals have little control.

3.3.1.2 Factors affecting behaviour

In addition to the above the factors there are six factors that affect behaviour. The following are the key factors affecting training and behaviour. They have to be considered during the design of behavioural change process.

Knowledge: Information plays a part, but does not always lead to action if other priorities exist. People interpret information based on existing beliefs.

Psychological factors: Behaviour is affected by beliefs, values, attitudes, emotions, ability to act, risk perception and sense of responsibility.

Social norms: A person’s behaviour is influenced by what they see others doing and how they think their behaviour will be perceived.

Habits: Much behaviour is habitual. This is both a block and an opportunity for safer behaviour.

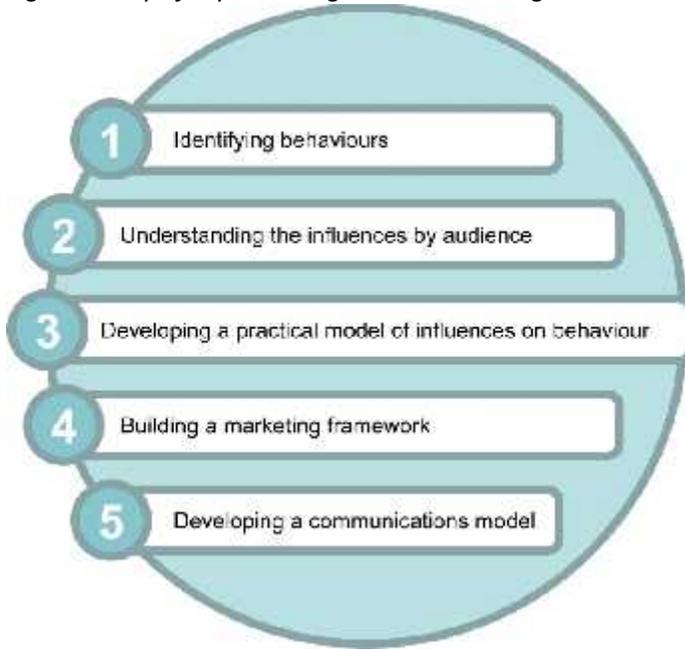
Structural conditions: Society co-evolves with technology. This can lead to “lock-in” creating practical obstacles to behaviour change but also open new opportunities. For instance use of video and sms opens opportunity for knowledge sharing

Socio-demographic patterns: The influence of age, gender and so on varies with individual circumstances and strongly impact on levels of risk.

3.3.1.3 Steps for promoting behaviour change.

In designing behaviour change content, it is important to know the concept behind behaviour change. There are five steps that involve behaviour change and these are provided in the figure 2 below

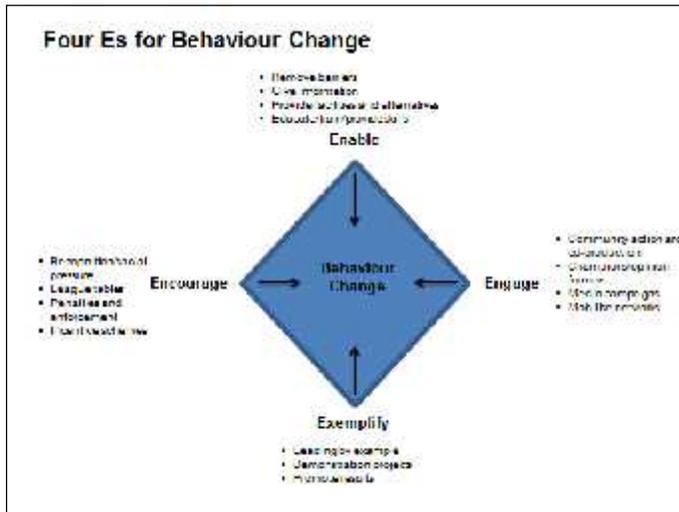
Figure 3 Steps for promoting behaviour change



3.3.1.4 Four E of behaviour change.

In addition to the above steps to the behaviour change, there are 4 Es that promote behaviour change. All these concepts are important to the understanding behind behaviour change. The figure below shows the wider issues that involve behaviour change.

Figure 4 Four E s for behaviour change



3.3.2 Best Practice in Behavioural change.

The best practice in behavioural change is the use of Systems approach by engaging and educating everyone using the road. The link between Education, Engineering and enforcement is crucial for successful behavioural change.

3.3.3 Use of behaviour change protocols

There are international on line behavioural change protocols that can be used at the RSS for drivers' behavioural change purposes. The following are examples:

- http://www.who.int/violence_injury_prevention/videos/en/
- <http://think.direct.gov.uk/>
- <https://www.fiafoundation.org>

Figure 5 The WHO behavioural change protocol

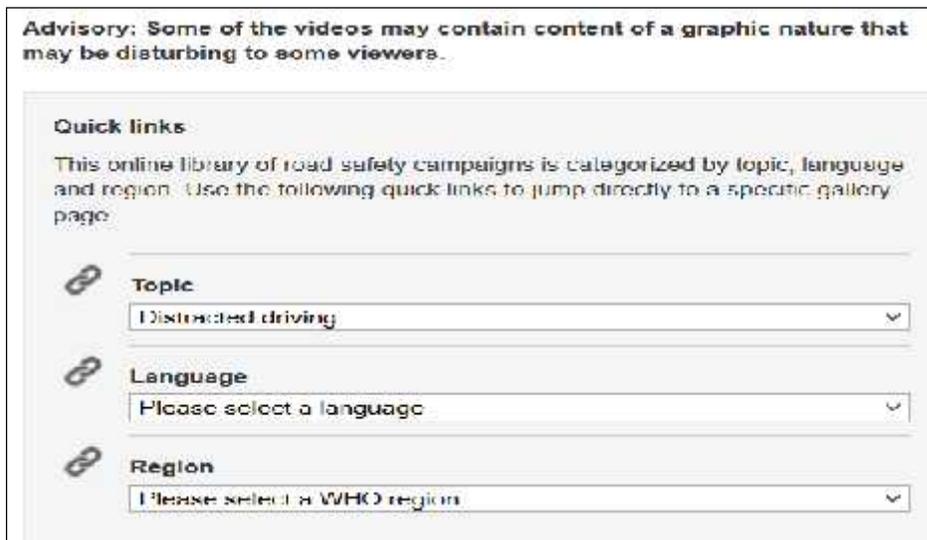


Figure 6 The THINK behavioural change protocol



There are on line protocols that are used for behavioural change under the Toa Sauti Campaign as shown below.

Figure 7 The Toa Sauti behavioural change protocol



3.3.4 Use of behaviour change sensitization campaigns

The best practice on behaviour change along the Corridor is demonstrated by sensitisation activities as shown below:

3.3.4.1 Sensitization programmes by SWRW

SWRW has a number of sensitization programmes along the corridor which include Caravan, child safety programme and mass media.

Figure 8 Road safety caravan



Figure 9 Child safety programmes



Figure 10 Mass media campaigns



3.3.4.2 Activities by Uganda Helmet Vaccine Initiative

Uganda Helmet Vaccine Initiative is involved in the following activities for promotion of road safety amongst the road users but specifically to the motorcyclists

- Mass media
- Sensitisation
- Research

- Advocacy

3.3.4.3. Activities for Road safety week in different countries

In most countries served by the Northern Corridor, there is National Road Safety Week activities aimed at sensitizing the road users on road safety issues through mass media and advocacy

3.3.4.4 Communication activities by Shell (Vivo)

As part of Community Social Responsibility (CSR), Vivo energy is involved in road safety programmes. In Uganda it has an on-going programme in the three areas:

- Child safety
- Bod boda training
- Mass media campaign

Figure 11 Boda boda sensitisation campaign by Vivo energy



3.4 Partnership Building

Road safety is multi sectoral and therefore has to be managed in partnership. Partnership building is important for ensuring sustainability of road safety programmes. Partnership is important for:

- Reducing duplication of effort
- Cross fertilization
- Ensuring better allocation of resources

- Getting social support and public involvement
- Overcoming potential obstacles created by opposing parties
- Effects of synergy – cooperation of several stakeholders is always more effective

3.5 Best Practice in Partnership along the Northern Corridor

3.5.1 Safe Way Right Way (Uganda and Kenya)

In 2010 the World Bank and TOTAL entered into a partnership entitled Africa Road Safety Corridors Initiative (ARSCI). In June 2011 Safe Way Right Way (SWRW) was formed as an independent NGO to achieve partnership goals, recruit private sector firms with road safety best practices and lobby respective Government along the Northern Corridor on road safety issues.

Figure 12 Partnership building by SWRW



3.5.2 The Global Road Safety Initiative, Brazil

The partnership is supported by Shell, Toyota, Renault, Total and Michelin in Brazil. It was developed by GRSP over several years in Brazil. It is a road safety management approach that was designed to improve road safety within a city. It has been successfully implemented in many Brazilian towns to improve road safety and the quality of people’s lives. It is now adopted by the Brazilian Government as the national approach to managing road safety at city level. It is now being implemented in other countries in Asia.

It provides a structured process for managing road safety and developing a road safety culture in the community. It relies on access to reliable road crash and injury data for both planning and monitoring

purposes. The approach involves citizens in a true community partnership where together they own the road trauma problem and the solutions.

3.6 Workplace and Fleet safety system

Fleet safety involves specific road safety interventions at institutional level that comprise workplace safety and fleet safety components of the transport management system. It largely includes:

- Journey Management
- Driver management
- Vehicle Management
- Road transport Policy implementation

3.6.1 Journey Management

One of the most important tools for promoting safety is the ability to effectively monitor the driver performance whilst on the journey on a regular basis. This is done by use of In Vehicles Monitoring System (IVMS) commonly called the On Board Computer (OBC). The OBC monitors the journey through:

- Monitoring of driver speed through use of in vehicle monitoring systems (O.B.C)
- Harsh braking
- Revs per minute
- Accident detail report
- Route used by vehicle
- Check on driver rest or fatigue / night driving policy

Figure 13 On Board Computer used to monitor driver performance



3.6.2 Driver management

In order to effectively improve road safety, there is need for effective driver management. These include monitoring that the driver has enough rest before the journey. This is by monitoring the driver on use of OBC monitors drivers rest periods. The recommended rest periods are as follows:

- 4-hr driving time then rest
- 9 hour per day driving period
- 35 hour maximum driving time per week (Day rest per week)
- Annual leave policy

Monitoring that the driver does not drink and drive through:

- Companies have drug and alcohol policy that regulates its use.
- Monitoring of driver's breath
- Random sampling of drivers en-route
- Publicity on drinking effects

3.6.3 Vehicle Management

There are some companies along the Northern Corridor that effectively manage their fleet through the following ways:

- Vehicle maintenance policy
- Acquisition and disposal policy
- Tyre policy
- Seat belt policy
- On Board Computer (OBC) Policy

3.6.4 Road Transport Policy

Some companies that have best practices along the Northern Corridor implement a fully-fledged road transport policy. The result has been reduced road traffic crashes amongst their fleet. *Figure 14* shows the common road transport policies implemented

Figure 14 some road transport policies implemented at company level

1) HSSE Policy	12) Medical Policy
2) Driving Policy	13) Vehicle Acquisition Policy
3) Driver Recruitment Policy	14) Vehicle Replacement Policy
4) On Board Computer (OBC) Policy	15) Tyre Policy
5) Seat Belt Policy	16) MSDS Policy
6) Mobile Phone Policy	17) Disciplinary Policy
7) Drug & Alcohol Policy	18) Road Transport Safety Policy
8) No Smoking Policy	19) HIV / AIDS Policy and Programme
9) PPE Policy	20) Day Light Running Policy
10) Waste Management Policy	21) Maintenance Policy
11) Hot Work Policy	

At company level there are also companies that promote fleet safety management as a self-regulatory policy as part of their Community Social Responsibility commitment. In addition they do it as:

- Business case for Fleet Safety
- Sustainable safety policies
- Benchmarking and best practice

3.7 Driver Training and Capacity building

In the area of driver training, there are best practices both internationally and along the corridor. This section provides some resources used for driver training internationally, regionally and nationally. The purpose is to assess what can be replicated at the RSS level.

3.7.1 UN training Manuals

The World Health Organisation with the support of the global partners² has developed manuals to address the knowledge gaps in road safety in developing countries. The manuals are meant for both decision makers and also practitioners like driver instructors and trainers. The manuals are useful training tools.

Figure 15 some UN manuals used for improving road safety

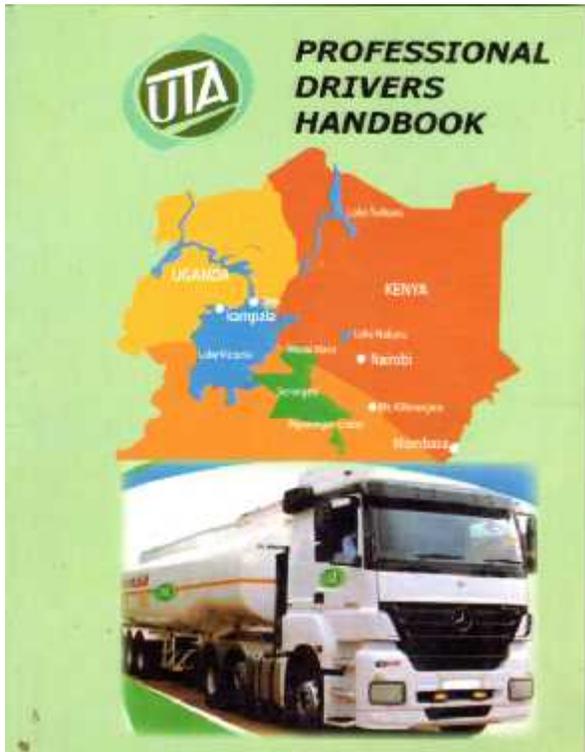
² FIA Foundation, Global Road Safety Partnership and the World Bank



3.7.2 Corporate Manuals for drivers

In an effort to improve driving standards, some corporate agencies have put in place formalized training programmes and policies as part of their Health, Safety, Security and Environment (HSSE) programmes. The purpose is to improve road safety. Some organisations have developed their own handbooks for their drivers. See Figure 16 below.

Figure 16 A Driver's handbook for Uganda Transport Agencies



3.8.3 Regional driver curriculum development

Trade Mark East Africa³ in 2012 funded a training needs assessment study for transport operators in East Africa⁴. The study revealed several important issues in regard to training in not only Uganda but also in the region.

The following are key findings:

- There is an acute shortage of professionally trained truck drivers and operators in the East Africa region. This shortage is projected to continue for the coming two decades unless urgent measures are taken by the respective governments and private sector operators as well as development partners to remove the constraints facing the sector especially in terms of training of key personnel. Only 36.7% of the 649 transport operators surveyed indicated that they had ever received any professional training relating to their work since they were employed.
- To train 63.3% of the workers in the transport sector will require a huge amount of resources from all the stakeholders. The task is even more challenging as continuous annual East African training and retraining in refresher courses are required.
- About 83 per cent of the workers surveyed are young and middle aged personnel who will be in the industry for a long time and therefore need relevant training to raise their productivity.
- Training of driving staff is a challenge because a large majority of them have low formal education, which could limit the type and level of training they can successfully take. About 3 per cent of the existing workforce has no formal education and almost 58% have only some level of primary school education, with only less than 10% having post-secondary diplomas and university level education.
- Top 5 priority training areas according to the respondents are: (1) Vehicle maintenance (2) Driver Health & Safety (3) Trade logistics/ fleet management (4) Defensive driving and (5) Driver refresher courses
- About two thirds (2/3) of the transport operators have not received any professional training in their areas of responsibility
- Currently there are less than 10 such institutions in the region, with some of them such as Defensive Driving Systems of Kenya, as one of the examples of regional best practices in the area of conducting professional training in various aspects of road transport.
- Key stakeholders interviewed drawn from various transport associations, long-distance workers unions, government officials and private sector expressed a strong desire for EAC region to develop a regionally standardized training curriculum that will be offered by all trainers, whether in public or private institutions. Trainees would go through the same syllabus and sit the same examinations administered by a regional body.
- The East African Community Secretariat has been strongly supportive of standardization and harmonization of virtually all aspects of road transport operations and policies among the member states.

3.7.4 The East Africa Trade Hub

³ www.trademarka.com

⁴ Dr. Gerrishon Ikiara Training Needs Assessment (TNA) Study for Road Transport Operators in East Africa Draft Final Report, University of Nairobi, July 2012.

The East African Trade Hub (formerly called USAID COMPETE) has assisted the Kenya Transporters Association (KTA) with the installation of three state of the art truck simulators procured from France. The simulators include real truck driving cabs with motion platforms and a monitoring work station. The Truck Simulator technology is designed to offer real time driving experience in a virtual 3D environment.

The Simulators reproduce real driving conditions and hence offer the trainee variety of options from basic to extreme conditions. It therefore makes it possible for a driver to anticipate different circumstances and prepare to handle them accordingly without risking lives and damaging trucks. In seeking to provide a one-stop solution to the training and education needs of HCV Drivers. Plans are also underway for a comprehensive training curriculum.

Figure 17 the driving training simulators for the KTA



3.7.5 Defensive Driving Courses by Corporate agencies

A number of transport agencies in the region that have strongly embraced regular, mandatory training of their staff, both the drivers, managers and other staff categories in defensive driving. There is a growing list of transport companies that are widely recognized as examples of best practices in the region with regard to training of transport operators. These include; Shell, East African Breweries, DHL, Multiple Hauliers, Bamburi Cement Company, Total, Tullow oil and many others. Most of these are the contracting and contracted companies. All the contracted companies are required to have all their staff involved in any way or the other, in the transportation of the cargo to undergo well-structured training programmes with approved training institutions.

Corporate companies have developed fully DDC course outlines for driver training as shown in Figure 18.

Figure 18 Training curricula for defensive driving course for oil company drivers

16 Modules Syllabus			
Module 1	Defensive Driving	Module 9	Traffic Regulations & Highway Code
Module 2	Hearts and Minds	Module 10	Specific Driving Conditions
Module 3	In Cab Safety & Familiarisation	Module 11	Petroleum Products Handling
Module 4	Practical Driving as Assessment	Module 12	Occupational Health & Safety
Module 5	Vehicle Stability + V Roll Over P	Module 13	Gantry Operations & PH
Module 6	Vehicle Maintenance and Inspection	Module 14	Basic Fire Fighting and Emergency Response
Module 7	Tyre Safety and Management	Module 15	Driver Fitness to Drive
Module 8	Driver Tiredness & Management	Module 16	Journey Mngt & DLS

3.8 Emergency Response

There are international, regional and national best practice responses towards emergency response. The following are some of the best practice.

3.8.1 World Rescue Organisation

The World Rescue Organisations' aim is to provide a platform for training for rescue and medical personnel, around the world, to share and advance rescue science and technology.

Figure 19 World Rescue Organisation drivers



The main area of WRO is support to member states in regard to training & knowledge sharing.

3.8.2 Best Practice in emergency rescue along the Corridor

There are organisations along the Northern Corridor that have set up emergency rescue response along the Northern Corridor.

3.8.2.1 Petroleum Institute of East Africa

The Petroleum Institute of East Africa (PIEA) has developed an adequate level of emergency preparedness along the Northern Corridor.

Figure 20 Map showing emergency response centres in Kenya by PIEA and wellness centres



3.8.2.2 RS 10 Best practice in Emergency rescue

The Road Safety in 10 Countries project, the five-year initiative draws on support from Bloomberg Philanthropies and the World Health Organization to evaluate and implement road safety solutions where they are needed most. The 10 countries involved in the project are Brazil, Cambodia, China, Egypt, India, Kenya, Mexico, Russia, Turkey and Vietnam.

The project is also assisting with sub projects of trauma care in Kenya and data system development in Kenya.

- Ambulance acquisition
- Trauma training for drivers and medical staff
- Helmet provision

- Emergency centre rehabilitation on Voi and Naivasha

3.9 Sustaining funding for Road safety

Road safety in the region is characterized by ad hoc and low funding windows. Most of funding comes from Government however it is usually inadequate. The following are the best practices for sustainable funding for road safety.

3.9.1 Potential funders in the Road safety area

There are several funders in the area of road safety. The table below provides the main road safety funders.

Table 5 shows the different funders in the road safety area.

Sector	Organisation	Area of Interest	Remarks
Foundations/ Charities	Bloomberg Foundation	Injury prevention, Helmet promotion, data management	Funds are channeled through WHO
	FIA and FIA Foundation	Global advocacy, NGO support, Training and capacity building, helmet use promotion	Funds are channeled through International NGOs and Auto clubs
	Road safety fund	Global advocacy and NGO activities	Funds are contributed to the Fund by the Private sector
	Asian Injury Prevention Foundation	Injury prevention and helmet use promotion	Receives funds from several sources
Multi-lateral partners	World Bank	Infrastructure, institutional setting, legal reforms, data base management, road safety audits, educational promotion	Funds are disbursed as loans and grants to Governments
	Global Road Safety Facility	institutional setting, capacity reviews, road safety audits, educational promotion	Funds are disbursed through consultancies and NGOs
	African Development Bank	Infrastructure, institutional setting, legal reforms, data base management, road safety audits	Funds are disbursed as loans to Governments
Private Sector	Petroleum Institute of East Africa	Emergency response	Funds are contributed by Petroleum companies
	Safe Way Right Way	Promotion, partnership building, child safety, mass campaigns	Partnership members contribute funds
	Individual companies	Mass campaigns	Funds are contributed Corporate Social Responsibility
	Insurance Companies	Mass campaigns, compensation of crash victims	Regulations are necessary to tap resources from insurance sector

3.9.2 Sustainable funding

There are some innovative funding systems that can be replicated for sustainable road safety funding.

Table 6 Showing examples of best practices of sustainable funding sources

Name	Where it is used	Remarks
------	------------------	---------

Traffic Fines	Uganda	The fines are provided to the Police Force to assist the Police in enforcing the traffic laws
Accident Fund	South Africa, Namibia,	Accident victim's compensation and rehabilitation is from the fund. The fund also helps in road safety promotion
Defensive Driving Courses	Zimbabwe,	The fees from Courses is used to run some of the National Road Safety Council Activities
Joint Proposal writing	NGOs,	Proposals that are multi sectoral in nature and implemented in partnership are likely to be funded than individual NGO
Continuous proposal writing	NGOs,	In order to cover the donor fatigue, there is need to ensure that proposals are continuously written not to rely on one funder.
Insurance companies	Private sector	Regulations can compel insurance companies to contribute towards road safety funding.

4.0 Road safety issues/Challenges and proposed interventions

4.1 Introduction

This chapter provides the issues/challenges and proposed interventions for improving road safety along the northern Corridor. The proposed interventions are based on best practices that reveal road safety interventions are strategically implemented, it can lead to significant road safety improvements and minimal road traffic crashes.

4.2 Challenges and proposed interventions

This study has identified issues, gaps and challenges and proposed interventions have been linked to the specific gap to address the issue to fill the gap.

Table 7 provides the challenges and the proposed road safety interventions

Table 5 Road safety issues & proposed interventions and activity

Area	Issues	Key Drivers	Proposed Intervention	Activity
Human Factors	<ul style="list-style-type: none"> • Drink Driving/Drug Abuse 	<ul style="list-style-type: none"> • Poor attitude about the risk of alcohol and driving • Social Environment along the corridor influences alcohol use • Peer Influence compels drivers to take on alcohol use • Weak enforcement of alcohol and drug abuse laws • Limited availability of breath analysers to assist in enforcement • Presence of cheap alcohol along the corridor • Alcohol as a social and entertainment function 	<ul style="list-style-type: none"> • Disseminate dangers of Drink driving and drug abuse. • Conduct road safety sensitization outreaches using different BCC Approaches • Promote self-regulation amongst drivers 	<ul style="list-style-type: none"> • Development and dissemination of IEC materials • Campaigns, peer education and outreach
Infrastructure	<ul style="list-style-type: none"> • Inadequate Road infrastructure condition 	<ul style="list-style-type: none"> • Inadequate parking spaces for trucks • Inadequate facilities for pedestrians • Inadequate facilities for cyclists and People with Disabilities • Inadequate maintenance funding for road infrastructure • Some sections are in poor conditions • Natural environment (hilly and mountainous areas) • Inadequate safety at road works sites • Natural calamities (Flooding, landslides) 	<ul style="list-style-type: none"> • Construction of parking spaces at RSS • Black spot awareness • Production of IEC materials developed on black spot maps 	<ul style="list-style-type: none"> • Expand existing RWCs • Setting up RSS • Development of IEC materials • Outreach and First Aid training at black spots
Human factor	<ul style="list-style-type: none"> • Over Speeding 	<ul style="list-style-type: none"> • Lack of discipline • Poor attitude towards safety • Weak enforcement of speeding laws 	<ul style="list-style-type: none"> • Sensitize the Drivers against over speeding and reckless driving • Conduct anti speeding 	<ul style="list-style-type: none"> • Road safety campaigns • Peer training on road safety

Area	Issues	Key Drivers	Proposed Intervention	Activity
		<ul style="list-style-type: none"> Inability to relate speeding to risk of crashes by road users 	<ul style="list-style-type: none"> campaigns Holding of joint awareness and enforcement campaigns 	
Human factor	<ul style="list-style-type: none"> Driver Fatigue 	<ul style="list-style-type: none"> Long distance driving without rest Boredom resulting from nature of job Poor rest facilities along the corridor High noise levels at the truck stop centres Inability to monitor driver rest periods due to absence of tracking devices Pressure to deliver goods urgently Failure to comply with rest periods when driving Absence of leave from work Weak trade unions to advocate for driver rights 	<ul style="list-style-type: none"> Health Breaks at RSS Appropriate legislations to address driver fatigue issues. Trucks should be having two stop centres fuels / chemicals and normal cargo parking Provision of rest areas along the corridor Provision of adequate parking at rest areas Provision of social amenities at RSS Provision of entertainment facilities at RSS Journey management process Charter implementation (compulsory stops after 4 hours and maximum 9 hours) Use the Canadian experience, transporters to appoint two (2) drivers where possible : one to drive from Point A to Point B and the other one to drive from Point B up 	<p>SWRW and NSA are members of a project steering committee to ensure that Safety and health issues are included in the RSS design and construction</p> <p>Harmonize legislations and address gaps to support the RSS programme (Mandatory annual health checks, accreditation of wellness centres as a testing centres. Set up an educational/ recreation activities</p> <p>(Videos ,TV screen, Pool table, Other games and Gym) Implement a charter that is enforceable through a peer audit mechanism. (vehicle vetting, driver health, training plan, vehicle standards, journey management plan, emergency response programme, compliant with the law CSR activity on road safety campaigns etc.).</p> <p>Upgrading the existing wellness centres or set up new</p>

Area	Issues	Key Drivers	Proposed Intervention	Activity
			<p>to the end of the journey</p> <ul style="list-style-type: none"> • Health checks • Develop a charter on rules and responsibility and code of conduct for various stakeholders including drivers • Build capacity of Unions to do their work better and do advocacy • Promote mind set change and sharing good practices 	<p>ones at the designated RSS sites to ensure delivery of Minimum Health Service Package (eye checks and hearing, BP, BMI, Blood sugar etc.)</p> <p>Upgrading includes Networking the sites, information dissemination, permanent structures Structured medical Establish a capacity building project under the TTCA to help stakeholders to deliver their responsibilities under the Charter (TTCA will monitor and coordinate the CB project)</p>
Human factor	<ul style="list-style-type: none"> • Over loading practices 	<ul style="list-style-type: none"> • Absence of Weigh Bridge services in some countries • Weak enforcement of weigh bridge controls • Profit motivation by transporters • Corruption and bribery • Lack of knowledge of dangers of overloading • Presence of vehicles with high 	<p>Highlight the dangers of overloading through a number of ways including IEC materials RSS can operate as mobile axle load control centres</p>	

Area	Issues	Key Drivers	Proposed Intervention	Activity
		<ul style="list-style-type: none"> capacity to transport cargo beyond the prescribed limit Lack of harmonized axle load limit 		
Infrastructure	<ul style="list-style-type: none"> Lack of Road signs and markings 	<ul style="list-style-type: none"> Vandalism of road signs along the corridor Road traffic crashes that damage the road signs Poor maintenance of road signs Weak laws that protect road infrastructure on the road Ensure that all humps are painted such that they do not lead to crashes 	<ul style="list-style-type: none"> IEC materials to promote the meaning of road signs IEC materials to promote protection of road signs as an asset for the community 	<ul style="list-style-type: none"> Work with Road and local authorities to mark the roads and put signage Campaigns on road use and road signs
Enforcement	<ul style="list-style-type: none"> Weak Enforcement of traffic laws. 	<ul style="list-style-type: none"> Limited training and capacity building of enforcement agencies Poor salaries and motivation of enforcers Limited equipment and logistics Corruption and bribery Lack of harmonized traffic regulations along the corridor Low level of awareness amongst the road users 	<ul style="list-style-type: none"> Deploy breath analysers in all Police stations near RSS Promote voluntary compliance of traffic regulations Implement workplace road safety regulations Share data on risky drivers along the corridor 	<ul style="list-style-type: none"> Work with the traffic police and government agencies on law enforcement
Human factor	<ul style="list-style-type: none"> Low awareness amongst road users 	<ul style="list-style-type: none"> Absence of adequate supply of IEC materials to road users Limited road safety campaigns targeting road users along the corridor Limited educational levels of drivers Multiplicity of languages along the corridor Poor attitude towards safety 	<ul style="list-style-type: none"> Mass campaigns on road safety IEC materials for different types of road users IEC materials development through innovative ways like use of CD ROMs and radio programmes 	<ul style="list-style-type: none"> Work with transport companies to incorporate Occupational health and safety issues are addressed

Area	Issues	Key Drivers	Proposed Intervention	Activity
			<ul style="list-style-type: none"> • Design hand books for drivers; this should include more lessons on safety, time to spend in the yard, time of rest, time to leave, etc. • Drivers of trucks must have respect, morality, courtesy for smaller cars. • BCC agents based at RSS • Use of role models for road safety • Awareness rising on defensive driving within the long distance drivers and PSV 	
Human factors	<ul style="list-style-type: none"> • Limited Seat Belt use 	<ul style="list-style-type: none"> • Weak enforcement of the seat belt regulations • Lack of harmonized regulations on helmets in the region • Low level of awareness of the use of seat belt • Limited seat belt promotion campaigns along the corridor • Dusty conditions that make seat belt use a hygiene issue • Presence of reasons and excuses of why seat belts should not be used • Unavailability of the seat belts 	<ul style="list-style-type: none"> • Promotion of seat use by IEC materials • Promotion of seat belt media campaigns • Joint media and enforcement campaigns 	<ul style="list-style-type: none"> • Media campaigns • Distribution of IEC materials • Signage and bill boards

Area	Issues	Key Drivers	Proposed Intervention	Activity
		in some vehicles (e.g. old trucks and locally fabricated taxi vans)		
Human factor	<ul style="list-style-type: none"> Limited use of helmets 	<ul style="list-style-type: none"> Weak enforcement of the helmets regulations Low level of awareness of the use of helmets Limited helmet promotion campaigns along the corridor Dusty conditions that make helmet use a hygiene issue Presence of reasons and excuses of why helmets should not be used (too hot for helmets) Lack of harmonized laws on helmet use 	<ul style="list-style-type: none"> Promotion of seat use by IEC materials Promotion of seat belt media campaigns Joint media and enforcement campaigns 	
Road safety management	<ul style="list-style-type: none"> Low driving standards 	<ul style="list-style-type: none"> Absence of standardized driver training programme Inadequate driver selection process Absence of a driver data base in the region Weak driving license regimes Inadequate medical tests for drivers during recruitment and in service Poor enforcement of traffic regulations Absence of graduated driver training programme Absence of point system for drivers Lack of harmonized enforcement system Ease of use of fake driving licenses 	<ul style="list-style-type: none"> Promote road safety at workplace level. Conduct road safety sensitization outreaches for mobile communities Conduct defensive driving for truck and PSV drivers Use of mentor drivers to promote road safety 	

Area	Issues	Key Drivers	Proposed Intervention	Activity
		<ul style="list-style-type: none"> • Corruption and bribery in driver testing regimes • Lack of professionalism amongst drivers • Poor salaries and motivation • Limited medical care and wellness services • Limited training opportunities 		
Vehicle issues	<ul style="list-style-type: none"> • Vehicle standards 	<ul style="list-style-type: none"> • Weak vehicle inspection regimes • Absence of national vehicle standards • Absence of vehicle inspection services in some member states • Importation of used vehicles • Absence of harmonized vehicle standards • Poor maintenance culture • Presence of non-genuine spare parts in the region • Limited on maintenance services • Presence of inferior fuels • Poor tyres care and maintenance 	<ul style="list-style-type: none"> • RSS to be used as a maintenance centre • IEC materials on Tyre care and other vehicle components 	
Vehicle issues	<ul style="list-style-type: none"> • Vehicle maintenance culture 	<ul style="list-style-type: none"> • Low level of awareness • Profit motivation as the main interest compared to longer lifespan of the unit • Poor compliance to recommended service schedules • Poor enforcement of vehicle inspection standards • Presence of inferior cheap 	<ul style="list-style-type: none"> • Installation and maintenance checks / Garages at RSS 	

Area	Issues	Key Drivers	Proposed Intervention	Activity
		spares		

5.0 Health Situation along the Northern Corridor

5.1 Introduction

This chapter outlines the main health challenges across the Northern Corridor. It largely focuses on the HIV/AIDS epidemic that is a challenge to transport investment and human resource development and productivity.

5.2 Main Health issues along the corridor

The countries served by the Northern Corridor suffer from several communicable and non-communicable diseases that affect transport and travel. For purposes of this report, four health issues of malaria, occupational health, road traffic injuries and HIV/AIDS are briefly discussed.

5.2.1 Malaria

An estimated 3.4 billion people are at risk of malaria, of which 1.2 billion⁵ are at high risk. In high-risk areas, more than one malaria case occurs per every 1000 population. There were an estimated 207 million cases of malaria in 2012 and an estimated 627,000 deaths. 90% of all malaria deaths occur in sub-Saharan Africa, and 77% occur in children under five.

Several studies have also highlighted that malaria is the top health concern of mobile populations such as truckers, who sleep in or under their vehicles without access to mosquito nets (IOM & GLIA, 2006).

5.2.2 Occupational health

Drivers endure long hours, loneliness, harsh, dirty living and working environments often expose drivers to risks such as occupational injury, gastrointestinal maladies, tuberculosis, and HIV risk-behaviour.

5.2.3 Road traffic Injuries

There are frequent deaths, injuries and loss of manpower due to road crash along the corridor. Issues concerning road safety have been covered in the previous two chapters.

5.2.4 Emerging epidemic e.g. Ebola

In the region there are threats of emerging diseases. Ebola has for instance been reported in West Africa. The proposed RSS will have in place measures such to assist in preventive measures promotion rather than becoming areas for spreading such diseases.

⁵ Fact sheet on World Malaria Report, WHO, December 2013. www.who.int

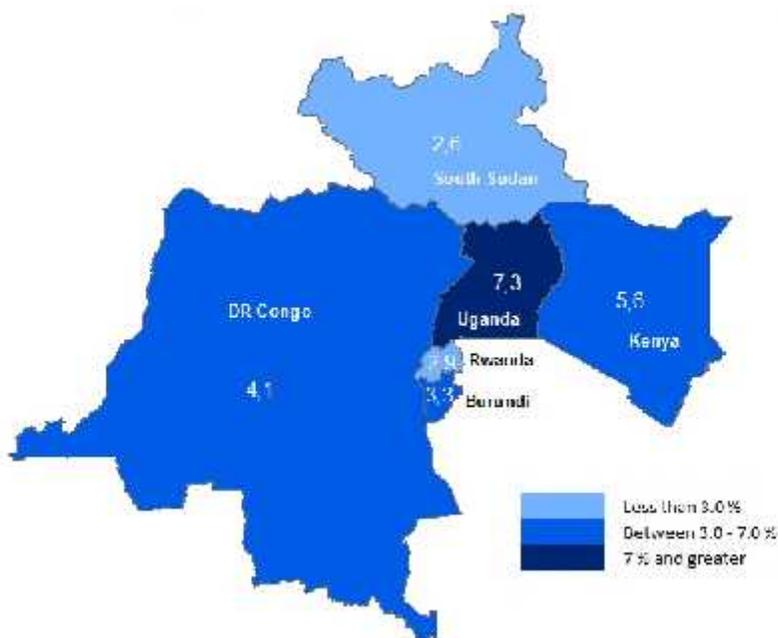
5.3 HIV and AIDS

Globally, an estimated 35.3 million people were living with HIV in 2012. With 2.3 million new HIV infections showing a 33% decline in the number of new infections from 3.4 million in 2001. At the same time the number of AIDS deaths is also declining with 1.6 million AIDS deaths in 2012, down from 2.3 million in 2005⁶.

Of the estimated 25.5 million people living with HIV/AIDS in sub-Saharan Africa, 17 million live in Eastern and Southern Africa⁷ representing 72%. The diverse countries have achieved notable reductions in HIV prevalence among young people (15–24 years). HIV prevalence among young women and men fell by 42% from 2001 to 2012. Even with these favourable trends, HIV prevalence among young women remains more than twice as high as among young men throughout sub-Saharan Africa. Apart from Uganda, all countries of Eastern and Southern Africa there are an indication of a reduction in cases of new infections.

As the map in Figure 21 shows, the present overall national prevalence rates in partner states are 5.6% in Kenya; 7% in Uganda 4.1%; in DRC, 2.6 %; in South Sudan 2.9 % in Rwanda and; 3.3% in Burundi.

Figure 21 Comparative HIV and AIDS prevalence rates in countries along the Northern Corridor



5.4 HIV/AIDS along the Northern Corridor

⁶ UNAIDS report 2013

⁷UNAIDS report 2013

The Northern Corridor is characterized by high HIV prevalence levels; there is heavy and frequent movement of people across the Corridor and there are challenges in the health systems to meet the demand for HIV and AIDS services. These problems are compounded by widespread poverty, high morbidity from malaria and other communicable diseases like tuberculosis.

5.5 Key Drivers of HIV and AIDS pandemic along the Corridor

The key drivers of HIV and AIDS pandemic along the Corridor include biomedical, behavioural and structural. Table 7 shows the key drivers of the HIV and AIDS along the Corridor.

Table 8 the Key drivers of HIV and AIDS along the Northern Corridor

Key Drivers of HIV and AIDS along the Northern Corridor			
	Biomedical Drivers	Behavioral Drivers	Structural Drivers
1	Not knowing ones HIV status:	Multiple sexual partners	Frequent separation from family
2	Limited HIV treatment for prevention	Alcohol and substance abuse	Poor accommodation
3	Sexually active age bracket	Commercial sex workers	Poor salary levels
4	Negative perception of HIV	Community perception	Night duty
5	Inconsistent supply of condom		Poverty
6	Lack of gadgets while handling blood		

5.6 Key actors in HIV AIDS

There are several key actors in the countries served by the Northern Corridor engaged in HIV/AIDS prevention. The table below provides the key players.

Table 9 Key actors in HIV and AIDS at National level along the Northern Corridor

Burundi	D.R.C	Kenya	Rwanda	Uganda	S. Sudan
Ministry of Health	Ministry of Health	Ministry of Health	Ministry of Health	Ministry of Health	Ministry of Health
National AIDS Council (NAC)	National Multisectoral de Luttecontre le SIDA	National AIDS Control Council	Rwanda Biomedical Center (RBC)	Aids Control Programme	South Sudan AIDS Commission
Path finder	Hospitals	National AIDS and STI Control Programme	Hospitals	Uganda AIDS Commission	Hospitals
Hospitals		Nairobi City Council		Kampala Capital City Authority	
		North Star Alliance		The AIDS Information Centre	

		Highway Community Health Resources Centre		North Star Alliance	
				The AIDS Support Organisation	
				Centre for Disease Control	
				Hospitals	

5.7 Regional actors in HIV/AIDS Pandemic

At regional level, there are several partners involved in HIV and AIDS pandemic, the following are the key actors

Table 10 Key actors in HIV and AIDS at regional level along the Northern Corridor

Organisation	Burundi	D.R.C	Kenya	Rwanda	Uganda	S. Sudan
UNAIDS						
IGAD						
IOM						
GLIA						
EAC						
TTCA-NC						
UNDP						
North Star						
FHI360						

6.0 Best Practices in HIV/AIDS prevention and care

6.1 Introduction

This chapter outlines the best practices in HIV/AIDS prevention and care along the Northern Corridor. The purpose is to assess the lessons that can be learned and can be used at the RSS level.

6.2 Best practices in HIV/AIDS along the Northern Corridor

Along the Northern Corridor there are driver focused HIV/AIDS programmes. These range from prevention, condom distribution to care services. Best practices along the corridor include:

- International Organisation of Migration
- The Great Lakes Initiative on HIV/AIDS (GLIA)
- The IGAD Regional HIV & AIDS Partnership Program
- Family Health International 360
- Highway Community Resource Centres
- Regional Outreach Addressing AIDS through Development Strategies (ROADS) I and II
- North Star Alliance

It has to be stated that there are many other players in the area of HIV/AIDS prevention that are not shown here but also play an important role.

Table 11 Driver focused HIV/AIDS prevention and care centres along the NC

Burundi	D.R.C	Kenya	Rwanda	Uganda	S. Sudan
Karusi – Roads II programme	Bukavu – North Star Alliance	Mombasa– Highway Community Health Resources Centre	Gatuna – Roads II programme	Malaba – North Star Alliance	Central Equatoria State – Roads II Programme
Kayanza– Roads II programme		Mariakani – Highway Community Health Resources Centre	Kigali– Roads II programme	Busia – AMICALL and Red Cross	Western Equatoria State – Roads II Programme
Kirundo – Roads II programme		Mtito Andei - North Star Alliance	Gicumbi – Roads II programme	Naluwerere	Eastern Equatoria State– Roads II Programme
Muyinga– Roads II programme		Emali – North Star Alliance	Rusizi– Roads II programme	Mbuya	
Bujumbura– Roads II programme		Mlolongo – North Star Alliance and Highway Community Health Resources Centre		Lubaale	

		Maai Mahiu – North Star Alliance		Katuna – North Star Alliance	
		Salgaa – North Star Alliance			
		Burnt Forest – North Star Alliance			
		Busia – Shell Kenya Busia- Health centre for Truckers Busia – Highway Community Health Resources Centre			

6.2.1 International Organisation of Migration

Over the last decade, IOM has implemented HIV-related projects in partnership with governments, international organizations and civil society around the world. Among the beneficiaries of IOM HIV projects are regular and irregular migrant workers across a range of sectors (including transport, mines, maritime, and infrastructure); mobile populations in crisis settings including internally displaced persons and refugees; families and partners of migrants (including sex workers); as well as victims of sexual and gender-based violence and trafficking in persons.

IOM addresses HIV risks and vulnerabilities at all phases of migration. HIV prevention and research are key activities. IOM also provides direct HIV services to migrants in selected sites, including voluntary HIV testing and counseling for migrants and their communities, and treatment services including anti-retroviral therapy. IOM works closely with policy-makers on a range of issues related to HIV and population mobility, including access to health services; regional and cross-border cooperation; and discriminatory legislation and practices, such as mandatory HIV testing.

6.2.2 The Great Lakes Initiative on HIV/AIDS (GLIA)

GLIA is a regional organization, fully-owned, and was operated by six member countries. GLIA Support project financed prevention, care, and treatment, programs for large numbers of refugees, migrant and transport workers, highly infected groups, and others which move between the five Great Lakes countries, with a strong emphasis on coordinating a regional, cross-border response to combating the disease. Its first component—HIV/AIDS support to refugees, affected areas surrounding the refugee communities, internally displaced people, returnees to provide prevention, care, treatment and mitigation services to a mutually agreed number of people in these groups which are vulnerable to the disease. The second component—Support to HIV/AIDS related networks will concentrate on reaching long-distance transport workers, communities and groups associated with them, as well as networks of people living with HIV/AIDS. The third component –Support to regional health sector collaboration will help to harmonize regional HIV/AIDS-related health sector policies and protocols across the six Great Lakes

countries, along with sharing program information, monitoring and evaluation, and training and pilot activities. The fourth component—Management, capacity strengthening, monitoring and evaluation and reporting to help strengthen the institutional capacity of the Great Lakes Initiative on HIV/AIDS (GLIA), a regional secretariat first set up in 1998, with the assistance of the Joint United Nations Program on AIDS (UNAIDS), to pilot a small number of cross-border activities between the six countries. The GLIA governments recognize the need to go beyond these modest efforts to create coordinated programs and policies to better fight their HIV/AIDS pandemics.

6.2.3 The IGAD Regional HIV & AIDS Partnership Program

The IGAD Regional HIV & AIDS Partnership Program is a reflection of the common objective of the National AIDS authorities of IGAD Member States and development partners to work in a mutually supportive way to address the sub-regional Cross Border and Mobile Populations (CBMPs) aspects of the HIV/AIDS challenge. The program will contribute to the reduction of HIV infections and to mitigate the socio-economic impact of the epidemic in the IGAD region by improving regional collaboration and implementing interventions that add value to the efforts of each individual country.

- To increase preventive action reduce misconceptions of cross border and mobile populations including refugees, IDPs, returnees, and surrounding host communities concerning HIV and AIDS prevention and mitigation in selected sites in the IGAD Member States
- To establish a common and sustainable approach to supporting these populations in the IGAD Member States.

6.2.4 Family Health International 360

FHI 360 is a nonprofit human development organization dedicated to improving lives in lasting ways by advancing integrated, locally driven solutions. Our staff includes experts in health, education, nutrition, environment, economic development, civil society, gender equality, youth, research and technology - creating a unique mix of capabilities to address today's interrelated development challenges. FHI 360 serves more than 60 countries.

FHI 360's Regional Outreach Addressing AIDS through Development Strategies (ROADS) project has linked communities along these corridors with critical HIV/AIDS and other health services by collaborating closely with national AIDS control programs; government ministries; district health management teams; health facilities; and local, national and international companies. The project helped individuals and communities to reduce their vulnerability to HIV by expanding economic opportunities and improving food security.

6.2.5 Regional Outreach Addressing AIDS through Development Strategies (ROADS) I and II

The transport corridors of East, Central and Southern Africa that link countries with their neighbours are also major transmission routes for HIV.ROADS II is currently active in the following countries Burundi,

DR Congo, Rwanda, Kenya, and Uganda. The Roads to a Healthy Future (ROADs II) project was aimed at strengthening communities along these routes by linking them with health services, expanding economic opportunities, improving food security and working to protect women and girls from sexual exploitation and abuse. ROADs II brought together local volunteer groups with similar interests to plan and implement activities jointly to meet community needs from generating demand for HIV testing and counselling to enhancing food security and livelihoods for women. ROADs II collaborates closely with national AIDs control programs; government ministries; district health management teams; health facilities; and local, national and multinational companies. By the end of 2011, ROADs I and II had reached approximately 4.3 million people, including 300,000 truck drivers across 11 African countries. About 1,200 community-based organizations with more than 82,000 members had been mobilized into 80 community clusters, transforming corridors of risk into pathways of prevention.

6.3 North Star Alliance

6.3.1 Brief History and objective

North Star Alliance was founded in September 2006 by TNT and United Nations World Food Programme as a response to the threat of HIV/AIDS among mobile transport workers in Sub-Saharan Africa. North Star Alliance is a public-private partnership that is focused on establishing a network of roadside health clinic – Road side Wellness Centres (RWCs) – in transport hubs and/or border crossing transport stops.

NSA specific services are for sex workers and community members living near transport hubs and ports, who each represented a link in the transmission of communicable disease. In addition to expanding our services to the broader community, we also widened the scope of our health service package to include more than HIV and STI prevention and management.

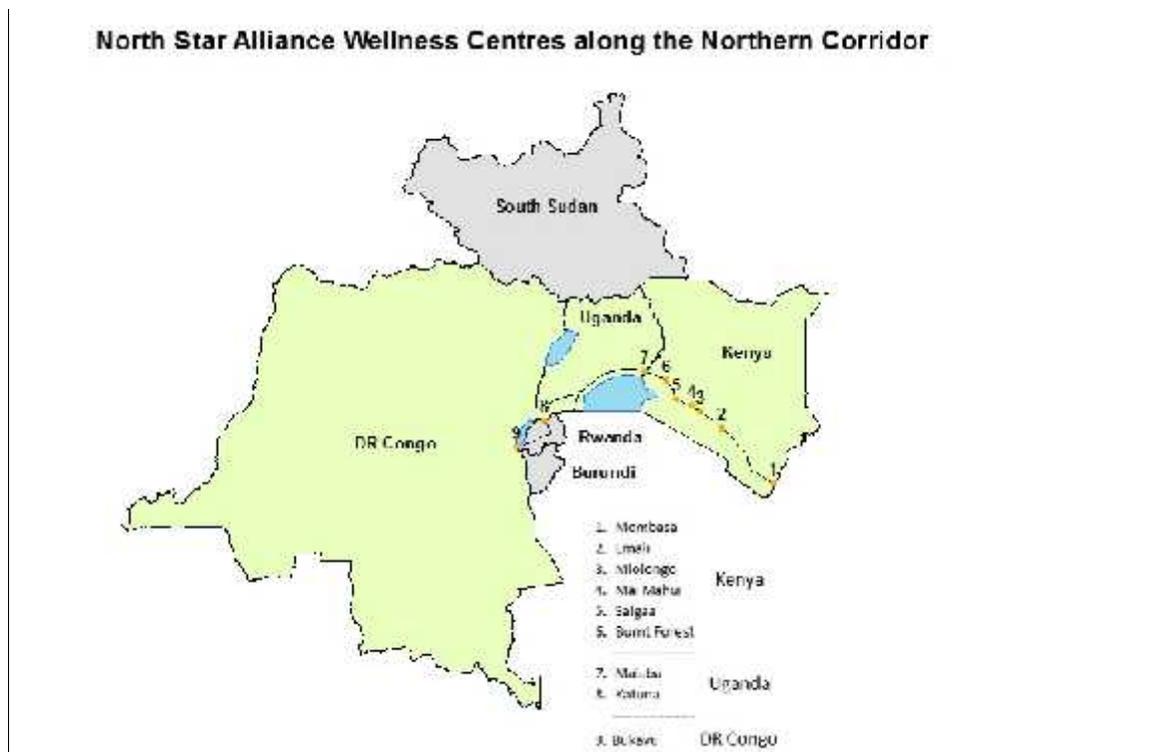
Specifically the NSA was established due to:

- Mobile workers have limited health and safety services
- African economies are driven by road transport
- A healthy work force is more productive
- Ill health among workers is a business liability
- Correlation between health and safety
- Communities at the crossroads are vulnerable
- Interventions too broad or too narrow
- Mobile workers not prioritized nationally or regionally

It operates 14 Wellness Centres in Kenya and Uganda, six of which are between Mombasa and Malaba. The wellness centres on Northern Corridor are located at Mombasa, Emali, Mlolongo, Maai Mahiu, Salgaa and Burnt forest. In Uganda they are located at Malaba and Katuna. In DRC they are located at

Bukavu. Outside the Northern Corridor in East Africa they are located at Namanga, Dar es Salaam, Mwanza Tunduma and Kahama in Tanzania.

Figure 22 Map showing North Star Alliance regional wellness centres network



6.3.2 Services provided by North Star Alliance

The services provided by North Star Alliance include:

- Treatment of various diseases such as Malaria, water borne diseases, colds and flu
- Sexually Transmitted Infections (STIs)
- ARV /TB treatment
- Health and Safety Education
- Referrals
- Medical checkups – eye, hearing, BP etc.
- Family Planning and Sexual Reproductive health
- Peer Education
- Condom distribution
- Studying disease trends and patterns

6.3.3 Information Management System

The North Star information management system (COMET) features:

- Proprietary IT System used to collect data
- Developed by ORTEC
- Connects all Wellness Centres with personal health information (real time)
- Confidential, encrypted data
- The IT system manages, monitors and evaluates performance
- The system controls inventory
- The system analyzes transport and health trends
- And is designed to link to national health system
- Used in the Abidjan/Lagos corridor and SADC projects

6.3.4 North Star Alliance Approach

The NSA approach involves

- High quality standardized services
- Joint planning with all stakeholders
- Site assessment before start-up
- Convenient hours – maybe 24hrs
- Strict adherence to Government guidelines and protocol
- Trained staff and good rapport
- Strict performance monitoring (COMETS)
- Cost effective operations

6.3.5 North Star Alliance Partnership building Approach

North Star Alliance has built partnership which have helped make its operations easier

- Ministry of Health- registration, guidelines and protocols, medical supplies and second ment of staff in some cases and support supervision
- Other government ministries and departments-Land
- Private sector- co funding and technical support
- Academia – Research
- Transport Companies-Mobilization of drivers and in kind contribution
- Local communities – Planning and monitoring
- Target population- Planning some of the activities, ideas and views incorporated
- Abidjan Lagos Corridor Organization

6.3.6 Financing Models for North Star Alliance

- Global health partners (US Government, Global Fund etc.)
- Private sector- Wellness Centre operations, training, Information management, research)
- Partnerships with MOH and other government ministries (see above)
- Fee for service
- Franchising Study in progress with Duke University

North Star Alliance is funded from the following partners:

- Dutch Government
- US Government (PEPFAR and USAID) –FHI360, EGPAF
- SOA AIDS
- Global Fund
- Heineken
- TNT
- Oil Companies
- UN WFP

7. Challenges and proposed interventions for HIV/AIDS prevention and care

7.1 Introduction

This chapter outlines the challenges and proposed interventions in HIV and AIDs prevention and care along the Northern Corridor. The purpose is to have a programme based on the lessons learned at the RSS level.

7.2 Challenges and proposed HIV/AIDS prevention interventions

The study has identified issues, challenges and gaps involved in HIV/AIDS prevention. Interventions have been proposed and have been linked to address the specific gap.

Table 12 shows the challenges and the proposed interventions

Table 12 Matrix showing the issues, drivers and proposed interventions for HIV/AIDS

AREA	ISSUE	DRIVERS	PROPOSED INTERVENTION	ACTIVITY
HIV and AIDS /Health of Mobile populations	Unprotected sex with multiple partners.	1. Availability of Sex Workers (SWs).	<ul style="list-style-type: none"> • Explicitly exposing the dangers of SW. • Considering alternatives like other income generating ventures. • A small poverty alleviation fund for SWs to promote income generating ventures for SWs to encourage them to leave the trade. • Skills training for SWs to equip them with skills for self- supporting lives. • Partnering with community associations to work on alternative livelihoods. • Carry our further research into the sex trade. • Training in life skills to empower key populations to better plan, negotiate, make decisions and manage their lives. • Make referrals to health centres • Target well educated young women who are involved in the sex trade 	
		2. Separation from partners for a long time.	<ul style="list-style-type: none"> • Organize talks on family related topics at company and RSS • Family events at transport company level • Lobby employers to integrate interventions which encourage family interactions • Internet access at RSSs • Awards to drivers demonstrating commitment to family • Advocate and improve the use of condoms for drivers who are separate from their homes for long. 	
		3. Alcohol and drug use and abuse.	<ul style="list-style-type: none"> • Exposing the dangers of alcohol use and abuse. • Peer led initiatives using reformed truckers • Recreation facilities 	

AREA	ISSUE	DRIVERS	PROPOSED INTERVENTION	ACTIVITY
			<ul style="list-style-type: none"> • Self -regulation at individual level. • Partner with NGOs that rehabilitate alcoholics and drug abusers – like Alcoholics Anonymous, etc. 	
		4. Idleness at road stops.	<ul style="list-style-type: none"> • Establish and/or promote Wellness Centres at all RSSs where there are popular games for drivers like Pool, Drafts, Ludo, Card games, football, Table Tennis, Swimming and others. • Work with Sports agencies. • One –hour Module training programmes aimed at combining entertainment and education (edutainment). 	
		5. Offer of free accommodation by women at road stops.	<ul style="list-style-type: none"> • Provide facilities for rest and social amenities. • Continuous education 	
		6. Poverty	<ul style="list-style-type: none"> • A small poverty alleviation fund for SWs. • Training in alternative sources of income. • Business skills training. • Linkages with Micro Finance Institutions for training and financial support where applicable 	
		7. Ignorance about the dangers of unprotected sex.	<ul style="list-style-type: none"> • Exposing the dangers of unprotected sex. • Risk assessment, counseling and reduction strategies • Ensure rigorous and sustained IEC and behaviour change • Campaign against HIV infection and spread of the disease. • Use of all media in all possible places – toilets, bathrooms, in restaurants and hotel rooms, on radio, posters in all places and inside the trucks. • Use of role models and live testimonies about the spread of HIV. • Ensure constant and adequate provision and proper use of condoms. – Both male and female. • Introduce/ increase Condom dispensers at strategic locations such as bars, lodges RSSs 	

AREA	ISSUE	DRIVERS	PROPOSED INTERVENTION	ACTIVITY
		8. Ignorance of one's HIV status	<ul style="list-style-type: none"> • Provision of user friendly, affordable and easily accessible HIV Testing and Counselling (HTC) services. • Promotion of HTC services • Provision of counselling services at all stopping centres. • Provide self-screen kits for testing HIV for people who can't go to the laboratory to ensure secret is well kept • Exposing the dangers of not knowing one's status and the importance and value of knowing one's status. • HIV services provided through outreach and other user-friendly modalities such as moonlight, camp-based services to go where the mobile populations are and be tailored to fit within their work patterns. 	
		9. Inconsistent supply of condoms	<ul style="list-style-type: none"> • Establishment of distribution points in all RSSs, • Equipping health workers to promote and demonstrate use of female condoms. • Lobby MOH / donors for consistent supply of condoms at the service delivery points along the Northern Corridor • Promote consistent, proper use and disposal of condoms along the Northern Corridor 	
		10. Cultural or religious beliefs	<ul style="list-style-type: none"> • IEC/BCC campaigns to break the belief system at RSS level. 	
	Inadequate/poor access to HIV/AIDS prevention, basic treatment, and support and care services.	1. Ignorance of one's HIV status	<ul style="list-style-type: none"> • Provision of affordable and easily accessible VCT services. • Provision of counselling services at all stopping centres. • Exposing the dangers of not knowing one's status and the importance and value of knowing one's status. • HIV services provided through outreach and other user-friendly modalities such as moonlight, camp-based services to go where the mobile populations 	<ul style="list-style-type: none"> • Promotion of Condom use and distribution • Establish RSS and expand existing RWCs

AREA	ISSUE	DRIVERS	PROPOSED INTERVENTION	ACTIVITY
			<ul style="list-style-type: none"> are and be tailored to fit within their work patterns. 	
		2. Stigma	<ul style="list-style-type: none"> Use of role models. Campaigns to address stigma among trucker and sex workers Rigorous and sustained IEC on HIV and AIDS and behaviour change communication. Development of IEC materials focusing on truckers Media (Radio, TV, and Press) efforts to reduce stigma and promote behaviour change. 	
		3. Cultural or religious beliefs	<ul style="list-style-type: none"> IEC/BCC campaigns to break the belief system Provide incentives to those who access health services. 	
		4. Services not user friendly to mobile populations.	<ul style="list-style-type: none"> Train special health personnel to handle mobile populations. Work with Government health centres as referrals. Establish special programmes to reach mobile populations. Establish mobile/outreach services for mobile populations. 	
		5. Staff not very receptive or friendly to patients.	<ul style="list-style-type: none"> Strengthen capacity of health service providers to treat and prevent HIV and AIDS. Customer care and KP counseling skills training Train special health personnel to handle mobile populations. Establish special programmes to reach mobile populations. 	
		6. Limited access/use of condoms along the Northern Corridor	<ul style="list-style-type: none"> Ensure constant and adequate provision of condoms. <ul style="list-style-type: none"> – Both male and female. Lobby for condom supply and distribution streamlining at the RWCs / RSS and other service delivery points along the NC Establishment of distribution points in all RSSs, 	

AREA	ISSUE	DRIVERS	PROPOSED INTERVENTION	ACTIVITY
			<ul style="list-style-type: none"> Equipping health workers to promote and demonstrate female condoms. 	
		7. Fear of knowing one's status.	<ul style="list-style-type: none"> Use of role models. Rigorous and sustained IEC on HIV and AIDS and behaviour change communication. Media (Radio, TV, and Press) efforts to reduce stigma and promote behaviour change. Strengthen the peer support through training and follow up 	
		8. Inadequate number of Wellness Centres/RSSs along the NC	<ul style="list-style-type: none"> Improve and expand existing Wellness Centres along the NC. Partnership building with Wellness Centres. Partner with/MoU with existing Wellness Centre Providers along the NC. Involve the local leadership in road safety and health matters along the NC. Mobilise the local leadership to prioritize road safety and health issues in their budgets. Involve the communities along the NC in decisions on road safety and health for sustainability purposes. Map the service delivery points and identify gaps along the NC 	
		9. Ignorance/negative perception about HIV/AIDS	<ul style="list-style-type: none"> Use of role models. Rigorous and sustained IEC on HIV and AIDS and behaviour change communication. Media (Radio, TV, and Press) efforts to reduce stigma and promote behaviour change. Community involvement to support the operations of the RSS and other service delivery points Outreaches and campaigns along the NC to raise awareness of Health and safety information 	
		10. Lack of proper HIV work place	<ul style="list-style-type: none"> Access / review existing work place policies 	

AREA	ISSUE	DRIVERS	PROPOSED INTERVENTION	ACTIVITY
		policies	<ul style="list-style-type: none"> • Build capacities of transport companies 	
	Poverty	<ol style="list-style-type: none"> 1. Low salary levels. 2. Unsustainable income generating ventures. 3. Lack of business skills among the mobile populations. 4. Lack of discipline- overspending, lack of proper planning and budgeting. 5. Availability of quick loans and lending facilities 	<ul style="list-style-type: none"> • A small poverty alleviation fund for CSWs. • Training in alternative sources of income. • Business skills training especially book keeping. • Live testimonies and encouragement from successful business entrepreneurs. • Regular Mentoring and follow up by successful business entrepreneurs. • Rigorous and sustained monitoring of loans and beneficiaries. • Promote saving schemes among the truckers and sex workers 	
	Irregular supply of ARVs	<ol style="list-style-type: none"> 1. Lack of discipline by users. 2. Lack of adequate supply centres along the Corridor 	<ul style="list-style-type: none"> • Increased supply centres • Improved ARV supply system – RSS to be ARV supply Centres • Partnership with Government. • Partnership with private sector. 	
	Inadequate number of Wellness Centres	<ol style="list-style-type: none"> 1. Inadequate funding for the facility. 2. Low involvement of the local leadership in Road safety and Health matters. 3. Lack of prioritization of road safety and health issues in local administration and stakeholder budgets. 4. Poor involvement of the community in road safety and health matters. 	<ul style="list-style-type: none"> • Improve and expand existing Wellness Centres along the NC. • Partnership building with Wellness Centres. • Involve the local leadership in road safety and health matters along the NC. • Involve the communities along the NC in decisions on road safety and health at RSS level for sustainability purposes. • Map out service gaps along the NC 	
	Other Health issues	<ol style="list-style-type: none"> 1. Loneliness and desire for companionship during the long distance driving. 2. Ignorance about the transmission of communicable diseases. 3. Association with infected persons 	<ul style="list-style-type: none"> • Provision of facilities like audio messages that combine entertainment, education, information and mobilisation for behaviour change. • Constant and rigorous IEC on transmission and prevention of infection by communicable diseases. • Provision of laboratory facilities for testing for 	<ul style="list-style-type: none"> • Expand the RWCs (to have additional services • Knowledge management Monitoring and evaluation (data collection, reporting, Coordination ,performance

AREA	ISSUE	DRIVERS	PROPOSED INTERVENTION	ACTIVITY
		<p>along the routes.</p> <p>4. Lack of facilities/gadgets for prevention of infection e.g. mosquito nets, mosquito/insect repellents, masks, gloves, etc.</p>	<p>communicable diseases at RSS level.</p> <ul style="list-style-type: none"> Collection and utilization of disease trend data at the service delivery pins along the transport corridor Streamline monitoring and reporting on data related to truckers and sex workers among service delivery points along the NC 	<p>measurement</p> <ul style="list-style-type: none"> Adapting IT for data capture and reporting
	<p>Risk of skeletal injuries and deformity like injuries of the backbone, collapse of the vertebrae, slipped discs, and spinal fractures among others;</p>	<ul style="list-style-type: none"> Poor sitting posture in the trucks during the long distance driving. Poor/inappropriate structure of the truck seat. Poor seat adjustment. Poor maintenance of truck seat. Lack of exercise during the long distances. Lack of co-drivers in some fleets. Long distance travelled by the driver. Ignorance of the need for exercise and rest during the long distance. Lack of regular check - ups at health centres. Inaccessible or non-user friendly health services for check-up and follow-up. 	<ul style="list-style-type: none"> Rigorous and sustained IEC on safe sitting and health practices. Ensure mandatory compliance to the policy of resting after every four hours of driving. Ensure regular medical check-ups at health centres. Equip RSSs to carry out medical check-ups and provide user friendly services to drivers and other mobile populations. Equipping RSSs with massaging equipment. Expand existing RWCs and other service delivery points to offer occupational health services Work with transport companies and KTA to streamline health issues into the work place policies 	
	<p>Risk of some psychological illnesses like depression, mental stress or mental Breakdown and</p>	<ol style="list-style-type: none"> Loneliness, frustration, boredom, and fatigue. Staying away from the family for a long time without communication. Monotony of work –travelling along the same route over and over. 	<ul style="list-style-type: none"> Provision of pre-recorded IEC messages. Health and Mind training (on emotional intelligence, etc.) Establish Wellness centres with sports and other recreation at all RSSs. Make RSSs centres for rest and medical check-ups. 	

AREA	ISSUE	DRIVERS	PROPOSED INTERVENTION	ACTIVITY
	many others.	<ol style="list-style-type: none"> 4. Use and abuse of alcohol and drugs. 5. Poverty 6. Low motivation. 7. Inadequate opportunity for leisure and pleasure. 8. Inadequate counseling services after testing positive. 	<ul style="list-style-type: none"> • Counselling services at all RSSs. • Mindset training to improve self- esteem. 	
	HIV/AIDS related stigmatization and discrimination among mobile populations.	<ol style="list-style-type: none"> 1. Low levels of knowledge and information about HIV and AIDS. 2. Cultural/Religious beliefs. 3. Peer influence. 	<ul style="list-style-type: none"> • IEC/BCC campaigns. • Counselling services at all RSSs • Mindset training to improve self-esteem. • Physical support for HIV positive mobile populations. • Establish pre-and post-test clubs for mobile populations. 	

8.0 Safety and Health Programme Packaging Process

8.1 Introduction

This chapter outlines the process of packaging the safety and health programme. This involves prioritizing the proposed interventions and then rationalizing them into projects for effective implementation.

8.2 Safety and Health Packaging

The safety and health packaging has been undertaken with the aim of developing the safety and health programme component of the RSS. This has been undertaken under the following process:

- Analysis of the safety and health situation
- In depth analysis of drivers behind the poor safety and health situation
- Identification of best practices
- Proposed interventions
- Linkage of gaps with the proposed interventions
- Packaging of the interventions into projects.

Table 13 shows the packaging of the safety and health programme.

Table 13 Proposed RSS Road Safety Project Packaging

Drivers	Proposed Interventions	Proposed Project
Driver Fatigue		
<ul style="list-style-type: none"> • Long distance driving • Boredom resulting from nature of job • Poor rest facilities along the corridor • High noise levels at the truck stop centres • Inability to monitor driver rest periods due to absence of tracking devices • Pressure to deliver goods urgently • Failure to comply with rest periods when driving • Absence of leave from work 	<ul style="list-style-type: none"> • Health Breaks at RSS • Provision of rest areas along the corridor • Provision of adequate parking at rest areas • Appropriate legislations to address driver fatigue issues. • Provision of entertainment facilities at RSS • Provision of social amenities at RSS • Promote mind set change and sharing good practices at RSS • Develop a charter on rules and responsibility and code of conduct for various stakeholders including drivers • Journey management process Charter implementation (compulsory stops after 4 hours and maximum 9 hours) • Upgrade and expansion of the wellness centres along the NC • Health checks • Build capacity of Transport Unions to do their work better and do advocacy particularly related to driver fatigue issues • Advocate and improve the use of condoms for drivers who are separate from their homes for long. • Use the Canadian experience, transporters to appoint two (2) drivers where possible : one to drive from Point A to Point B and the other one to drive from Point B up to the end of the journey 	<ul style="list-style-type: none"> • RSS Infrastructure Development Project • Provision of adequate parking and rest areas for drivers • Expansion and Upgrade of Wellness Centres Project • Provision of adequate sanitary facilities <hr/> <ul style="list-style-type: none"> • Harmonization and standardization of services project • Guidelines and protocols • Legislative reform issues and harmonization • Review of national traffic laws • Harmonization of the traffic regulations • Build the capacity of different actors to implement the harmonized legislations, laws and protocols. <hr/> <ul style="list-style-type: none"> • Behavioural change communication project • Road safety behavioural change communication (IEC material development, Peer Education and driver training • IEC materials development through innovative ways like use of CD ROMs and radio programmes • Design hand books for drivers; this should include more lessons on safety, time to spend in the yard, time of rest, time to leave, etc. • Drivers of trucks must have respect, morality, courtesy for smaller cars. • Defensive driving approach as basis for training • Sensitisation of traffic regulations <hr/> <ul style="list-style-type: none"> • Strengthening safety and HIV/health work place policies Project • Workplace policy on Road safety • Advocate and improve the use of condoms for

Drivers	Proposed Interventions	Proposed Project
		drivers who are separate from their homes for long. <ul style="list-style-type: none"> • Advocacy for Road safety and Occupational health incorporated and implemented within the workplace and environment • Care for accident victims at workplace • RSS Safety and Health Charter promotion • Capacity building of unions and transport companies • Promotion of self-regulations • Occupational health
<ul style="list-style-type: none"> • 2. Emergency Response 		
<ul style="list-style-type: none"> • Inadequate rescue response system • Low level of First Aid practices • Inadequate trauma centres /hospitals along the corridor • Poor staffing of health centres 	<ul style="list-style-type: none"> • Emergency Response Provision • Treatment of the minor injuries of road traffic Victims • Referrals • First Aid 	<ul style="list-style-type: none"> • RSS Emergency Response Project • Emergency rescue system • Ambulance services • First Aid services
<ul style="list-style-type: none"> • Over speeding 		
<ul style="list-style-type: none"> • Lack of discipline • Poor attitude towards safety • Weak enforcement of speeding laws • Inability to relate speeding to risk of crashes by road users 	<ul style="list-style-type: none"> • Sensitize the Drivers against over speeding and reckless driving • Conduct anti speeding campaigns • Self-regulation on speeding through workplace initiatives • Holding of joint awareness and enforcement campaigns 	<ul style="list-style-type: none"> • Refer to 4 • Refer to 3 • Refer to 2
<ul style="list-style-type: none"> • Overloading 		
<ul style="list-style-type: none"> • Absence of Weigh Bridge services in some countries • Weak enforcement of weigh bridge controls • Profit motivation by transporters • Corruption and bribery • Lack of knowledge of dangers of 	<ul style="list-style-type: none"> • Highlight the dangers of overloading through a number of ways including IEC materials 	<ul style="list-style-type: none"> • Refer to 3 • Refer to 2 • Refer to 4

Drivers	Proposed Interventions	Proposed Project
<ul style="list-style-type: none"> overloading • Presence of vehicles with high capacity to transport cargo beyond the prescribed limit • Lack of harmonized axle load limit 		
<ul style="list-style-type: none"> • Low level of awareness 		
<ul style="list-style-type: none"> • Absence of adequate supply of IEC materials to road users • Limited road safety campaigns targeting road users along the corridor • Limited educational levels of drivers • Multiplicity of languages along the corridor • Poor attitude towards safety 	<ul style="list-style-type: none"> • Mass campaigns on road safety • IEC materials for different types of road users • BCC agents based at RSS • Use of role models for road safety • Awareness rising on defensive driving within the long distance drivers and PSV 	<ul style="list-style-type: none"> • Refer to 3
<ul style="list-style-type: none"> • Low driving standards 		
<ul style="list-style-type: none"> • Absence of standardized driver training programme • Inadequate driver selection process • Absence of a driver data base in the region • Weak driving license regimes • Inadequate medical tests for drivers during recruitment and in service • Poor enforcement of traffic regulations • Absence of graduated driver training programme • Absence of point system for 	<ul style="list-style-type: none"> • Promote road safety at workplace level. • Conduct road safety sensitization outreaches for mobile communities • Conduct defensive driving for truck and PSV drivers • Use of mentor drivers to promote road safety • Share data on risky drivers along the corridor • IEC materials development through innovative ways like use of CD ROMs and radio programmes • Design hand books for drivers; this should include more lessons on safety, time to spend in the yard, time of rest, time to leave, etc. • Drivers of trucks must have been drivers of small cars showing respect, morality, courtesy. 	<ul style="list-style-type: none"> • Refer to 3. • Refer to 4

Drivers	Proposed Interventions	Proposed Project
drivers <ul style="list-style-type: none"> • Lack of harmonized enforcement system • Ease of use of fake driving licenses • Corruption and bribery in driver testing regimes • Lack of professionalism amongst drivers • Poor salaries and motivation • Limited medical care and wellness services • Limited training opportunities 		
<ul style="list-style-type: none"> • Vehicle Standards 		
<ul style="list-style-type: none"> • Weak vehicle inspection regimes • Absence of national vehicle standards • Absence of vehicle inspection services in some member states • Importation of used vehicles • Absence of harmonized vehicle standards • Poor maintenance culture • Presence of non-genuine spare parts in the region • Limited on maintenance services • Presence of inferior fuels • Poor tyres care and maintenance 	<ul style="list-style-type: none"> • self-regulation in terms of vehicle standards • Harmonization of vehicle standards in the region • IEC materials on Tyre care and other vehicle components • RSS to be used as a maintenance centre 	<ul style="list-style-type: none"> • Refer to 4 • Refer to 2 • Refer to 3 • Refer to 1
<ul style="list-style-type: none"> • Weak Traffic law Enforcement 		
<ul style="list-style-type: none"> • Limited training and capacity building of enforcement 	<ul style="list-style-type: none"> • Harmonize traffic regulations throughout the corridor • Promote voluntary compliance of traffic regulations 	<ul style="list-style-type: none"> • Refer to 2 • Refer to 3

Drivers	Proposed Interventions	Proposed Project
<ul style="list-style-type: none"> agencies • Poor salaries and motivation of enforcers • Limited equipment and logistics • Corruption and bribery • Lack of harmonized traffic regulations along the corridor • Low level of awareness amongst the road users 	<ul style="list-style-type: none"> • Implement workplace road safety regulations 	<ul style="list-style-type: none"> • Refer to 4
<ul style="list-style-type: none"> • Low seat belt use 		
<ul style="list-style-type: none"> • Weak enforcement of the seat belt regulations • Lack of harmonized regulations on helmets in the region • Low level of awareness of the use of seat belt • Limited seat belt promotion campaigns along the corridor • Dusty conditions that make seat belt use a hygiene issue • Presence of reasons and excuses of why seat belts should not be used • Unavailability of the seat belts in some vehicles 	<ul style="list-style-type: none"> • Promotion of seat use by IEC materials • Promotion of seat belt media campaigns • Joint media and enforcement campaigns 	<ul style="list-style-type: none"> • Refer to 3 • Refer to 4
<ul style="list-style-type: none"> • Low Helmet use 		
<ul style="list-style-type: none"> • Weak enforcement of the helmets regulations • Low level of awareness of the use of helmets • Limited helmet promotion campaigns along the corridor • Dusty conditions that make 	<ul style="list-style-type: none"> • Promotion of seat use by IEC materials • Promotion of seat belt media campaigns • Joint media and enforcement campaigns 	<ul style="list-style-type: none"> • Refer to 3 • Refer to 4

Drivers	Proposed Interventions	Proposed Project
<ul style="list-style-type: none"> helmet use a hygiene issue • Presence of reasons and excuses of why helmets should not be used (too hot for helmets) • Lack of harmonized laws on helmet use 		
<ul style="list-style-type: none"> • Limited Road signs 		
<ul style="list-style-type: none"> • Vandalism of road signs along the corridor • Road traffic crashes that damage the road signs • Poor maintenance of road signs • Weak laws that protect road infrastructure on the road 	<ul style="list-style-type: none"> • IEC materials to promote the meaning of road signs • IEC materials to promote protection of road signs as an asset for the community • RSS safety and health Charter • Capacity building 	<ul style="list-style-type: none"> • Refer to 3 • Refer to 4
<ul style="list-style-type: none"> • Drink driving 		
<ul style="list-style-type: none"> • Poor attitude about the risk of alcohol and driving • Social Environment along the corridor influences alcohol use • Peer Influence compels drivers to take on alcohol use • Weak enforcement of alcohol and drug abuse laws • Limited availability of breath analysers to assist in enforcement • Presence of cheap alcohol along the corridor • Alcohol as a social and entertainment function 	<ul style="list-style-type: none"> • Disseminate dangers of Drink driving and drug abuse. • Conduct road safety sensitization outreaches using different BCC Approaches • Strengthen the laws on drink driving • Promote self-regulation amongst drivers • Capacity building 	<ul style="list-style-type: none"> • Refer to 3 • Refer to 2 • Refer to 4 •

8.3 Health issues packaging

Table 14 Proposed RSS Health Project Packaging

Drivers	Proposed Interventions	Proposed Project
<p>3. Un protected Sex</p> <ul style="list-style-type: none"> • Availability of Commercial Sex Workers (CSWs). • Alcohol and drug use and abuse. • Idleness at road stops by a sexually active age bracket. • Offer of free accommodation by women at road stops. • Poverty • Ignorance about the dangers of unprotected sex. • Ignorance of one’s HIV status • Inconsistent supply of condoms • Poor salary levels. • Cultural or religious beliefs 	<ul style="list-style-type: none"> • Explicitly exposing the dangers of CSW. • Exposing the dangers of unprotected sex • Ensure rigorous and sustained IEC and behaviour change campaign against HIV infection and spread of the disease. • Use of all media in all possible places – toilets, bathrooms, in restaurants and hotel rooms, on radio, posters in all places and inside the trucks. • Use of role models and live testimonies about the spread of HIV. • IEC/BCC campaigns to break the belief system at RSS level. • Training programmes aimed at combining entertainment and education (edutainment). • Popular games for drivers like Pool, Drafts, Ludo, Card games, football, Table Tennis, Swimming and others. • Peer led initiatives using reformed truckers • Recreation facilities • Continuous education • Risk assessment, counseling and reduction strategies • Campaigns to address stigma among trucker and sex workers • Development of IEC materials focusing on truckers. • Customer care and KP counseling skills training • Strengthen the peer support through training and follow up • Community involvement to support the operations of the RSS and other service delivery points • Outreaches and campaigns along the NC to raise awareness of Health and safety information • Access / review existing work place policies 	<p>1. HIV prevention, care and treatment project</p> <ul style="list-style-type: none"> • Treatment for minor illnesses • HTC, • ARVs, TB • STI/screening and treatment, • Condoms supply and distribution • Advocate and improve the use of condoms for drivers who are separate from their homes for long • And other health issues • Workplace policy on HIV/AIDS <ul style="list-style-type: none"> ○ Advocacy for HIV/AIDS workplace and environment ○ Care for HIV/AIDS victims care at workplace <p>2. Behavioural change and communication project</p> <ul style="list-style-type: none"> • Sexual behaviour change communication (IEC Material development, Peer Education, health education etc.) • IEC materials development and production • Radio programme • Educational outreach programmes • Life-saving caravans • Promotion HIV/AIDS through Trade Union activities • Mass campaigns • Promotion of condom use • Bill boards

Drivers	Proposed Interventions	Proposed Project
	<ul style="list-style-type: none"> • Build capacities of transport companies • Collection and utilization of disease tread data at the service delivery pins along the transport corridor • Streamline monitoring and reporting on data related to truckers and sex workers among service delivery points along the NC • Expand existing RWCs and other service delivery points to offer occupational health services • Work with transport companies to streamline health issues into the work place policies 	
	<ul style="list-style-type: none"> • Improve and expand existing Wellness Centres along the NC. • Partnership building with Wellness Centres. • Involve the local leadership in road safety and health matters along the NC. • Involve the communities along the NC in decisions on road safety and health at RSS level for sustainability purposes. • Map the service delivery points and identify gaps along the NC • Community involvement to support the operations of the RSS and other service delivery points • Outreaches and campaigns along the NC to raise awareness of Health and safety information • Streamline monitoring and reporting on data related to truckers and sex workers among service delivery points along the NC • Expand existing RWCs and other service delivery points to offer occupational health services 	<p>3. Expansion and upgrade of wellness centres Project</p> <ul style="list-style-type: none"> • Equip and rearrange health centres and facilities • Expand wellness centres along the Corridor for provision of comprehensive health package
	<ul style="list-style-type: none"> • 	<p>4. Knowledge Management Project</p> <ul style="list-style-type: none"> • Develop standard indicators and partnerships • Setting up a standard IT monitoring system • Establishing Electronic Data base, Data sharing and

Drivers	Proposed Interventions	Proposed Project
		Reporting <ul style="list-style-type: none"> • Sharing of best practices
	<ul style="list-style-type: none"> • A small poverty alleviation fund for CSWs to promote income generating ventures for CSWs to encourage them to leave the trade. • Skills training for CSWs to equip them with skills for self-supporting lives. • Partnering with community associations to work on alternative livelihoods. • Business skills training. • Carry our further research into the sex trade. • Target well educated young women who are involved in the sex trade 	5. Economic Empowerment and livelihood project <ul style="list-style-type: none"> • income generation amongst the SW • Fund to provide micro finance for drivers, SW and other community members • Create a livelihood fund for SW and drivers Enhance support for HIV/AIDS orphans
	<ul style="list-style-type: none"> • Provide facilities for rest and social amenities. 	<ul style="list-style-type: none"> • Refer to 2
	<ul style="list-style-type: none"> • Equipping health workers to promote and demonstrate use of female condoms. • Skills training to equip drivers with ability to generate additional income. 	<ul style="list-style-type: none"> • Refer to 4
<ul style="list-style-type: none"> • Separation from partners for a long time. 	<ul style="list-style-type: none"> • Organize talks on family related topics at company and RSS • Family events at transport company level • Lobby employers to integrate interventions which encourage family interactions • Internet access at RSSs • Awards to drivers demonstrating commitment to family 	<ul style="list-style-type: none"> • Refer to 3
<ul style="list-style-type: none"> • 14. Inadequate/poor access to HIV/AIDS prevention, basic treatment, support and care services 		
<ul style="list-style-type: none"> • Ignorance of one’s HIV status • Stigma and peer pressure/influence 	<ul style="list-style-type: none"> • Provision of affordable and easily accessible VCT services. • Provision of counselling services at all stopping centres. • Provide self-screen kits for testing HIV for people who can’t 	<ul style="list-style-type: none"> • Refer to 6

Drivers	Proposed Interventions	Proposed Project
<ul style="list-style-type: none"> • Cultural or religious beliefs • Services not user friendly to mobile populations. • Staff not very receptive or friendly to patients. • Limited access/use of condoms along the Northern Corridor • Fear of knowing one’s status. • Inadequate number of Wellness Centres/RSSs along the NC • Ignorance/negative perception about HIV/AIDS • Lack of workplace policies 	<p>go to the laboratory to ensure secret is well kept</p> <ul style="list-style-type: none"> • Exposing the dangers of not knowing one’s status and the importance and value of knowing one’s status. • Provide incentives to those who access health services. • Work with Government health centres as referrals. • Establish mobile/outreach services for mobile populations. • Ensure constant and adequate provision of condoms. • Establishment of distribution points in all RSSs, • Partnership building with Wellness Centres. • Partner with/MoU with existing Wellness Centre Providers along the NC. • Involve the local leadership in road safety and health matters along the NC. • Mobilise the local leadership to prioritize road safety and health issues in their budgets. • Involve the communities along the NC in decisions on road safety and health for sustainability purposes. • Use of role models. • Peer led initiatives using reformed truckers • Campaigns to address stigma among trucker and sex workers • Customer care and KP counseling skills training • Strengthen the peer support through training and follow up • Community involvement to support the operations of the RSS and other service delivery points • Outreaches and campaigns along the NC to raise awareness of Health and safety information • Access / review existing work place policies 	
15. Poverty		
<p>Ñ Low salary levels.</p> <p>Ñ Unsustainable income generating ventures.</p>	<p>Ñ A small poverty alleviation fund for CSWs.</p> <p>Ñ Training in alternative sources of income.</p> <p>Ñ Business skills training especially book keeping.</p>	<p>Ñ Refer to 7</p> <p>Ñ Refer to 6</p>

Drivers	Proposed Interventions	Proposed Project
<ul style="list-style-type: none"> Ñ Lack of business skills among the mobile populations. Ñ Lack of discipline-overspending, lack of proper planning and budgeting. Ñ Availability of quick loans and lending facilities 	<ul style="list-style-type: none"> Ñ Live testimonies and encouragement from successful business entrepreneurs. Ñ Regular Mentoring and follow up by successful business entrepreneurs. Ñ Rigorous and sustained monitoring of loans and beneficiaries Ñ Linkages with Micro Finance Institutions for training and financial support where applicable Ñ Promote saving schemes among the truckers and sex workers 	
15. Irregular supply of Condoms		
<ul style="list-style-type: none"> Ñ Lack of adequate supply centres along the Corridor 	<ul style="list-style-type: none"> Ñ Increased supply centres Ñ Improved ARV supply system – RSS to be ARV supply Centres Ñ Partnership with Government. Ñ Partnership with private sector. Ñ Ensure constant and adequate provision and proper use of condoms. Ñ Introduce/ increase Condom dispensers at strategic locations such as bars, lodges RSSs Ñ Lobby MOH / donors for consistent supply of condoms at the service delivery points along the Northern Corridor Ñ Promote consistent, proper use and disposal of condoms along the Northern Corridor 	<ul style="list-style-type: none"> Ñ Refer to 6 Ñ Refer to 4
16. Inadequate number of wellness centres along the Corridor		

Drivers	Proposed Interventions	Proposed Project
<ul style="list-style-type: none"> Ñ Inadequate funding for the facility. Ñ Low involvement of the local leadership in Road safety and Health matters. Ñ Lack of prioritization of road safety and health issues in local administration and stakeholder budgets. Ñ Poor involvement of the community in road safety and health matters 	<ul style="list-style-type: none"> Ñ Improve and expand existing Wellness Centres along the NC. Ñ Partnership building with Wellness Centres. Ñ Involve the local leadership in road safety and health matters along the NC. Ñ Involve the communities along the NC in decisions on road safety and health at RSS level for sustainability purposes. Ñ Map the service delivery points and identify gaps along the NC Ñ Community involvement to support the operations of the RSS and other service delivery points Ñ Outreaches and campaigns along the NC to raise awareness of Health and safety information Ñ Streamline monitoring and reporting on data related to truckers and sex workers among service delivery points along the NC Ñ Expand existing RWCs and other service delivery points to offer occupational health services 	<ul style="list-style-type: none"> Ñ Refer to 1
17. Risk of infection by communicable diseases like Tuberculosis (TB), skin diseases, malaria, flu and cough among others;		
<ul style="list-style-type: none"> Ñ Loneliness and desire for companionship during the long distance driving. Ñ Ignorance about the transmission of communicable diseases. Ñ Association with infected persons along the routes. Ñ Lack of facilities/gadgets for prevention of infection e.g. mosquito nets, mosquito/insect repellents, masks, gloves, etc. 	<ul style="list-style-type: none"> Ñ Provision of facilities like audio messages that combine entertainment, education, information and mobilisation for behaviour change. Ñ Constant and rigorous IEC on transmission and prevention of infection by communicable diseases. Ñ Provision of laboratory facilities for testing for communicable diseases at RSS level. 	<ul style="list-style-type: none"> Ñ Refer to 4 Ñ Refer to 3 Ñ Refer to 2

Drivers	Proposed Interventions	Proposed Project
18. Risk of skeletal injuries and deformity like injuries of the backbone, collapse of the vertebrae, slipped discs, and spinal fractures among others		
<ul style="list-style-type: none"> Ñ Poor sitting posture in the trucks during the long distance driving. Ñ Poor/inappropriate structure of the truck seat. Ñ Poor seat adjustment. Ñ Poor maintenance of truck seat. Ñ Lack of exercise during the long distances. Ñ Lack of co-drivers in some fleets. Ñ Long distance travelled by the driver. Ñ Ignorance of the need for exercise and rest during the long distance. Ñ Lack of regular check - ups at health centres. Ñ Inaccessible or non-user friendly health services for check-up and follow-up. 	<ul style="list-style-type: none"> Ñ Rigorous and sustained IEC on safe sitting and health practices. Ñ Ensure mandatory compliance to the policy of resting after every four hours of driving. Ñ Ensure regular medical check-ups at health centres. Ñ Equip RSSs to carry out medical check-ups and provide user friendly services to drivers and other mobile populations. Ñ Equipping RSSs with massaging equipment. 	<ul style="list-style-type: none"> Ñ Refer to 4 Ñ Refer to 2 Ñ Refer to 3 Ñ Refer to 1
19. Risk of some psychological illnesses like depression, mental stress or mental breakdown and many others.		
<ul style="list-style-type: none"> Ñ Risk of some psychological illnesses like depression, mental stress or mental breakdown and many others. 	<ul style="list-style-type: none"> Ñ Loneliness, frustration, boredom, and fatigue. Ñ Staying away from the family for a long time without communication. Ñ Monotony of work –travelling along the same route over and over. Ñ Use and abuse of alcohol and drugs. Ñ Poverty Ñ Low motivation. 	<ul style="list-style-type: none"> Ñ Refer to 2 Ñ Refer to 3 Ñ Refer to 4

Drivers	Proposed Interventions	Proposed Project
	<ul style="list-style-type: none"> Ñ Inadequate opportunity for leisure and pleasure. Ñ Inadequate counseling services after testing positive. 	
20. HIV/AIDS related stigmatization and discrimination among mobile populations.		
<ul style="list-style-type: none"> Ñ Low levels of knowledge and information about HIV and AIDS. Ñ Cultural/Religious beliefs. Ñ Peer influence. 	<ul style="list-style-type: none"> Ñ IEC/BCC campaigns. Ñ Counselling services at all RSSs Ñ Mindset training to improve self-esteem. Ñ Physical support for HIV positive mobile populations. Ñ Establish pre-and post-test clubs for mobile populations 	<ul style="list-style-type: none"> Ñ Refer to 3 Ñ Refer to 4 Ñ Refer to 1

Annex 1 Terms of Reference

The Study on Improvement of Road Safety and Health through Roadside Station Services along the Northern Corridor

1. Background

Road safety affects nations economically as well as socially and has become a global concern. On 11th May 2011, the United Nations Decade of Action for Road Safety 2011-2020 was launched in more than 100 countries, with one goal: to prevent five million road traffic deaths globally by 2020. Moving from the Global Plan for the Decade to national action, many countries have taken measures towards improving road safety, either by developing national plans for the Decade, introducing new laws or increasing enforcement of existing laws and legislation, among other concrete actions.

In the Northern Corridor region, road transport is currently handling 95% of the entire cargo traffic, an indication of the important role played by this mode of transport in the economies of the member States. However the road safety situation in the Northern Corridor is alarming due to an increasing number of accidents on the transport corridor. Traffic accidents have become one of the most common causes of death and injury and consume a significant share of East African nations' resources. In addition to loss of human lives and personal sufferings incurred, road accidents are a burden to the community due to costs related to funeral services, medical treatment, repair of vehicle damages, administrative arrangements and of course the long term financial and community effects on families resulting from the loss of a bread winner. Therefore it makes both social and economic sense that measures be taken to reduce accidents and their consequences.

With regard to health considerations, though cross-border trade is vital for economic growth, it triggers increased mobility and long-distance travelling which may lead to increased health risks if these are not adequately mitigated. Since the 1980s, public health experts have identified mobile workers particularly long-distance truck drivers as highly vulnerable to infectious diseases, including HIV/AIDS, tuberculosis (TB) and malaria. These groups of people have also been identified as one of the main conduits of the spread of communicable diseases particularly HIV/AIDS.

Various studies paint a grim picture of the HIV/AIDS prevalence rates among truck drivers and sex workers along the northern transport corridor. A study conducted in Kenya (Job, et al. 1992) found that HIV prevalence rate among truck drivers plying the Mombasa – Nairobi highway stood at 27%. Meanwhile, Bwayo et al. (1991; 1994) reported similar HIV prevalence rates among 970 long-distance truck drivers traveling along the Mombasa - Nairobi highway. In both Kenya and Uganda, studies show that sex workers and their clients account for an estimated 14.1 percent and 10 percent of new HIV infections, respectively. It is estimated that, each year, 3,200 to 4,148 new HIV infections occur along the Mombasa-Kampala section of the Northern Corridor.

The high level of HIV infection along the Northern Corridor is attributed to longer duration of driving, fewer visits per month to spouses and contacts with commercial sex workers. Also many truck drivers develop social networks that in many instances combine as channels to access accommodation and

food. In a study conducted by ILO in 2006, truck drivers reported that it was cheaper to spend the night with a sex worker than pay for a night at a hotel. Morris and Ferguson, 2006 reported that there is an estimated 8,000 sex workers along the Mombasa-Kampala section of the Northern corridor. The number of sexual partners per sex worker in a year was estimated to be 129 along this section of the Northern Corridor. Most of these sex workers are clients of the long distance truck drivers which heightens their risk of HIV infection. This situation has been compounded by the inadequate capacity of the health facilities that serve the affected population, which makes it more difficult for the infected people to receive healthcare.

Based on the above analysis of the status of road safety and health along the Northern Corridor, TTCA-NC has decided to include in the RSS Programme a component that will address road safety and health issues in and around the roadside stations. TTCA-NC has decided to partner with North Star Alliance owing to the latter's experience in establishing Wellness Centres along the Northern Corridor. North Star Alliance is an NGO that operates 14 Wellness Centres in Kenya and Uganda, six of which are between Mombasa and Malaba. In order to avoid duplicating efforts in the region, TTCA-NC is also keen to collaborate and coordinate work with initiatives such as the Africa Road Safety Corridor Initiative (ARSCI) being implemented by the World Bank in partnership with Total. The ARSCI has supported the establishment of Safe Way Right Way (SWRW), a Kenya-based NGO whose aim is to promote road safety along the Northern Corridor. ARSCI plans to support establishment of similar NGOs in other Northern Corridor countries. This arrangement was agreed upon in a meeting between these organisations and TMEA, which was held at the latter's office on 16th May 2012.

2. Objective

The purpose of this study is to design the road safety and health component of the RSS Programme. This particular Programme component will seek to design interventions aimed at nurturing the right attitude and behaviour among Northern Corridor road users and communities with regard to road safety particularly around roadside stations. Other road safety interventions will be selectively targeted based on their potential in supporting improved safety and health around RSSs. On the health sub-component, the interventions to be designed will focus on mitigating the spread of HIV/AIDS and other communicable diseases and alleviating their socio-economic impact on the lives of people who work and live along the northern transport corridor.

The implementation of the Road Safety and health campaign is expected to lead to improved safety and health for crew and long distance passengers (particularly women, children, and elderly). Also it is expected to lead to better health and safety of the communities living along the Northern Corridor. The study will be implemented by the TTCA-NC with technical assistance from TMEA in partnership with North Star Alliance (an NGO operating wellness Centres for professional drivers along the Northern Corridor) and in collaboration with other similar initiatives such as the Safe Way Right Way non-profit organisation being jointly supported by the World Bank and Total.

3. Recipient

The recipients of the consultancy services will be Trade Mark East Africa and its partners EAC and TTCA-NC as well as their member states. Other key stakeholders, including North Star Alliance and SWRW, are expected to be involved and to benefit from this Programme.

4. Scope or Deliverables

The tasks to be carried out by the consultant under this study will include but not limited to the following:

1. Review the relevant literature and ongoing initiatives in East Africa (including work by North Star and SWRW) as well as best practices from other parts of the world in areas related to road safety and the spread of HIV/AIDS and other communicable diseases along trade corridors.

2. Undertake an in-depth analysis of existing traffic, road safety and health conditions including the mapping of key actors (their scope and competencies) around the sites that will host RSSs along the NC and identify key issues and needs;

3. Identify lessons, good practices and intervention gaps to take into account the design of the road safety and health Programme. Highlight potential areas of partnership or collaboration with other initiatives.

4. Based on the analysis under i, ii and iii, design a road safety education and awareness campaign that would improve road safety around RSSs along the Northern Corridor.

The aim of the campaign will be to:

- Motivate and spur attitude and behaviour change among road users (both drivers and pedestrian) and community members by raising awareness of the gravity of the road safety situation (know that it is serious) and calling for action (stop reckless behaviour)
- Generate and disseminate information on ways to prevent or manage road accidents as well as compliance/enforcement (e.g. through traveller information kits, media campaign, online information portal, etc.)

In addition to the main TMEA partners (TTCA-NC, North Star Alliance), the campaign should be developed with the various stakeholders to enhance buy-in and will have to involve in its implementation the enforcement agencies, local authorities, community members, business community, civil society sectors, schools and the media. The design and implementation of the campaign should provide for measurement of its outputs and impact.

- Identify other road safety interventions that at the minimum will need to be implemented to ensure successful implementation of the RSS Programme. Such interventions may target areas such as traffic rules enforcement, post-crash emergency services, information gathering and analysis, road signage and infrastructure improvements around RSSs as well as related capacity-building.

- Based on the analysis under i, ii and iii, design the health sub-component of this Programme focusing on preventing the spread of HIV/AIDS and other communicable diseases among road users and communities along the NC. The Programme will use the RSSs and/or wellness centres as platforms for delivering awareness, information, counselling, testing, treatment and other services.
- Package the interventions under iv, v and vi into a rolling two-year Programme of activities with cost estimates and implementation schedule. The Programme will clearly indicate the areas and modalities of partnership with North Star alliance and collaboration with SWRW and any other key initiative that may be identified.

The consultant will be required to submit an inception report at the end of the first week after mobilisation. He/She will produce an interim report once the tasks under i, ii and iii have been completed and will present it to a stakeholders' validation workshop. At the final stage, the consultant will produce a draft report presenting key outputs from all the above tasks and present it to a stakeholders' validation workshop. Based on comments received from this workshop and from TMEA, he/she will produce the final report with the Programme document as an annex. TMEA will bear all costs directly associated with the organisation of these two workshops.

5. Methodology

The consultant will be required to develop a detailed methodology outlining each process to demonstrate how the study will be conducted. This will include analytical tools which will be used and individuals/agencies which will be contacted to derive relevant information. The consultant will be required to apply a partnership approach to road safety and health improvement in a corridor environment building upon existing road safety and health initiatives, management structures and local practices. He/She will also be expected to carry out extensive stakeholder consultations, field observations, reviews of relevant documentation, and analysis of traffic, road safety and health data.

6. Reporting

The proposed duration for the assignment is sixteen (16) Calendar weeks. It is expected that the work will commence by 29th October 2013. The project deliverables will have to be approved at each stage by TMEA and TTCA-NC to effect sign off of the specific deliverable.

7. Reporting

Report title:	Submitted to:	Date of submission :
Inception report	TMEA / TTCA-NC	As set in the study's timeframe
Interim report	TMEA / TTCA-NC	As set in the study's timeframe
Draft final	TMEA / TTCA-NC	As set in the study's timeframe
Final report	TMEA / TTCA-NC	As set in the study's timeframe

8. Timeframe

Mobilization: 02.12.2013

Inception report: 12.12.2013

Interim report: 16.01.2014

First Stakeholders' workshop 23.01.2013

Draft report: 24.02.2014

Second Stakeholders' workshop 28.02.2014

Draft final report 14.03.2014

Final Report: 30.03.2014

9. Coordination

The study will jointly be coordinated by TTCA-NC and TMEA. The consultant will report to the Director Trade Facilitation/Transport at TMEA, and the Head of Programme Investment Promotion at TTCA-NC. Contract management issues will be handled by the procurement unit.

10. Qualifications

The assignment will be output based. The consultant will be expected to mobilize all the resource persons required to successfully and timely complete the work. The proposed team will have to demonstrate hands on experience in carrying out similar assignments. The consultants' team will at the minimum include the following skills and competencies.

- Team leader & Road safety specialist conversant with transport logistics in a corridor environment;
- Public health specialist with experience in addressing issues related to HIV/AIDS and other communicable diseases in a corridor environment
- Communication and media specialist

The key experts should have demonstrable excellent information and data collection, analysis and reporting skills. At least a university degree in a relevant field will be required for each of the core resource-persons. They should be fluent in spoken and written English, the knowledge of French among any of the consultants being an added advantage.

Annex 2 Key documents Reviewed

No	
1.	Annual Insurance Market Report, 2011: Insurance Regulatory Authority of Uganda
2.	Annual Police Traffic Report, 2012, Uganda Police Force.
3.	Annual Sector Performance Report F/Y 2012/13 Ministry of Works and Transport September 2013
4.	Bliss and Breen, Building Frameworks for Land Transport Safety Authority, 2000.
5.	Breen et al Guidelines for mainstreaming road safety in Road Trade Transport Corridors report, SSATP, working paper 97, 2013
6.	Bribery as a non-Tariff Barrier to Trade: A case study of East African Trade Corridors. Transparency International Kenya
7.	Burundi Country Assistance Strategy, http://www.wds.worldbank.org/external/default/
8.	Burundi Third Structural Adjustment Programme http://www.wds.worldbank.org/external/default/WDSContentServer
9.	Corridor Diagnostic Study of the Northern and Central Corridors of East Africa, Nathan Associates Inc. Arlington, Virginia, USA Uganda is an example: see, Road Safety Policy, Ministry of Works and Transport, Uganda 2012
10.	Corsia consultants, Road Safety Capacity Review, Uganda, Ministry of Works and Transport 2010
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Annex 3 Officials met

Stakeholders Organisation	Name
Trade Mark East Africa	Silas Kanamugire, Director, Trade Facilitation
	Mary Odongo Programme Officer, Transport and Economic Corridor
Safe Way Right Way	Joseph F. Adewa, Chief Executive
	Mathew Munyao, Director, SWRW
	Barbara Mwanje: Consultant, SWRW, Uganda
	Vincent Wandera, Programme Officer
North Star Alliance	Luke Disney, Executive Director,
	Eva Mwai, Regional Director, East Africa
	Silas Inoti, Head of Finance and Administration
	Ngunga Ngutha, Programme Manager
	Franusah Mwikali, Clinician
	Josphat Kituku, Laboratory Technician
	Erustus Malonza, VCT Provider
John Mochama	
Athi River Sub County	Robert Kilonzo, DASIO/ District Medical Officer
Northern Corridor Transit Transport Coordination Authority	Lievin Chirhalwirwa Mwilarle, Head of Programmes, Infrastructure Development and Management
	Fred Tumwebaze Hunter, Head of Investment Programmes
	Venant Ntahonsigaye, Road Side Station Study Coordinator
	Rachel Nganwa: NC TTCA, Assistant Program Officer, Infrastructure Development and Management
	Chezy Kanionga: NC TTCA Assistant Program Officer, Private Sector Investment
Regional Lorry Drivers and Transporters Association	Kinene Byron, Chairman
Uganda Commercial Truckers Owners Association	Paul Kaala
Uganda Freight Forwarders Association	Agnes Wadda Programme Officer
	Ann Kibirige Training coordinator,
Naluwerere Wellness and Information Centre	Mr. Moses Wakabi, Site Coordinator
Vivo Energy (Shell) Uganda	Mr. Wandera

	Mr. Mike, in Charge Busia
Ministry of Works and Transport	Nathan Tumushabe
Ministry of Health, Uganda	Dr. Musinguzi Joshua, ACP Programme Manager
	Mr. Muyonga Michael, Behavioural Scientist
Aids Information Centre, Uganda	Dr Abdallah Nkoyooyo, Director for Programmes and Planning
	Betty Nabukeera, Prevention Officer
Uganda AIDS Commission, Uganda	Dr. David Kihumuro Apuuli, Director General
	Lillian Tatwebwa, Programme Manager
East African Breweries Limited/National Road Safety Trust	Brenda Mbathi
Ministry of Lands, Housing and Urban Development	Eng. Hilary Nyaanga
Ministry of Transport and Infrastructure	Martin Eshiwani
Total Kenya/NRST	Ada Eze Managing Director
TYPESA Engineers	Francisco Cordeiro: Resident Engineer
	Douglas Odhiambo: Expert in Social and Environmental Matters
Kenha	Eng. Warui Gichuri
Uganda National Roads Authority	Eng. David Luyimbazi
	Eng. Alfred Ojik
Rwanda Transport Development Authority	Peter Mugabo
	Vergus Hadelin
	Patrick Muleme
Office des Routes, Division Technique Goma, D R Congo	Kofina Pangi Yanes
Office des Route, Burundi	Director General
	Eng. Busha
SEP/CNLS/Burundi	Ndayikengurukiye Sylvain Chargé de la Communication et des Relations Publiques
Association des Transporteurs du Burundi	Chairman
Uganda Transport Agencies Limited	Denis Ssengonzi

Annex 4 Report of the Validation workshop

REPORT OF THE Stakeholders' Workshop FOR THE VALIDATION OF THE DRAFT FINAL REPORT OF THE STUDY on Road SAFETY AND HEALTH along the Northern Corridor Sheraton Hotel, Kampala, Uganda 29th August 2014

A. Introduction

1. The Northern Corridor Transit and Transport Coordination Authority (NCTTCA), through the financial support from Trade Mark East Africa (TMEA), organized a Stakeholders' meeting on Road Safety and Health along the Northern Corridor on 29th August 2014 in Kampala, Uganda. The purpose of the meeting was to validate the draft final report (DFR) on RSH study, whose objective is to design a Road Safety and Health program to be operated within the Roadside Stations (RSS) along the northern corridor.
2. The meeting was attended by delegates from Governments' Ministries, ; Road Authorities Traffic Police; Transport Associations Shippers Councils; Transport & Safety Agencies; Clearing and Forwarding Associations; Long distance truck drivers unions; North Star Alliance; SWRW. Also were in attendance representatives of regional organizations such as ICGLR; GLIA; CCTTFA; TMEA, NCTTCA. The Consultant (ITSL) for the study presented the report. The list of participants is attached (Annex)

B. OPENING REMARKS

3. The TMEA representative Mr. Silas KANAMUGIRE welcomed the guests and thanked them for attending the workshop despite their tight activities' schedule. He gave a brief on the progress so far made in the execution of the Road Safety and Health study is a component of RSS whose final report is completed TMEA funding to the NCTTCA. He highlighted some of the benefits in implementing the RSS program and thanked all partners and stakeholders who facilitated the execution of the study.
4. In his remarks, the NCTTCA Executive Secretary, Mr. Donat BAGULA welcomed the delegates and appreciated, through the Guest of Honour, the support from the Uganda Government for hosting the workshop. He indicated that the RSS program and its component comprising Road Safety and Health is one of the main program under the NCTTCA Strategic Plan. The Executive Secretary stressed the high level of road crashes and VIH/ AIDS cases in the region in general and along the Northern Corridor in particular and invited wished the meeting to come up with an action plan on implementation of recommendations to reduce them. He also informed the meeting on other initiatives by NCTTCA in line with RSS program such as the Project on Northern Corridor business information management.

5. The Guest of Honour and representative of the Permanent Secretary, Ministry of Works and Transport, Uganda, in his opening remarks conveyed apologies from the PS who could not attend the meeting due to other important commitments. He welcomed stakeholders and thanked NCTTCA and TMEA for organizing the meeting in Kampala. He ensured the meeting of the support from the Uganda Government to the RSS program implementation. Eng. Denis SABIITI reminded the high importance of the meeting as road safety and VIH/AIDS were critical issues affecting the transport along the Northern Corridor and urged the stakeholders to come up with strong recommendations. He invited them to visit Kampala, the Pearl of Africa, before their return to their countries. He then declared the workshop open.

C. CONSIDERATION OF THE DRAFT FINAL REPORT (DFR)

6. The Consultant ITSL presented the report. He recalled the process through which they went on carrying out the road safety and health study. The study was implemented under the guidance of Project Implementation Team constituted of representatives of NCTTCA, TMEA, North Star Alliance and Safe Way Right Way.

D. Problem statement

7. The number of accidents in the member States is too high. Similarly VIH/AIDS and other STD is equally high a big threat. The Northern Corridor route is taking a big share of these threats. The table below shows the level of fatal accidents by country.



	Country	Fatalities
1	Burundi	275
2	DRC	309
3	Kenya	3,179
4	Rwanda	308
5	Uganda	2,937
6	South Sudan	96
		7,104

Fatalities due to trucks' accidents along the Northern Corridor (2013 figures), plus value of damaged/lost cargo

E. Presentation of the report

8. The following presentations were made by the Consultant:
 - Road Safety and Health situation along the Northern Corridor;
 - Gaps and challenges identified in the Road Safety and Health.
 - Proposed interventions to improve Road Safety and Health (HIV/AIDS)

- Proposed Safety and Health Programme

9. The Consultant described the current situation of Road Safety as poor and unacceptable within the Northern Corridor region. He cited human factors, infrastructure, equipment or vehicle and environment as the main factors contributing to crashes along the corridor.
10. Then the Consultant identified gaps and challenges in road safety as well as well as in health along the Northern Corridor. He highlighted best practices along the Northern Corridor in both road safety and HIV/AIDS care.
11. To improve Road Safety and Health (HIV/AIDS, the consultant proposed interventions based on the lessons learned. He then presented a program as follows:

F. Proposed RSH programme

- **Key projects of safety and health programme**

12. Key activities are highlighted for the programme. These include the following projects:

1. RSS Infrastructure Development Project
2. Behavioural change communication
3. RSS Emergency Response Project
4. Expansion and upgrade of wellness centres
5. Strengthening policies on Road safety and HIV/health issues
6. Knowledge Management, information management Project
7. Economic Empowerment and livelihood project
8. HIV prevention, care and treatment project

2. Project costs

13. A cost estimate of the 2-year safety and health programme has been calculated on the assumption that within Year 1, six wellness centres will be established and fully operational and year 2 additional 12 centres will be set up across the corridor.
14. The programme estimates the cost to be **US\$ 13,563,912 million**. In the first year US\$ 4,733,304 million will be required and US\$ 8,830,608 million in the second year. The detail of the costs is as follows: Programme management \$1,511,982; Establishment and upgrade of wellness centres \$2,430,000; Harmonization and standardization of services project \$315,858; Road safety Behavioural change and communication \$ 1,418,580; Sexual Behavioural change and communication \$1,418,580; Emergency response\$ 1,944,000; Strengthening of Workplace policies \$184,716; HIV prevention, care and treatment project \$3,952,782 and Economic empowerment project \$387,414.

3. Mapping of wellness centres at Road Side Station locations

15. The main RSS study has made recommendations suitable for the development of Road Side Stations across the Northern Corridor. However, not all RSS shall have wellness centres. The recommended wellness centres to fast track include:

Burundi : Bugarama and Kayanza
DRC : Goma, Beni, Bunagana and Bukavu

Kenya	: Salgaa, Sultan Hamud, Jua Kali, Awasi and Miritini
Rwanda	: Ruhango, Nyacyonga, Rugende and Ryabega
Uganda	: Packwach, Idudi, Mbiko, Lyantonde, Migeera and Kabale in Uganda and
South Sudan	: Nimule and Nasitu.

4. Proposed Institutional setting for of the RSS wellness centres Management

16. *At regional level:* A regional steering committee comprising of NCTTA, SWRW, NSA and selected regional agencies to coordinate the RSS activities at regional level. This committee will be coordinating with the Main RSS Committee which oversees the infrastructure development as suggested in the TYPASA report.
17. *At the national level:* A national taskforce to oversee the implementation of RSS roll out is established.
18. *At local level:* Services at RSS management should be entrusted to either the private sector or NGO sector as shown in the region by agencies providing wellness services. National Taskforce should focus on oversight, monitoring and guidance function rather than actual day to day implementation.

5. Sustainability of the Programme

19. In order to ensure the sustainability of the programme the following are the suggestions:
 - Since some RSS have been found to be self-sustainable and given the fact that RSH will be an integral part of RSS, the sustainability is assured, at least from this RSH category;
 - Consider self- paying schemes for services provided at RSS. These include laboratory services and Defensive driving courses among others;
 - Creation of safety and health fund that could be used to pool funds for the programme;
 - Mainstream RSS wellness programmes into Government budgets;
 - Develop proposals for funding from development partners.

6. Implementation Strategy

20. This report has outlined the implementation strategy for the programme. The strategy covers oversight and management arrangements, involving/participation of stakeholders into the programme.

G. KEY COMMENTS AND INPUTS FROM STAKEHOLDERS:

21. Below is a summary of keys comments made by participants on the presentations made by the consultant respectively on Road Safety and Health situation along the Northern Corridor; Gaps and challenges identified in the Road Safety and Health and Proposed interventions to improve Road Safety and Health (HIV/AIDS);
 - i. Advocate and improve use of condoms for drivers with long separation from the family

- ii. Based on Canadian experience, transporters to appoint two (2) drivers when possible : one to drive from Point A to Point B and the other one to drive from Point B up to the end of the journey
- iii. Provide self-screen kits for testing HIV for people who can't go to the laboratory to ensure secret is well kept
- iv. Local administration to be responsible for the road signs to avoid vandalism
- v. Determine Cost for every item (rooms, laboratory, truck services, etc. to encourage truckers for using the facilities
- vi. New disease of Ebola to be taken into account in the Consultant's study. RSS should not be an area for spreading Ebola.
- vii. Innovate in constructing type of bumps that can help to avoid accidents
- viii. Mandatory break after 4 hours driving
- ix. Address socio-economic issues that promote prostitution even among well-educated girls
- x. Consultant to take note that in Burundi there is only one Ministry in charge of Health (Not Ministry of Health and Ministry of AIDS)
- xi. Use of ICT to share data. e.g. High risk driver
- xii. Design hand books for drivers; this should include more lessons on safety, time to spend in the yard, time of rest, time to leave, etc.
- xiii. Trucks drivers' sensitization to be done not only through workshops but also by using CDs, radio...
- xiv. Drivers of trucks must have been drivers of small cars showing respect, morality, courtesy...
- xv. Involve users of the Northern Corridor such as transporters and truck drivers unions in implementing the project.

H. WAY FORWARD FOR THE STUDY ON ROAD SAFETY AND HEALTH (RSH)

1. Stakeholders who wish to provide further inputs are invited to send them to the NC TTCA and TMEA no later than Friday 05th August 2014;
2. ITSL to address the comments raised and submit the Final Report to NC TTCA and TMEA not later than 12th August 2014;
3. NC TTCA to fast track, with member states, the setting up of required institutional structures at national level (National Task Forces);
4. The National Task Forces to define their work plans;
5. NCTTCA and TMEA to prepare the investors' conference for RSS/RSH programme.

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Stakeholders Workshop for the Validation of Road Safety & Health Study

Sheraton Kampala Hotel, Uganda - 29th August, 2014

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