## SHORT TERM IMPROVEMENT PLAN
### 4. BURKINA FASO

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<td>Ludo Kluppels</td>
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<tr>
<td>ASRA</td>
<td>Association pour la Sécurité Routière en Afrique</td>
</tr>
<tr>
<td>BNSP</td>
<td>Brigade Nationale des Sapeurs-pompiers</td>
</tr>
<tr>
<td>CCVA</td>
<td>Centre de Contrôle des Véhicules Automobiles</td>
</tr>
<tr>
<td>CFTRA</td>
<td>Centre de Formation en Transport et Activités Auxiliaires</td>
</tr>
<tr>
<td>CIFTER</td>
<td>Crawford Ishikura Factor for Evaluating Roles</td>
</tr>
<tr>
<td>CNSR</td>
<td>Conseil National de la Sécurité Routière</td>
</tr>
<tr>
<td>CREAT</td>
<td>Cercle de Réflexion, d’Expertise et d’Actions en Transport et logistique</td>
</tr>
<tr>
<td>DGER</td>
<td>Direction Générale de l’Entretien Routier</td>
</tr>
<tr>
<td>DGIR</td>
<td>Direction Générale des Infrastructures Routières</td>
</tr>
<tr>
<td>DGMU</td>
<td>Direction Générale de la Mobilité Urbaine</td>
</tr>
<tr>
<td>DGNETC</td>
<td>Direction Générale de la Normalisation, des Etudes Techniques et du Contrôle</td>
</tr>
<tr>
<td>DGPC</td>
<td>Direction Générale de la Promotion Civique</td>
</tr>
<tr>
<td>DGPM</td>
<td>Direction Générale de la Police Municipale</td>
</tr>
<tr>
<td>DGPN</td>
<td>Direction Générale de la Police Nationale</td>
</tr>
<tr>
<td>DGPR</td>
<td>Direction Générale des Pistes Rurales</td>
</tr>
<tr>
<td>DGTTM</td>
<td>Direction Générale des Transports Terrestres et Maritimes</td>
</tr>
<tr>
<td>DOV</td>
<td>Direction de l’Observatoire de la Ville</td>
</tr>
<tr>
<td>DSTM</td>
<td>Direction des Services Techniques Municipaux</td>
</tr>
<tr>
<td>DTR</td>
<td>Direction des Travaux Routiers</td>
</tr>
<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>EFP-TP</td>
<td>Ecole de Formation et de Perfectionnement des Travaux Publics</td>
</tr>
<tr>
<td>ETSC</td>
<td>European Transport Safety Council</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FASER</td>
<td>Forum Africain de la Sécurité Routière</td>
</tr>
<tr>
<td>FAPSER</td>
<td>Fédération des Associations pour la Promotion de la Sécurité Routière</td>
</tr>
<tr>
<td>FSR</td>
<td>Fonds Spécial Routier</td>
</tr>
<tr>
<td>HI</td>
<td>Humanity &amp; Inclusion</td>
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<tr>
<td>ICI-santé</td>
<td>Initiatives Conseils International Santé</td>
</tr>
<tr>
<td>KPI</td>
<td>Key Performance Indicator</td>
</tr>
<tr>
<td>KRA</td>
<td>Key Result Areas</td>
</tr>
<tr>
<td>ONASER</td>
<td>Office Nationale de la Sécurité Routière</td>
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<tr>
<td>OSS</td>
<td>Ouagadougou Safe System</td>
</tr>
<tr>
<td>PMUSR</td>
<td>Programme Mobilité Urbaine et Sécurité Routière</td>
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<tr>
<td>PTW</td>
<td>Powered Two Wheeler (include power tricycles)</td>
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<tr>
<td>RJCPSER</td>
<td>Réseau des Journalistes et Communicateurs pour la Promotion de la Sécurité Routière</td>
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<tr>
<td>RS</td>
<td>Road Safety</td>
</tr>
<tr>
<td>RSMCR</td>
<td>Road safety Management Capacity Review</td>
</tr>
<tr>
<td>SMART</td>
<td>Specific Measurable, Achievable, realistic and Time bound</td>
</tr>
<tr>
<td>SPI</td>
<td>Safety Performance Indicator</td>
</tr>
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<td>ToR</td>
<td>Terms of Reference</td>
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1. Introduction

1.1 Road Safety and Traffic Management Capacity Reviews in SaferAfrica (WP5)

The overall objectives of a road safety and traffic management capacity review, based on engagement with senior management of the key agencies, are to:

- systematically assess the state of road safety and traffic management
- summarise the strengths and weaknesses of institutional capacities to significantly improve road safety results
- reach consensus amongst the key agencies about next steps, and sustainable activities
- fundamentally improve road safety and traffic management by proposing a long term headline Safe System strategy and a project concept for activity to launch it.

Given the scope of SaferAfrica generally and WP5 specifically, it is not feasible to involve all African countries in all Regional Economic Communities and especially not possible to conduct detailed capacity reviews in all of the countries on the continent. For the purpose of the SaferAfrica project five countries representing the main geographic areas of Africa have been selected to be reviewed on the basis of the Road Safety Management Capacity Review (RSMCR) assessment framework outlined in the World Bank guidelines (Bliss & Breen, 2009).

The countries selected are:
1. Cameroon
2. South Africa
3. Kenya
4. Burkina Faso
5. Tunisia

1.2 Country specific enabling objectives

The primary objectives are reformulated into the following enabling objectives for each of the five selected African countries:

- To analyse the efficacy of current road safety management systems.
- To assess road safety management and, where necessary, to propose suggestions for improvements relating to the institutional management framework (including monitoring and evaluation systems, intervention strategies and results expressed as goals and targets).
- To develop and propose relevant legislative and organisational reforms in order to systematically improve road safety management in general and to prevent and reduce deaths and serious injuries in road traffic crashes.
- To develop and identify key performance indicators (KPI)\(^1\) and key result areas (KRA) and to incorporate these as part of a (revised) road safety strategy and action plan/project.
- To develop and incorporate Safety Performance Indicators (SPI's) as part of the road safety goal setting and monitoring process.

WP5 of the SaferAfrica project involves capacity reviews of road safety and traffic management at the country level. The aim is to systematically assess the state of traffic and road safety management in the selected five countries and propose remedial and sustainable programs and actions to fundamentally improve traffic and road safety management in those countries. The WP5 outputs will contribute to fine

---

1. KPI and KRA are related to organisational targets (internal) and relevant to for example. Lead Agencies and service delivery bodies.
tuning the activities of other WPs, particularly WP4 and WP6 (see http://saferafrica.eu/). To achieve this, 5 tasks are carried out namely;

- Task 5.1: Scoping of road safety actions and legislation
- Task 5.2: Road safety and traffic management capacity reviews
- Task 5.3: Specification and selection of Safe System Approach projects (subject of this report)
- Task 5.4: Studies on National Road Safety Agencies
- Task 5.5: Studies on the standardisation of vehicles and road infrastructures

1.3 Outline of task 5.3

After conducting the capacity review, the World Bank guidelines (Bliss & Breen, 2009) recommend the preparation and implementation of Safe System projects, designed to launch the identified long-term country investment strategy.

In this Task 5.3 detailed short-term improvement plans were prepared in the form of Terms of Reference (ToR) for a number of projects per selected country. These projects are remedial in nature, they address high-priority projects and are able to demonstrate high potential gains within current administrative and legislative frameworks (i.e. only the preparation of projects requiring longer term amendments to standards, legislations and regulations is considered in these ToR). In addition, Task 5.3 will indicate which immediate enabling actions will need to be undertaken in order to overcome legislative, regulatory, organisational, institutional and other barriers that may prevent measures or actions from being implemented. These will be further developed in Tasks 5.4 and 5.5.

Task 5.3 is structured in the following activities:

- Activity 5.3a Prioritise and develop(small) improvement projects in selected countries
- Activity 5.3b Prepare terms of reference (remedial projects)
- Activity 5.3c Identify legislative; regulatory; organisational; financial; institutional barriers
- Activity 5.3d Develop short to medium term strategy (input to Tasks 5.4 and 5.5) to overcome barriers

1.4 Objectives and methodology

The focus of this task is the identification and preparation of projects belonging to the Safe System road safety project recommended in the Capacity Review of Burkina Faso (Cardoso, et al. 2018). These projects components should be selected with the aim of accelerating the process from a weak to a high capacity road safety management system and taking into account the easiness of implementation.

1.4.1 Safe System approach

What is a Safe System road safety project? According to Bliss & Breen (2009), Safe System projects are stand-alone, multisectoral initiatives targeting high-risk corridors and areas, with outcomes large enough to be reliably measured. The project should address three broad components, namely: 1) institutional capacity strengthening priorities, 2) targeted interventions in high-risk corridors and areas, and 3) policy reforms where weaknesses have been identified. Moreover, it is recommended to consider within the project also safety performance monitoring and evaluation activities.

The development and implementation of a Safe System project is conducted through eight distinctive steps (Bliss & Breen, 2009):

1. Set project objectives
2. Determine scale of project investment
3. Identify project partnerships
4. Specify project components
5. Confirm project management arrangements
6. Specify project monitoring and evaluation procedures
7. Prepare detailed project design
8. Highlight project implementation priorities
1.4.2  Assessment methodology

Based on the findings of the capacity review a number of project components have been identified each detailed with related technical assistance services. SaferAfrica is going to identify a number of high priority technical assistance services to be selected according to criteria such as ease of implementation costs and time to implementation.

To assess the feasibility of further developing these project components and their related enabling projects, a number of approaches, not strictly related to road safety, were explored to look for further criteria that could be included in the transferability tool that was developed in WP7. Various of these approaches have a different scope, the most frequent one is project complexity used to understand the difficulty of managing a specific project. One of these is a tool called CIFTER (Crawford-Ishikura Factor Table for Evaluating Roles) which identifies seven factors that affect specifically the management complexity of a project (Table 1). Each factor is rated from (1) to (4) using a point scale which places a quantitative value to a qualitative metric. These points are then totalled to produce a management complexity rating for the project (GAPPS, 2007). The total number of points across the seven factors determine whether a project is Global level 1 or 2 or neither and where:

- 11 points or less: projects cannot be used to provide evidence for a GAPPS compliant performance assessment.
- 12 points or more: projects can be used to provide evidence for a GAPPS compliant performance assessment at Global Level 1.
- 19 points or more: projects can be used to provide evidence for a GAPPS compliant performance assessment at Global Level 2.

GAPPS assesses individual competences necessary for effective project management. The higher the score and global level the more competences are required from the project manager or management team. It stands to reason that projects with very high CIFTER scores will require exceptionally talented managers to successfully bring these projects to the desired conclusion.

Among the 7 criteria, criteria 1 (Stability of the project context), 5 (Strategic importance of the project to the organization or organizations involved), 6 (Stakeholder cohesion regarding the characteristics of the product of the project) and 7 (Number and variety of interfaces between the project and other organisational entities) might be considered as additional criteria in the Institution component.

Table 1: CIFTER Assessment matrix (GAPPS, 2007)

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<tr>
<th></th>
<th>Very High (1)</th>
<th>High (2)</th>
<th>Moderate (3)</th>
<th>Low (4)</th>
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<td>1. Stability of the overall project context</td>
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<tr>
<td>2. Number of distinct disciplines, methods, or approaches involved in performing the project</td>
<td>Low (1)</td>
<td>Moderate (2)</td>
<td>High (3)</td>
<td>Very High (4)</td>
</tr>
<tr>
<td>3. Magnitude of legal, social, or environmental implications from performing the project</td>
<td>Low (1)</td>
<td>Moderate (2)</td>
<td>High (3)</td>
<td>Very High (4)</td>
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<td>4. Overall expected financial impact (positive or negative) on the project’s stakeholders</td>
<td>Low (1)</td>
<td>Moderate (2)</td>
<td>High (3)</td>
<td>Very High (4)</td>
</tr>
<tr>
<td>5. Strategic importance of the project to the organization or organizations involved</td>
<td>Very Low (1)</td>
<td>Low (2)</td>
<td>Moderate (3)</td>
<td>High (4)</td>
</tr>
<tr>
<td>6. Stakeholder cohesion regarding the characteristics of the product of the project</td>
<td>High (1)</td>
<td>Moderate (2)</td>
<td>Low (3)</td>
<td>Very Low (4)</td>
</tr>
<tr>
<td>7. Number and variety of interfaces between the project and other organizational entities</td>
<td>Low (1)</td>
<td>Moderate (2)</td>
<td>High (3)</td>
<td>High (4)</td>
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1.4.3 Terms of references preparation

For each selected project a terms of reference is compiled comprising SMART (Specific; Measurable; Achievable; Realistic and Time bound) project objectives and criteria. Each terms of reference includes the following sections (Bliss and Breen, 2009):

- The objectives of the required technical assistance services
- The outputs of the required technical assistance service
- The scheduling of the required technical assistance services
- Professional skills and experience required

A sample terms of reference for the procurement of technical assistance services to support the preparation and implementation of Safe System projects is presented in figure 1 and figure 2 as an example (Breen et al., 2013).

Terms of reference N°2: Review of corridor road safety priorities

<table>
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<th>[STEP 2, TASKS 2.1 &amp; 2.2, STEP 3, TASK 3.1]</th>
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<td>Background</td>
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<tr>
<td>Provide description of proposed project.</td>
<td></td>
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<tr>
<td>Objectives</td>
<td></td>
</tr>
<tr>
<td>The objectives of the required technical assistance services are as follows:</td>
<td></td>
</tr>
<tr>
<td>• Determine the desired regional and country road safety performance in the project.</td>
<td></td>
</tr>
<tr>
<td>• Identify regional and country road safety priorities in the project.</td>
<td></td>
</tr>
<tr>
<td>Outputs</td>
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</tr>
<tr>
<td>The outputs of the required technical assistance services are as follows:</td>
<td></td>
</tr>
<tr>
<td>1 Determine desired project RTRC road safety performance:</td>
<td></td>
</tr>
<tr>
<td>1.1 Identification of current road safety performance goals for the project RTRC at the regional and country levels.</td>
<td></td>
</tr>
<tr>
<td>1.2 Establishment of regional and country consensus on desired road safety performance in the project RTRC over the coming decade.</td>
<td></td>
</tr>
<tr>
<td>2 Identify project RTRC road safety priorities:</td>
<td></td>
</tr>
<tr>
<td>2.1 Assessment of country and regional fatal and serious injury data prioritized by crash vehicle type, crash victims, factors contributing to crashes, spatial concentrations and country differences in fatality and injury patterns, and any other relevant safety performance data.</td>
<td></td>
</tr>
<tr>
<td>2.2 Establishment of regional and country consensus on project RTRC road safety priorities on the basis of available evidence.</td>
<td></td>
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</table>

Figure 1: Example of terms of reference for a safe system project (1/2)
1.5 Structure of the deliverable

Besides this first introduction chapter, the remainder of the document is built up of 3 substantive chapters, followed by a limited reference list. Terms of References (ToR) for seven projects are presented in the annexes.

Chapter 2 describes a concrete project which build: further on the study of accident black spots in the city of Ouagadougou, the capital of Burkina Faso. The project is an example of an initiative in road safety, built on a Safe System Framework. The underlying idea for the choice of a concrete project, is the assumption that improvement of the capacities and of the road safety structure can be realized on basis of concrete experiences and providing the ground for learning by doing. Working on an improvement of the road safety situation in the city of Ouagadougou, people will automatically work together, they will learn new competences and they will grow in strength.

In chapter 3 the different components of this project are described in more detail. Based on a first internal discussion, we could indicate a CIFTER-score for each of the 5 components of the project. Further on, the different components were discussed with local stakeholders and involved organizations in Burkina Faso. Several barriers were mentioned and suggestions are made to solve these issues. The results of these discussions were presented in chapter 4.

The components describe in detail the activities that have to be done for that specific project. To come to more general improvement of the road safety management in Burkina Faso, different things need to be done. For this, we developed 7 Terms of References for different management aspects:

- Establishing a lead agency
- Improvement of road infrastructure
- Developing awareness campaigns, combined with enforcement
- Organizing education and community development
- Improving post-crash response
- Adapting the regulations specific to motorized 2 and 3 wheelers
- Implementing evaluation systems.
2 Safe System project objectives and scope

The overall objective of the project is building road safety management capacity through institutional reform and accelerating knowledge transfer through “learning by doing”.

2.1 Summary of the key findings from the Burkina Faso RSMCR.

Based on the analysis of the Burkina Faso social, economic and political context, the following issues must be considered to explain and understand the road safety problems:

- The rural exodus creates many challenges in the main cities of the country;
- Road traffic is the economic engine of the country, in their absence, the country would be totally isolated commercially from the rest of the World;
- The high mortality rate suggests a weak health system and unfair access to health care;
- Rates of literacy and comprehension of French are very low, which makes it difficult to understand legislation written in French only, such as the Highway Code.
- The 2014 popular uprising has consequences for the current policy, which remains very (if not too much) conservative. The people would not hesitate to go down the streets in case of dissatisfaction or disagreement with new policy proposals.

The conclusions of the Capacity Review of Burkina Faso were described as a SWOT-analysis as is shown by table 2

Table 2: SWOT-analysis of the road safety management system in Burkina Faso (Cardoso, et al. 2018)

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
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<tbody>
<tr>
<td>A National Road Safety Plan</td>
<td>Lack of resources for implementation</td>
</tr>
<tr>
<td>ONASER – database – new crash registration system in development</td>
<td>Lack of enforcement…</td>
</tr>
<tr>
<td>laws on</td>
<td>Disunity of the power/interest about all aspect of Road Safety</td>
</tr>
<tr>
<td>o Safe vehicles</td>
<td>This ‘disunity’ is also visible in the government</td>
</tr>
<tr>
<td>o Driver’s license</td>
<td>The non-agreement between RS-organizations on some issues</td>
</tr>
<tr>
<td>o Helmets / safety belts / speeding / DUI / …</td>
<td>Poor post-crash care organization</td>
</tr>
<tr>
<td>o Safe roads (motorcycling paths!)</td>
<td>Complacency with mixed transport</td>
</tr>
<tr>
<td>o Etc.</td>
<td>Widespread and resigned (almost atavistic) sense that safety is a problem due to noncompliance of road users to traffic law</td>
</tr>
<tr>
<td>Different associations on Road Safety</td>
<td>Insufficient segregation of different road users</td>
</tr>
<tr>
<td>(limited) attention to traffic regulation</td>
<td>Guidelines are not adapted to the specific situation/context.</td>
</tr>
<tr>
<td>Knowledge of main road safety intervention principles</td>
<td></td>
</tr>
<tr>
<td>Willingness to make mid-term evaluation of the national Road Safety Plan</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growing concern about injuries and fatalities.</td>
<td>Specific situations of users of motorbikes</td>
</tr>
<tr>
<td>Growing number of experts in the field</td>
<td>Import of old cars from Europe and Japan</td>
</tr>
<tr>
<td>Growing collaboration with foreign and international organizations, in- and outside the field of Road safety</td>
<td>Poor economic situation</td>
</tr>
<tr>
<td>Growing concern of international agencies with road safety and increasing willingness to finance road safety programs</td>
<td>Low level of education</td>
</tr>
</tbody>
</table>

More specific recommendations are formulated in the different chapters. Table 3 will show the main propositions.
Table 3: overview of the specific recommendations made in the Capacity review of Burkina Faso (Cardoso et al. 2018)

<table>
<thead>
<tr>
<th>Action domain</th>
<th>propositions</th>
</tr>
</thead>
</table>
| Enforcement            | • develop a criminal policy adapted to the specificity of Burkina Faso.  
                          • Reinforce the link between campaign / awareness and police control.  
                          • In both cases, work with small but very visible local projects.  
                          • improve coordination of law enforcement, giving the same department the training mission on changes to the law and the recommended procedures for control and punishment.  
                          • specific training for police and gendarmes who deal with road safety.                                                                                                                                                                                                         |
| Safe vehicles          | • Ensure that all vehicles annually pass the technical control, in particular via:  
                          o better collaboration with the police / gendarmerie to better control;  
                          o the training of police officers / gendarmes in the control of papers;  
                          o Awareness of drivers - especially road transport regarding the link between safety, costs and the technical condition of their vehicles.  
                          • Increase the quality of technical repairs, via:  
                          o training and accreditation of "mechanics";  
                          o Technical training of carriers.  
                          • Seek solutions for motorized two-wheelers. In view of the social impact, one must be careful and look for a more comprehensive strategy, encompassing all the problems and aspects                                                                                                                                 |
| Driver training        | • The adaptation of educational tools to the specific situation of Burkina Faso. With a more suitable curriculum, the credibility of the trainings will increase and with it no doubt the mutual trust of students, monitors and examiners. The training centers for instructors and examiners must take the lead in this action.  
                          • Ensure better control of (fake) permits but also on driving schools.  
                          • Strengthening road safety education in primary and secondary schools which will at the same time be a good preparation for learning to drive.                                                                                                                                 |
| Road safety education  | • Strengthening ‘podium-truck’ teams to have more frequent actions.  
                          • Achieve an adequate and consistent approach for all awareness actions.  
                          • Evaluate the results of mass campaigns and local actions, to initiate a range of advantages and disadvantages in Burkina Faso  
                          • Carry out targeted road safety campaigns for helmet use                                                                                                                                                                                                                      |
| Post-crash care        | • Strengthen the skills and equipment of paramedics.  
                          • Develop coordination between hospitals in each health region.  
                          • Develop a mutual insurance system accessible to all in order to avoid non-treatment due to patients' financial problems.                                                                                                                                                       |

2.2 Focus for the improvement plan for Burkina Faso

The Safe System project proposed for Burkina Faso follows up on a previous study by Nikiema, A., Bonnet, E., Sidbega, S. & Ridde, V. (Nikiema et al., 2017) and relates to Ouagadougou's identified black spots2, namely:

- Centre-ville (near Rond-Point des Nations-Unies) ;  
- Grand Rond-Point de Tampouy (near Rond-point de la Jeunesse) ;  
- Carrefour de la Patte d'Oie (near Rond-point Naba Wobgo) ;  
- Avenue France-Afrique (in the vicinity of Rond-point Patte d'Oie) ;  
- Connection with the road to Bobo-Dioulasso (signalised intersection) ;  
- Connection with the road to Route de Fada N’Gourma (signalised intersection).

The Safe System project proposed structure and priorities were designed to achieve quick benchmarkable results while strengthening Burkina Faso road safety stakeholders' responsibility and capacity. It will focus on powered two-wheelers (PTW) and PTW users, identified by Bonnet and colleagues (Bonnet, E. et al. 2016), as being the most impacted by road accidents in Ouagadougou.

2 Plateforme De Surveillance d'Accidents De La Route à Ouagadougou http://traumatismes.africasys.com/main
The first component is a quick improvement of the road infrastructure, through the application of low-cost engineering measures. These low-cost engineering measures are physical interventions on the road, specifically designed to improve road safety, which involve low capital investment and can be implemented quickly (Cardoso & Roque, 2000). These are specifically designed to prevent accidents occurring in certain high-risk areas of the road network. Normally, they have a favorable cost / benefit ratio and their systematic application is a cost-effective method to rapidly and sustainably reduce the frequency of accidents and their consequences on well-targeted sites (ETSC, 1996).

Interventions concerning the first component will therefore be targeted at sites identified as ‘black spots. The study of Nikiema (Nikiema, et al. (2017) based on the accidents that occurred during a period of only six months (from April until September 2015); therefore, the redetermination of Ouagadougou black spots and their boundaries is an integral part of this safe system project.

The second component of the Safe Project concerns more specifically users of powered two-wheelers. This group, identified by the study Nikiema (Nikiema, et al. (2017) as well as by the various road safety stakeholders interviewed in the Road Safety Management Capacity Review as being the most affected by road accidents. This results not only from the unprotected nature of PTW occupants, but also from the share of PTW in traffic volumes in the city of Ouagadougou. The interventions of the second component have a more general scope (extended to all road users) because improving the infrastructure and mobility of one group has a direct influence on all the others, and PTW user safety should not endanger the other road user groups.
3 Project elements of the proposed Ouagadougou Safe System project (OSS).

3.1 The coherence between the proposed improvement plan and other related documents.

The proposed improvement project, described in general terms in the previous chapter, is strongly connected, not only with the Burkina Faso Capacity review (Cardoso et al., 2018), but also with the National Road Safety Action Plan from the Burkina Faso government (Conseil Nationale de La Sécurité Routière, 2011).

The Ouagadougou Safe System project (OSS) contains five priorities:

1) Institutional strengthening
2) Improvement of the road infrastructure
3) Improvement of the safety of powered two-wheelers
4) Improvement of underlying conditions
5) Improving the project management capacities

The detailed description of these priorities leads to the development of different, in this case seven, Terms of References (ToR). These ToRs, presented in chapter 6, concerns the following issues:

1- ToR1 Establishing a lead agency for the OSS-project
2- ToR2 Road infrastructure
3- ToR3 Awareness campaigns
4- ToR4 Community Development and education in companies and schools
5- ToR5 Post-crash response
6- ToR6 Regulation on powered two-wheelers
7- ToR7 Monitoring and evaluation systems.

Table 2 shows the links between these different priorities and the seven ToRs on the one hand, and the National Road safety Plan of Burkina Faso – developed by the National Agency for Road Safety (Office National de la Sécurité Routière – ONASER) on the other hand. It’s clear that some of these priorities and/or ToRs are related to several different components of the National Road safety Plan.

<table>
<thead>
<tr>
<th>National Road Safety Action Plan (ONASER)</th>
<th>Project Priorities</th>
<th>Related Terms of Reference (ToR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component 1: Improving institutional and regulatory management of road safety; more specific: 1.3 Installing an accident data base 1.4 improve the capacity of actors 1.5 review of legislation 1.6 improve enforcement 1.8 improvement of post-crash care</td>
<td>1, 3, 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2, 5, 6, 7</td>
<td></td>
</tr>
<tr>
<td>Component 2: Building a road safety culture; more specific: 2.1 road safety programs in school education 2.3 encourage actions to inform and sensitize the population.</td>
<td>2, 3, 4</td>
<td>2, 3, 4</td>
</tr>
</tbody>
</table>
2.4 improve the safety of vulnerable road users

Component 3: Improving the technical condition of vehicles; more specific:
3.1 improve technical control of vehicles

Component 4: Improving road infrastructure safety; more specific:
4.3 speed adaptation and regulation
4.4 improvement of road sides
4.5 separation of different types of users in urban areas
4.6 improvement of traffic flow in the big cities

Table 3, shows the links between the project priorities and the ToRs on the one hand and the recommendations mentioned in the Capacity Review of Burkina Faso (Cardoso, et al. 2018).

<table>
<thead>
<tr>
<th>Capacity review Burkina Faso</th>
<th>Project Priorities</th>
<th>Related Terms of Reference (ToR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendations to increase compliance with legislation; more specific:</td>
<td>3, 4</td>
<td>3, 4, 6</td>
</tr>
<tr>
<td>Reinforce the link between campaigns and police control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve coordination between different actors in enforcement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommendations for safer vehicles, more specific:</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Solutions for powered two-wheelers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommendations for driver training, more specific:</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Adaptation of educational tools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommendations for road safety education, more specific:</td>
<td>3/4</td>
<td>3, 4, 7</td>
</tr>
<tr>
<td>Developing a consistent approach for all awareness actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve road safety education in schools (‘camion podium’)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluate the results of campaigns and actions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommendations for the “post-crash” care system, more specific:</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Strengthen the skills and equipment of paramedics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2 Detailed description of the different OSS priorities.

Each of the five OSS priorities will be described in more detail. At the same time we made an assessment of the feasibility of each priority based on the CIFTER-methodology.

The different priorities were discussed in a group with stakeholders and road safety experts in Burkina Faso. An overview of this group is given in chapter 4. On basis of their remarks and suggestions, two of the authors3 of the Capacity Review of Burkina Faso, gave a rating of each criteria, on basis of consensus. A final review of these ratings was made by the third author.4

3 Felix Vandemeulebroek and Ludo Kluppels – both from VIAS- institute.
4 Joao Cardoso, from LNEC
3.2.1 Project priority 1: Institutional strengthening (ToR 1,7)

Aspects:

- Identification of the most important institutional actors, in particular the National Agency for Road Safety (l’Organisation Nationale de la Sécurité Routière- ONASER) and the municipality.
- Assessment of needs to improve their competence and capacity concerning the cooperation in this project.
- Institutional and political awareness (particularly with respect to investment issues and commitments for RS).
- Identification of other stakeholders, especially those who could intervene on the field.
- Making an overview of different projects in progress (ex. ‘Project to improve the medical care for victims of road accidents in Burkina Faso’ (Expertise-France,2014); Terms of Reference for the education in the Transport sector to establish private companies to deliver official certificates for the transport industry. (Ministère des Transport, 2028), etc) and the identification of their complementarity.
- Capacity building of the relevant actors (concerning norms, role clarification, ...).
- Improving the legal status of the leading agency (in particular ONASER)
- Revitalization of the consultation between different agencies by organizing regular meetings (Secrétariat Permanent, Réunion du Bureau des Ministres et Assemblée Générale du Conseil National de la Sécurité Routière);
- Revitalization of the cooperation between different agencies by developing a common vision.

Remarks:

- the project ‘Expertise-France’ addresses topics to caring for the injured and setting up an accident monitoring system; its results are taken into consideration as part of the safe system project.
- An initiative is starting soon to adapt the legislative texts to the local reality (‘Africanization of texts’)
- The National Council on Road safety (Conseil National de la Sécurité Routière- CNSR) and FASER have an important role in the revitalization process.

Table 6:Crawford-Ishikura Factor Table for Evaluating Roles (CIFTER) on Component 1

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Rating</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stability of the overall project context</td>
<td>High (2)</td>
<td>Project is seen as a continuation of a previous study and limited to the city of Ouagadougou.</td>
</tr>
<tr>
<td>2. Number of distinct disciplines, methods, or approaches involved in performing the project</td>
<td>Low (4)</td>
<td>Competences are for a part available, but the many organizations are involved different areas of expertise are required.</td>
</tr>
<tr>
<td>3. Magnitude of legal, social, or environmental implications from performing the project</td>
<td>Low (1)</td>
<td>No specific remarks</td>
</tr>
<tr>
<td>4. Overall expected financial impact (positive) on the project’s stakeholders</td>
<td>High (3)</td>
<td>Strengthening a lead agency needs more resources to put their ‘power’ into practice.</td>
</tr>
<tr>
<td>5. Strategic importance of the project to the organization or organizations involved</td>
<td>Moderate (3)</td>
<td>It requires a different approach from the organizations and Ministries</td>
</tr>
<tr>
<td>6. Stakeholder cohesion regarding the characteristics of the product of the project</td>
<td>Moderate (2)</td>
<td>Rivalry and different visions between organizations</td>
</tr>
<tr>
<td>7. Number and variety of interfaces between the project and other organizational entities</td>
<td>High (4)</td>
<td>Different disciplines and actors</td>
</tr>
</tbody>
</table>
3.2.2 Project component 2 Improvement of the road infrastructure. (ToR 1,2,7)

Aspects:
- Validation of priorities for road infrastructure intervention, including the integration and compatibilization of Nikiema data (Nikiema et al., 2017) and those available data from other accident databases (ONASER, Police, Gendarmerie, BNSP, Direction Générale de la Mobilité Urbaine, DOV);
- Integration and analysis of the different accident data
- Development of an investment plan for the improvement of the ‘black spots’, taking into consideration all relevant parameters, including socio-cultural and spiritual aspects.
- Review good practices for urban interventions, including evaluation and monitoring systems.
- Physical interventions on different sites
- Evaluation of these interventions.

Remarks:
Local actors have repeatedly pointed out the important role of spiritual and sociological aspects to take into account when identifying places and intervention measures (including protected areas). For example: some ‘black spots’ are considered to be a place where ‘bad spirits’ are presents. So, prevention of accidents will be not possible.

Table 7: Crawford-Ishikura Factor Table for Evaluating Roles (CIFTER) on component 2

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Rating</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stability of the overall project context</td>
<td>High (2)</td>
<td>Project is seen as a continuation of a previous study and limited to the city of Ouagadougou.</td>
</tr>
<tr>
<td>2. Number of distinct disciplines, methods, or approaches involved in performing the project</td>
<td>Moderate (2)</td>
<td>Competences are for a part available, capacity building is needed on road safety audits and road safety inspections and diagnosing crash problems.</td>
</tr>
<tr>
<td>3. Magnitude of legal, social, or environmental implications from performing the project</td>
<td>Low (1)</td>
<td>Possible non-compliance by road users.</td>
</tr>
<tr>
<td>4. Overall expected financial impact (positive) on the project’s stakeholders</td>
<td>Moderate (2)</td>
<td>Working essential with low cost solutions</td>
</tr>
<tr>
<td>5. Strategic importance of the project to the organization or organizations involved</td>
<td>High (4)</td>
<td>It’s the important factor in the OSS-project</td>
</tr>
<tr>
<td>6. Stakeholder cohesion regarding the characteristics of the product of the project</td>
<td>Moderate (2)</td>
<td>Rivalry and different visions between organizations</td>
</tr>
<tr>
<td>7. Number and variety of interfaces between the project and other organizational entities</td>
<td>moderate (3)</td>
<td>Different disciplines and actors (police, engineers, RS-experts,...)</td>
</tr>
</tbody>
</table>

5 Direction de l’Observatoire de la Ville
3.2.3 Project component 3: Improvement of the safety of powered two-wheelers road users (ToR 3,4, 5, 6, 7)

Aspects:
- Collection and promotion of good practices
- Collection and promotion of safe behavior for different road users
- Collection and promotion of good practices concerning community development, social responsibility actions of companies and educational programs for schools.
- Campaigning, in combination with enforcement, concerning motor helmets and adapted clothing for motorized 2 and 3 wheelers.
- Campaigning, in combination with enforcement, concerning licensing for motorized 2 and 3 wheelers (license A and A2).
- Development of a plan concerning community development and actions in companies.
- Improvement of the post-crash care, especially in the region of the ‘black spots’.
- Acquisition of enforcement devices (for ex. speed radars, surveillance cameras, breath analyzers, wheel clamps,...) and providing training to use them.

Remarks:
- The project on medical care for victims (Expertise-France, 2014) addresses topics to caring for the injured and setting up an accident monitoring system; its results will be taken into consideration as part of the safe system project.
- For the “improvement of post-crash care”, the local actors stress the need to provide, on the one hand, an increase of the reception capacities of those health centers to where the majority of the victims are directed, and on the other hand to associate this problem with the necessary discussion on the establishment of a global insurance system of minimal care for funding first aid, before the time that families are able to intervene.

Table 8: Crawford-Ishikura Factor Table for Evaluating Roles (CIFTER) on component 3

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Rating</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stability of the overall project context</td>
<td>low (4)</td>
<td>Historically enforcement in general and specific enforcement concerning powered-two-wheelers is a sensitive social issue.</td>
</tr>
<tr>
<td>2. Number of distinct disciplines, methods, or approaches involved in performing the project</td>
<td>low (1)</td>
<td>Combination of enforcement and sensibilization are both involved.</td>
</tr>
<tr>
<td>3. Magnitude of legal, social, or environmental implications from performing the project</td>
<td>high (3)</td>
<td>Corruption in enforcement; non-compliance especially for PTW cultural attitude concerning helmets.</td>
</tr>
<tr>
<td>4. Overall expected financial impact (positive) on the project’s stakeholders</td>
<td>moderate (2)</td>
<td>Effective enforcement and sensibilization can give financial benefits on the long run, but demands an investment at the beginning.</td>
</tr>
<tr>
<td>5. Strategic importance of the project to the organization or organizations involved</td>
<td>Moderate (3)</td>
<td>Significant change in police procedures and attitude towards law / fight against corruption / image building!</td>
</tr>
<tr>
<td>6. Stakeholder cohesion regarding the characteristics of the product of the project</td>
<td>Moderate (2)</td>
<td>No specific remarks</td>
</tr>
<tr>
<td>7. Number and variety of interfaces between the project and other organizational entities</td>
<td>Low (2)</td>
<td>No specific remarks</td>
</tr>
</tbody>
</table>

3.2.4 Project component 4: Improving underlying conditions (ToR 6, 7)

Aspects:
- Setting up a funding for road safety actions and initiatives.
- Developing a toolbox (web interface, capacity building etc.) for the different actors in road safety to update information, to reform legislation, to exchange experience gained in different actions, etc.)
• Adaptation of training programs (also train-the-trainer) as well as the accreditation of technical control measures (e.g. DGTTM call for studies on the development of training benchmarks in transport trades and the definition of certification criteria for private institutions providing vocational training in road transport (May 2018)).
• Homologation of vehicles, especially for PTW (also concerning import specifications) and their safety equipment (helmets).
• Structural integration of the specificity of M2Ws in functional specifications of infrastructural interventions, and more specific in the projects financed in the frame work COUNTRY PARTNERSHIP FRAMEWORK FOR BURKINA FASO FOR THE PERIOD FY18-FY23 of the World Bank, or in the framework of partnerships between government and private organizations (for ex. “Ville Nouvelle Yennenga”)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Rating</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stability of the overall project context</td>
<td>low (4)</td>
<td>Demands a change in different organizations and a change in culture</td>
</tr>
<tr>
<td>2. Number of distinct disciplines, methods, or approaches involved in performing the project</td>
<td>Moderate (2)</td>
<td>Broad range of different disciplines, but focus on specific aspects</td>
</tr>
<tr>
<td>3. Magnitude of legal, social, or environmental implications from performing the project</td>
<td>high (3)</td>
<td>Radical change of several aspects driver/rider education, technical control, attitude change, ...</td>
</tr>
<tr>
<td>4. Overall expected financial impact (positive) on the project’s stakeholders</td>
<td>High (3)</td>
<td>Looking for resources, but also implementing cost to lay people (alternatively, fiscal incentives, but then these should be extended to the rest of the country for equity purposes?)</td>
</tr>
<tr>
<td>5. Strategic importance of the project to the organization or organizations involved</td>
<td>High (4)</td>
<td>Will change a lot of crucial aspects with a direct influence on people</td>
</tr>
<tr>
<td>6. Stakeholder cohesion regarding the characteristics of the product of the project</td>
<td>Moderate (2)</td>
<td>No specific remarks</td>
</tr>
<tr>
<td>7. Number and variety of interfaces between the project and other organizational entities</td>
<td>Low (2)</td>
<td>No specific remarks</td>
</tr>
</tbody>
</table>
3.2.5 Project component 5: Project Management (TdR 1,6, 7)

Aspects:

- Delivering support for project management, especially due to the complexity of the funding procedures.
- Establishing key results and monitoring corresponding key performance indicators and setting up periodic evaluation of interventions.
- Establishing and monitoring enforcement and educational (campaigns) actions
- Revitalization of intersectoral coordination

Remarks:

The project 'Expertise-France' addresses topics in the post-crash pillar (caring for injured victims) and setting up an accident monitoring system; its results are taken into consideration as part of the safe system project.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Rating</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stability of the overall project context</td>
<td>High (1)</td>
<td>It's a continuation of an existing study; ONASER, in cooperation with the Police and the Gendarmerie have already developed a database</td>
</tr>
<tr>
<td>2. Number of distinct disciplines, methods, or approaches involved in performing the project</td>
<td>low (1)</td>
<td>No specific remarks</td>
</tr>
<tr>
<td>3. Magnitude of legal, social, or environmental implications from performing the project</td>
<td>Moderate (2)</td>
<td>Not every database is based on the same principles; evaluation is not a common practice</td>
</tr>
<tr>
<td>4. Overall expected financial impact (positive) on the project's stakeholders</td>
<td>low (1)</td>
<td>No specific remarks</td>
</tr>
<tr>
<td>5. Strategic importance of the project to the organization or organizations involved</td>
<td>Moderate (3)</td>
<td>Approach could have a big impact on further planning</td>
</tr>
<tr>
<td>6. Stakeholder cohesion regarding the characteristics of the product of the project</td>
<td>low (1)</td>
<td>No specific remarks</td>
</tr>
<tr>
<td>7. Number and variety of interfaces between the project and other organizational entities</td>
<td>Very Low (1)</td>
<td>No specific remarks</td>
</tr>
</tbody>
</table>

In order to select those projects to be considered for a further assessment by the stakeholders, a total score was made based on all the points across the seven factors. This overview is shown in table 7. According to CIFTER methodology higher scores identify complex projects, especially in terms of management, so priority should be given to those projects with the lowest rates.
<table>
<thead>
<tr>
<th>Project component</th>
<th>Project component 1: Institutional strengthening</th>
<th>Project component 2: Improvement of road infrastructure</th>
<th>Project component 3: Improvement of safety of powered two-wheelers</th>
<th>Project component 4: Improvement of underlying conditions</th>
<th>Project component 5: Project management</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stability of the overall project context</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. Number of distinct disciplines, methods, or approaches involved in performing the project</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>3. Magnitude of legal, social, or environmental implications from performing the project</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4. Overall expected financial impact (positive) on the project's stakeholders</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>5. Strategic importance of the project to the organization or organizations involved</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>6. Stakeholder cohesion regarding the characteristics of the product of the project</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>7. Number and variety of interfaces between the project and other organizational entities</td>
<td>10</td>
<td>15</td>
<td>17</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>TOTAL SCORE</td>
<td>16</td>
<td>16</td>
<td>17</td>
<td>20</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 11: overview of all CIFTER scores for the different components
4 SaferAfrica project opportunities

The plan was submitted to a larger group of experts from Burkina Faso, and especially from the city of Ouagadougou itself. Casimir Sanon (HI) and Thierry Zagre (ICI-Santé – SAFER) organized different meetings to have their remarks and comments. The organizations represented in these discussions will be mentioned in the next table.

Table 12: Overview of the different organizations involved in the review of the components

<table>
<thead>
<tr>
<th>Ministère des Transports, de la Mobilité Urbaine et de la Sécurité Routière</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Programme Mobilité Urbaine et Sécurité Routière (PMUSR)</td>
</tr>
<tr>
<td>2- Office National de la Sécurité Routière (ONASER)</td>
</tr>
<tr>
<td>3- Direction générale des Transports Terrestres et Maritimes (DGTMM)</td>
</tr>
<tr>
<td>4- Centre de contrôle des Véhicules Automobiles (CCVA*)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ministère des Infrastructures</th>
</tr>
</thead>
<tbody>
<tr>
<td>5- Direction Générale des Infrastructures Routières (DGIR)</td>
</tr>
<tr>
<td>6- Direction Générale de la Normalisation, des Études Techniques et du Contrôle (DGNETC)</td>
</tr>
<tr>
<td>7- Fonds Spécial Routier (FSR)</td>
</tr>
<tr>
<td>8- Programme Sectoriel des Transports</td>
</tr>
<tr>
<td>9- Ecole de Formation et de Perfectionnement des Travaux Publics (EFP-TP)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ministère de l’Administration territoriale, de la Décentralisation et de la Cohésion Sociale</th>
</tr>
</thead>
<tbody>
<tr>
<td>10- Direction Générale de la Police Municipale (DGPM)</td>
</tr>
<tr>
<td>11- Direction des Infrastructures Routières et de la Mobilité (DIRMO) ;</td>
</tr>
<tr>
<td>12- Direction des Services Techniques Municipaux (DSTM)</td>
</tr>
<tr>
<td>13- Brigade Nationale des Sapeurs-pompiers (BNSP)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ministère de la Sécurité</th>
</tr>
</thead>
<tbody>
<tr>
<td>14- Etat-Major de la Gendarmerie Nationale</td>
</tr>
<tr>
<td>15- Direction Générale de la Police Nationale</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ministère de la Justice, Garde des Sceaux</th>
</tr>
</thead>
<tbody>
<tr>
<td>16- Direction Générale des Offres de Soins /Direction de la Logistique et des Urgences</td>
</tr>
<tr>
<td>17- Direction Générale de la Santé Publique /Direction de la Prévention et du Contrôle des Maladies non Transmissibles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ministère du Commerce, de l’Industrie et de l’Artisanat</th>
</tr>
</thead>
<tbody>
<tr>
<td>18- Direction Générale de la Promotion Civique (DGPC)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ONG et Organisations de sécurité routière</th>
</tr>
</thead>
<tbody>
<tr>
<td>20- Initiatives Conseils International Santé (ICI-Santé)</td>
</tr>
<tr>
<td>21- Humanité &amp; Inclusion (HI)</td>
</tr>
<tr>
<td>22- Association pour la Sécurité Routière en Afrique (ASRA)</td>
</tr>
<tr>
<td>23- Fédération des Associations pour la Promotion de la Sécurité Routière (FAPSER)</td>
</tr>
<tr>
<td>24- Réseau des Journalistes et Communicateurs pour la Promotion de la Sécurité Routière (RJCPSER)</td>
</tr>
<tr>
<td>25- Cercle de Réflexion, d’Expertise et d’Actions en Transport et logistique (CREAT).</td>
</tr>
</tbody>
</table>
4.1 Transferability.

On basis of these meetings with the stakeholders and road safety experts of Burkina Faso a transferability matrix (Appelt et al, 2009; Wang, et al. 2016) was filled in for the plan as a whole. No distinction between the different priorities was made at this level, because they were seen as parts of an integrated project.

<table>
<thead>
<tr>
<th>Factors/Criteria</th>
<th>Questions to assess Criterion</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Society/Culture related barriers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>People</td>
<td>Would the general public and the targeted population accept this intervention?</td>
<td>Yes – population is very concerned about safety, but will not agree with every proposed intervention, in some cases, preparatory work to improve the acceptance of change will be needed.</td>
</tr>
<tr>
<td></td>
<td>Does any aspect of the intervention go against local social norms?</td>
<td>Especially wearing helmets and more effective police control (enforcement)</td>
</tr>
<tr>
<td></td>
<td>Is it ethically acceptable?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Can the contents of the intervention be tailored to suit the local culture?</td>
<td>Yes when local social issues are taken into account</td>
</tr>
<tr>
<td></td>
<td>Does the target population in the local setting have enough educational level to comprehend the contents of the intervention?</td>
<td>No direct link with behavior change</td>
</tr>
<tr>
<td></td>
<td>Is the target population aware of the road safety problem?</td>
<td>Yes – see first response</td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institution related barriers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of regulation</td>
<td>Legislation relevant to the transferability of the intervention available (standards of service and safety, …)</td>
<td>There are laws and regulations, but they must be adapted to the actual situation and put in practise</td>
</tr>
<tr>
<td>Political commitment</td>
<td>Does the political environment of the local society allow this intervention to be implemented?</td>
<td>Yes, Road Safety is one of the priorities in the political program</td>
</tr>
<tr>
<td>Economy related barriers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design, implementation and maintenance costs affordability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical skill availability</td>
<td>Does the provider of the intervention in the local setting have the skill to deliver this intervention?</td>
<td>Several aspects need assistance (road safety audit, training the trainers, diagnosing crash problems)</td>
</tr>
</tbody>
</table>
4.2 Barriers and solutions for each component.

4.2.1 Project priority 1: Institutional strengthening.

This component includes two major aspects: 1) political action to establish the official function of a coordinative organization, and 2) the coordination of all the different partners and actions.

Based on the capacity review on Burkina Faso (Cardoso et al. 2018) several different organizations are involved in road safety activities. ONASER (National Office of Road Safety) is a structure attached to the Ministries of Transport, Urban Mobility and Road Safety, with the following missions: promoting road safety, improving the flow of traffic and improving the operation of the road network. The infrastructure is a responsibility of the Ministry of infrastructures and divided over 4 different departments:

a) DGER (General Directorate of Road Maintenance)
b) DGIR (General Directorate of Road Infrastructure)
c) DTR (Directorate of Road Works)
d) DGPR (General Directorate for Rural Roads)

Specific for the proposed project, the communality of Ouagadougou is also concerned, because it has the responsibility for the urban roads on his territory. All these organizations must work together with the same spirit, making coordination highly needed. One of these organizations will have to take a more formal role as general coordinator and/or secretary of the project. This will also involve a temporary increase in their budget, and an intensification of their management activities, when coordinating budget allocations among the collaborating entities.

Currently, there is a lack of coordination between the different organizations and certainly when also other stakeholders (police, gendarmerie, ...) must be integrated in the project. There seems to be a certain confusion and dormant conflicts about competences and tasks. For a part, this is due to a lack of mutual and periodic contact and concertation between these different organizations.

Focusing on this particular project (The Ouagadougou Safe System – OSS) the most practical solution will probably be that the municipal administration takes the leading role and assembly the different partners. Before the first meeting, it will be wise to have a first plan concerning the competencies and role of each invited organization in this project, and also to determine the process and the way in which they will work together. It will probably take a lot of efforts to motivate each organization and to point their ‘nose in the same direction’, nudging them to direct their efforts and actions towards the common objectives.

On the long run, a more powerful central organization on road safety must be established and provided with more resources in terms of finances and human capacity. ONASER got already this status in 2008, but this was not accompanied by the means to develop itself in this perspective. A National Assembly on road safety could be a good way to improve the general concern in the country and to have more impact on policy. When working frequently together and open minded, this General Assembly could also be a tool to reduce the rivalry between organizations.

Budgetary problems can be a barrier to improve the strength of such a lead agency. Therefore, it is necessary to review the way in which financial means could be available. A direct funding, coming from specific incomes (percentage of traffic fines, of cost for technical inspection, ...) has to be discussed in the short term.

4.2.2 Project priority 2: Improvement of the road infrastructure

Prevention of accidents in an urban area involves two important things: 1) well-developed road infrastructure, based on the principles of a safe system, and 2) the compliance of road users. Component 2 focusses on the first aspect: detecting black spots, assessing the existing infrastructure, and, where possible, adapting it to a safer operation.

This component can be based on the previous study of Nikiema (Nikiema et al. 2017) taking into account the more recent data gathered by the police and ONASER.
Institutional barriers are, as mentioned by the stakeholders, the absence of leadership and the instability of some organizations and institutions involved in the component. Engineers are well educated and follow the official standards concerning road building. Knowledge of specific procedures of road safety inspections and audits are not well developed or even missing, and improvement in diagnosing roads crash problems is needed, as well.

A special issue in developing a good infrastructure concerns the seasonal variation in the weather conditions. In the rain season a lot of problems occur in the smaller city roads which are in most cases non-paved gravel roads.

To come to real implementation of adaption of the infrastructure, we must look especially for low cost measures, because financial resources are very restricted. Taking into account the general economical situation of Burkina Faso, big investments are not expectable.

A capacity building project on road safety audits and inspections needs to be organized to make a good analysis of the existing infrastructure and to promote low cost solutions. To organize this course, support can be found by different organizations (PIARC, FRI,...).

If component 1 is solved and the structure of the leading agency and the role of other organizations are well defined, the mentioned barriers on leadership and instability can be overcome as well.

More problems could be arising when being confronted with some cultural issues. Local actors have repeatedly pointed out the important role of spiritual and sociological aspects. For example: some ‘black spots’ are considered to be a place where ‘bad spirits’ are presents. So, people could be convinced that all the efforts to prevent accidents in that specific area will be not possible.

By analysing the ‘black spots’, also an assessment of these more spiritual aspects must be developed. Two issues must be considered:
- Is the conviction of fatalism linked to a very specific location, or is it a more general belief?
- In case there is a conviction of a local ‘curse’ on that specific location – how strong is this connected with the belief in spirits and local ghosts or demons?

The stronger the conviction in the existence of ghosts or evil spirits, especially connected with a specific location, the help of spiritual leaders must be involved in the actions. We refer for this in the approach of specific sensibilization actions in the project priority number 3.

### 4.2.3 Project priority 3: Improvement of the safety of motorized 2 and 3 wheelers.

This component contains different actions on four different levels:

1. **Communication**: promotion of safe behaviour on the road; promotion of a common sense of responsibility (in general and more specific to private companies); specific campaigns,…
2. **Education**: improvement of driver and rider education
3. **Enforcement**: acquisition of equipment, improvement of roadside checks, especially for motorized 2 and 3 wheelers
4. **Institutional organization** of post-crash care

Especially concerning enforcement, a lot of barriers are formulated by the stakeholders.
- A general lack of compliance
- A general non-respect towards and distrust in the police force and authorities
- Unclear or too general laws for motorized 2 and 3 wheelers
- A general lack of roadside checks, especially for M2-3W’s
- Absence good driver education and knowledge of rules
- Corruption by police officers (demanding a ‘personal’ payment instead of an official fine)
The problem of helmets has already a long history with a lot of resistance, especially from women: wearing a helmet is in contradiction with the cultural of having a nice and elaborated hairstyle. Previous ideas of enforcement on this matter, even the obligation to offer a helmet when people buy a motorcycle, have not solved the problem and only generated a more determined opposition.

The overwhelming presence of motorcycles, due to their low cost and their accessible availability, especial for the low and middle class population, increases the problem.

There is no easy solution for these problems. Successful campaigns on helmet are not easy to transfer to the Burkinabè situation. In 2008 a first study was conducted by the Ministry of Transport (Ministère des Transports, 2008) concerning the problem of wearing helmets. A survey was conducted concerning the reasons why so few people wear not a helmet. This study could feed actions and campaigns to chance the attitude towards helmets. Talking not only about helmets, but also on adapted clothing for riders, the high temperature is certainly not a motivating factor. A study to take this specific issue into consideration can probably find some more adapted ‘clothing-rules’.

Education in general is well appreciated by all organizations. ONASER develops some activities awareness campaigns in schools and public places using the podium truck (“camion podium”) Schools, Schools, markets and public bus stations are open for these initiatives. The only barriers are financial ones. Rider education as a preparation to get a drivers’ license faces more barriers. In general, the image of driving schools and driving examination is very low. For most of the people it is a matter of spending money on something they don’t need. People learn on their own (by trial and error, or by learning from a peer) how to handle motorized 2 or 3 wheeled vehicles. As long as there is no systematic control on drivers’ licence, this will not change. At the same time, the quality of driver (rider) education is very low. An official curriculum for driver/lover education is not yet developed. This would be the first step before more effort on enforcement concerning licencing is put in action.

There is a big discussion going on concerning the way in which campaigns have to be developed. Different organizations have different opinions, which sometimes leads to a ‘wait and see attitude’. But the real barrier for these aspects is a financial one. A strong collaboration with all mass media and especially RJCPSER (Réseau des Journalistes et Communicateurs pour la Promotion de la Sécurité Routière) could provide opportunities for fostering road safety.

Post-crash-care is certainly an important issue, all the more because accidents with motorized two-wheelers are most of the time severe ones. In the city of Ouagadougou the organization is well established. The civil-protection service is taking care of the transport of road victims. They already received a training in first-aid, but probably this can be improved and updated. The barrier consists, once again, on the lack of financial resources. Equipment is rather limited, both in the ambulance service, and at the emergency units of the hospitals (Cardoso, et al. 2018).

As special issue concerns the communication linked with localizations which are supposed to be under the influence of demons or spirits, as mentioned in the previous chapter. Depending on the strength of faith and the wide spread of this belief, specific actions have to be taken. Working together with cultural and spiritual leaders can be important to solve the problem, or to make improvement possible.

4.2.4 Project priority 4: improving underlying conditions.

In fact, this component implicates an anchoring in official regulations of the main conclusions and results of the previous components.
On itself, this would not be a difficult task. Burkina Faso has already a broad arsenal of laws and regulation on paper. The main problem is the delivery of effective enforcement of all these regulations. Two major barriers could be detected:

1) The coordination of all the different regulations into a well structured and integrated whole. Even to gather the necessary information for the capacity review (Cardoso, et al. 2018), authors already mentioned the lack of coherence and availability. Some of the existing regulations are not in alliance with reality, and are simple copies of regulations from France.

2) The application of these regulations in society. People are in general very reluctant to accept regulations and, because enforcement is very weak, they don’t feel the need to comply with rules. In some cases, the resistance is very strong (for ex. helmet regulation).

Besides this, the lack of financial resources makes everything very difficult. This is not only for the good organization of the work of the lead agency and the different agencies, but also for the population. To comply with certain, especially, technical rules, they need to have enough resources to buy the compliant (or duly adapted) vehicles and to get a good driver education.

Solutions to get sufficient financial resources to support the work on road safety, have to be looked for in more structural solutions coming from specific fiscal incomes related to traffic (traffic fines, technical inspection, …).

New regulations or adaption of existing regulations should always be reviewed from different angles. Road safety is probably the most important one, but other aspects, such as mobility, economical situation, difference between rural and urban regions, social aspects, … should also be taken into consideration. Within the General Assembly for Road Safety, other disciplines can take their role in this concertation.

4.2.5 Project priority 5: project management.

Although this is a very important aspect to realize the OSS-project, if in the first phase (Component1) the role of the involved organizations are well defined, and there is a strong leadership of the leading organization (in this case the municipality), the management of the project will not be obstructed by major barriers.
5 Terms of References.

5.1 Terms of reference 1: Establishing a lead agency for the OSS-project

Identification and assessment of Road Safety Agencies and Lead Agency’s responsibilities and capacities for Ouagadougou Safe System project (OSS) with regards to project road safety goals and priorities, best practice interventions (TdR 3, 4, 5) policy reforms (TdR 6), monitoring and evaluation systems, and project management arrangements (TdR 7).

Background

The Ouagadougou Safe System (OSS) project focuses on powered two-wheelers (PTW) and PTW users identified as being the most impacted by road accidents. It follows up on a previous study (Nikiema, et al. 2017) and relates to identified black spot areas, namely:

- Centre-ville (near Rond-Point des Nations-Unies);
- Grand Rond-Point de Tampouy (surroundings of Rond-point de la Jeunesse);
- Carrefour de la Patte d’Oie (near Rond-point Naba Wobgo);
- Avenue France-Afrique (surroundings of Rond-point Patte d’Oie);
- Connection with the road to Route de Bobo-Dioulasso (signalised intersection);
- Connection with the road to Fada N’Gourma (signalised intersection).

For each big project a leading organization is a necessity to put the views of different stakeholders in the same direction, to coordinate the different action and to lead the project in a successful way. This is not only a fact for a specific project, but also for the general operation on traffic safety in a country. The creation and the further development of a leading agency would thus enhance the road safety issue and give it legitimacy. It would be valuable for this agency to be placed under a high authority, in order to give it all the necessary legitimacy and sufficient political weight to take effective measures. The present leading agency (ONASER) started in 2008 but has only a limited power and competences. Therefore, further development and changes in legislation are necessary.

This leading agency has also an important role of gathering the different other organizations and agencies to work together for a safer Burkina Faso.

Objectives

The objectives of the required consulting services are as follows:

- define the OSS project’s framework including institutional and investment context in which the project will be delivered;
- define and identify ONASER and Road Safety Agencies’ responsibility within the OSS project and assess their capacity to deliver;
- make recommendations on the overall scale of the investment proposed for the OSS project;
- determine road safety performance in the project;
- specify best practice interventions and policy reforms to address identified priorities (Components 1 to 5);
- formalize local, regional, and country agencies’ responsibilities for selected best practices interventions and policy reforms and review agencies management delivery capacity;
- specify project monitoring and evaluation systems and project management arrangements for best practice interventions and policy reforms in the project.

6 Plateforme De Surveillance d’Accidents De La Route à Ouagadougou http://traumatismes.africasys.com/main/
Main tasks and outputs

The output of the required technical assistance services are as follows:

1. **Validation of the identified OSS project black spots**
   1.1. Assessment of Ouagadougou fatal and serious injury data prioritized by crash vehicle type, crash victims, factors contributing to crashes (if available), spatial concentrations, country differences in fatality and injury patterns, and any other relevant safety performance data.
   1.2. Establishment of a consensus on OSS project’s priorities, based on the available data and evidences. Black spots description covering key parameters (geolocalization, road characteristics, traffic volume by user type, projected growth, roadside population, etc...).

2. **Identification of the participating agencies and stakeholders and recommendations of ONASER responsibilities and assessment of ONASER capacity to delivery**
   2.1. Identification of all potential road safety partner agencies and stakeholders for the OSS project.
   2.2. Assessment of institutional arrangements for OSS road safety management at local, level, and related responsibilities (infrastructure provision and operations, road policing, emergency services and post crash response, etc...).
   2.3. Identification and assessment of ONASER options for proposed OSS project and recommendation of preferred option.
   2.4. Assessment of ONASER delivery capacity with emphasis on the coordination and promotion of the OSS project.
   2.5. Publish a Highway Code, condensing currently scattered legislation.

3. **Determine OSS project’s goals and the planned investments**
   3.1. Identification of current road safety performance goals for the OSS project and future similar projects at the regional and country levels.
   3.2. Establishment of regional and country consensus on desired road safety performance over the coming decade.
   3.3. Collation of planned infrastructure investments and provision of improved road safety services.
   3.4. Assess transferability to other regions and propose recommendations for enlarged application.

Scheduling of tasks

**PHASE I: Project scoping and specification of project concept.**

To be developed in accordance with project identification and preparation schedule.

Professional skills and experience required

**Road safety management specialist**

Internationally recognized road safety management specialist with more than 10 years of leadership experience in the development and implementation of national and regional road safety strategies. Experience in the conduct of road safety management reviews and demonstrated success in working with lead agencies and associated safety-related agencies at the departmental head and ministerial levels are essential. Experience in road safety analyses in developing and transition countries is desirable.

**Road safety analysis specialist**
An internationally recognized specialist with more than 10 years of experience in conducting scientific analyses of the road environment, vehicle, and human factors contributing to road crashes and injuries. Hands-on experience in quantitative evaluations of road safety interventions and outcomes is essential. Experience in road safety analyses in developing and transition countries is desirable.

For all team members, a demonstrated ability to work with and gain the trust of senior government officials and professional peers is essential.
5.2 Terms of reference 2 Systematic improvement of road infrastructure.

Review of design, construction and maintenance standards, and development of priorities and investment plan for infrastructure safety intervention

Background

The Ouagadougou Safe System (OSS) project focuses on powered two-wheelers (PTW) and PTW users identified as being the most impacted by road accidents. It follows up on a previous study (Nikiema, et al, 2017) and relates to identified black spot areas, namely:

- Centre-ville (surrounding area of Rond-Point des Nations);
- Grand Rond-Point de Tampouy (surrounding area of Rond-point de la Jeunesse);
- Carrefour de la Patte d'Oie (Rond-point Naba Wobgo);
- Avenue France-Afrique (surrounding area of Rond-point Patte d'Oie);
- Connection with the road to Bobo-Dioulasso (signalized intersection);
- Connection with the road to Fada N’Gourma (signalized intersection).

In a Safe System approach, the infrastructure is one of the most important aspects to modify road users behaviour. By being self-explaining and forgiving, infrastructural design can prevent accident and/or decrease the severity of mistakes. Especially for vulnerable road users (and for this particular project: motorized 2 and 3 wheelers) special arrangement could be made for the protection of this group and to modify their behaviour in a safer way. In general, a good infrastructure, based on safety standards, is more effective in regulating traffic than enforcement and education.

Objectives

The objectives of the required consulting services include the following:

**A. Review the Design Standards for Roads in Burkina Faso**

- Assess and review all available technical specification, standards and guidelines, within the region and all relevant studies carried out in Burkina Faso.
- Provide an in-depth analysis of the country's physical, climate, soil and socio-economic characteristics and translate them into safe system streets/roads/highways general requirements.
- Compare the available best technical specifications and standards in the region with the developed requirements, identify the gaps in qualitative and quantitative manner and propose the required and missing technical and socio-economic specifications, standards and methodologies or their updating.
- Prepare the National Design Standards and Maintenance Guidelines, for roads and streets, including Road Safety guidelines and design specifications.
- Prepare the works/performance specifications together with associated budgetary, technical and other socio economic/environmental and road safety parameters (National Design Standards and Maintenance Guidelines).
- Prepare a clear and concise description of methodology to be deployed for provision and updating/upgrading/improvement of design standards and work/performance specification and maintenance for roads. Specific attention will be required regarding the current output and performance contracting (OPRC); Design Build and Transfer (DBT) methodologies and requirements; PPP operation and their requirements, with associated Level of Services guidelines and required field and laboratory testing using the most recent technologies and equipment (profilometers, falling weight deflectometer, etc.).

**B. Accident analysis and infrastructure treatment at blackspots in Ouagadougou**

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Survey geometric design characteristics and operational settings of traffic signals in the six black spot areas identified (TOR 1) for the OSS, using traditional methods or video data recording. 

Collect crash data, obtain classified traffic flow counts, and measure approach and site speeds. 

Assess the safety situation at each black spot, identify local safety problems and list promising infrastructure interventions, and their prospective effects. 

Consult with local authorities on the feasibility of identified infrastructure interventions and assess construction and maintenance costs for each retained intervention. 

Develop a Safer Roads Investment Plan for the six black spots and detail design of the selected infrastructure interventions, following the developed design and construction standards and guidelines in preparation (or already approved – see A, above). 

Prepare TOR for construction and control of the infrastructure interventions. 

Propose a methodology for black spot detection in Ouagadougou and support the preparation of a post-project program of infrastructure safety improvements throughout Ouagadougou black spots, based on experience from the OSS project. 

C. On the job capacity building in infrastructure safety intervention 

Prepare and deliver a capacity building training course on the application of the developed standards and guidelines in the design, construction and maintenance of road infrastructures. 

Train road agency and associated regional and national consulting staff in the design, implementation and evaluation of improved infrastructure safety programs combining proactive and reactive tools and procedures. 

Main tasks and outputs 

During the course of the work, the Consultant is expected to liaise with relevant Burkina Faso agencies and other stakeholders (e.g. design and construction control consultants) indicated by the contractor agency. 

The output of the required technical assistance services are as follows: 

- General requirements for safe system streets/roads/highways adapted to the physical, climate, soil and socio-economic characteristics of Burkina Faso and its regional surroundings. 

- National Design and Construction Standards and Maintenance Guidelines, for roads and streets, including Road Safety guidelines and design specifications for: 
  - Interurban roads and urban streets; 
  - Segregation of mixed traffic including motorcycle lane, bicycle lane, and Footpath; 
  - Pedestrian crossings; 
  - Intersections & interchanges; 
  - Active Traffic calming & speed control measures; 
  - Roadside hazards; 
  - Traffic signals, signs and lane marking; 
  - Intelligent transport systems; 
  - Parking zones on-street / off street; 
  - Speed limits / weight limits; 
  - Zoning and congestion pricing; 
  - Traffic restrictions for different vehicles; 
  - Temporary road closures and car-free programs. 

- Draft methodology for regular updating/upgrading/improvement of design standards, and construction and maintenance specifications for roads. 

- Uniform dataset with site geometric, accident and operational characteristics (traffic volumes and speeds), and traffic signal settings. 

- Standardized site road safety assessment and list of feasible infrastructure interventions, including costs and prospective effects. 

- Detailed design of selected infrastructure Safe Road interventions, and TOR for construction and control procurement. 

- Draft methodology for black spot detection in Ouagadougou. 

- Training course on the application of the developed design and construction standards and maintenance guidelines.
• Training course on the application of the developed Road Safety guidelines and design specifications.

Scheduling of tasks

PHASE I & II: Project scoping and specification of project concept
To be developed in accordance with project identification and preparation schedule.

PHASE III & IV: Detailed project specification & Project implementation

- Duration of project. Support the design, implementation, maintenance, and evaluation of improved infrastructure safety programs in the OSS and related staff training.
- Final year of project. Support the preparation of a post-project program and guidelines for the improvement of infrastructure safety throughout the OSS.
Reference documents


1. RAP-SR-2.1 Star Rating and Investment Plan - Road survey and coding specification

Professional skills and experience required

I. Road safety expert (team leader)
   - Graduate in Civil/Highway/Transportation Engineering as a minimum and desirably with a post-graduation or equivalent in Road Safety Engineering/Highway Engineering/Transportation Engineering.
   - Minimum total work experience after graduation of 20 years, and a minimum experience in developed countries of 3 years. The candidate should have experience as a Team Leader for at least one Infrastructure/Road Projects of similar complexities in a developed country and as Team Leader for at least one Infrastructure/Road Projects of similar size and complexities in a developing country.
   - Project Management Experience for Infrastructure development projects from design to delivery, thorough experience in road safety audits, design, construction, supervision and management of road safety related engineering interventions in major highway projects. Experience of managing a team of multi-disciplinary experts as well as strong people management skills during a project or corporate assignment are essential.
   - The candidate must demonstrate knowledge and experience of international 'best practices' and road safety audit, design, drawings and execution of road safety enhancement features in different countries. Computer Aided Project Management Tools & Interpretation, Administering FIDIC/Internationally Funded Contracts expertise are important.

II. National road safety expert/traffic and transport engineer
   - Graduate in Civil/Highway/Transportation Engineering as a minimum, and desirably with a post-graduation or equivalent in Highway Engineering/Transportation Engineering/Construction Management.
   - Minimum total work experience after graduation of 20 years, and minimum 3 years of total international work experience. Minimum 10 years of total work experience in road safety assessment, design, construction, supervision and management of road safety related engineering interventions in major highway projects.
   - The candidate must have experience in administering FIDIC conditions of Contracts, specifications and Standards for road design, construction, supervision and management of road safety related engineering intervention relevant to Burkina Faso, modern survey and construction techniques. Experience of managing a team of multi-disciplinary experts is desirable, as well as strong people management skills during a project or corporate assignment. The candidate should have knowledge of contract law, disputes resolution and arbitration.

III. Highway engineer
   - Graduate in Civil/Highway/Transportation Engineering as a minimum, and desirably post-graduation or equivalent in Highway Engineering, Transportation Engineering or Construction Management. The candidate should have a professional/chartered accreditation with a recognized engineering/management institute of Burkina.

- Minimum total work experience after graduation of 15 years, including a minimum 10 years of total work experience in road design, construction, supervision and management of road safety related engineering interventions. The candidate should have worked as resident engineer of at least one road construction supervision project of similar size and complexity.

- The candidate must have experience in administering FIDIC conditions of Contracts, specifications and Standards for road safety audits, design, construction, supervision and management of road safety related engineering interventions relevant to Burkina Faso, modern survey and construction techniques and computer aided project management tools and interpretation.

IV. Senior surveyor
- Graduate in Civil/ Highway/ Transportation Engineering (as a minimum) and desirably with a post-graduation or equivalent in any Civil Engineering Discipline.

- Minimum total work experience after graduation of 10 years, and a minimum 5 years of total work experience in road design, construction, supervision and management of road safety related engineering interventions. A thorough knowledge is required of specifications and standards for highway projects in Africa and International best practice, as well as a thorough knowledge on modern techniques of survey e.g. total stations, GPS, video, etc.

V. Monitoring and Evaluation Specialist
- An internationally recognized specialist with more than 10 years' experience in the design and implementation of asset management and traffic monitoring and evaluation systems. Knowledge of sample design methods and related measurement equipment requirements is required. Experience of road safety monitoring and evaluation in developing and transitional countries is desirable.

For all team members, a demonstrated ability to work with and gain the trust of senior government officials and professional peers is essential.

Support from national, regional, and international industry organizations
iRAP may provide support in preparing the post-project program of infrastructure safety improvements, but it is very expensive.
5.3 Terms of reference 3: Awareness campaigns and enforcement

Project component 3

Awareness campaigns and dissemination of examples of good driving behaviours associated with deterrence and behavioral change programs.

Background

The Ouagadougou Safe System (OSS) project focuses on powered two-wheelers (PTW) and PTW users identified as being the most impacted by road accidents. It follows up on a previous study (Nikiema, et al, 2017) and relates to identified black spot areas 9, namely:

- Centre-ville (surrounding area of Rond-Point des Nations);
- Grand Rond-Point de Tampouy (surrounding area of Rond-point de la Jeunesse);
- Carrefour de la Patte d’Oie (Rond-point Naba Wobgo);
- Avenue France-Afrique (surrounding area of Rond-point Patte d’Oie);
- Connection with the road to Bobo-Dioulasso (signalized intersection);
- Connection with the road to Fada N’Gourma (signalized intersection).

Enforcement is not very common and effective in Burkina Faso. Many different barriers make it difficult to deliver a good enforcement policy, strong reluctance to comply with some rules being a major issue. On the other hand, there is a great concern in the general population for fatalities and accidents, but the link with certain rules and behaviour is not fully established in lay man and woman yet.

Awareness campaigns could change this attitude of atavism and general incompliance, but only when they are accompanied by an enforcement improvement.

Objectives

The objectives of the required consulting services are as follows:

- Support the introduction and evaluation of
  - general deterrence police enforcement targeting unsafe behaviours in the OSS project area;
  - publicity and awareness campaigns that support police enforcement programs targeting unsafe behaviours in the OSS project areas
- Training
  - police staff in the implementation and management of general deterrence enforcement targeting unsafe behaviours in the OSS project;
  - designated road safety agency staff, police staff, and associated regional and national consultants in the implementation and management of publicity and awareness campaigns that support police enforcement programs targeting unsafe behaviours in the OSS project areas.
- Support the preparation of a post-project
  - program of general deterrence police enforcement targeting unsafe behaviours throughout the (Regional Trade Road Corridors) RTRC, based on successful experience in the OSS project;

publicity and awareness campaign that supports police enforcement programs targeting unsafe behaviours, based on successful experience in the OSS project.

Main tasks and outputs

The outputs of the required technical assistance services are as follows:

1. Support the preparation of annual police enforcement programs to achieve the general deterrence of unsafe behaviours in the OSS project area.
   1.1 Identification of unsafe behaviours in the OSS project.
   1.2 Operational strategies and tactics and related guidelines to address unsafe behaviours in the OSS project.
   1.3 Annual programs of (monthly) scheduled enforcement operations targeting unsafe behaviours in the OSS project.
   1.4 Analysis of equipment needs and specification and costing of additional equipment required to support annual enforcement programs.
   1.5 Draft tender specification documents for the procurement of additional equipment.
   1.6 On-the-job support for the implementation of annual enforcement programs.

2. Prepare annual publicity and awareness campaigns to support police enforcement programs targeting unsafe behaviours in the OSS project.
   2.1 Identification and prioritization of high-risk behaviours to be targeted through publicity and awareness campaigns.
   2.2 Identification of road user groups demonstrating the identified high-risk behaviours and their extended social and business networks in the OSS project.
   2.3 Development of key road safety messages to high-risk road user groups and their extended social and business networks.
   2.4 Identification of electronic, print media, and billboard services reaching high-risk road user groups and their extended social and business networks in the project.
   2.5 Annual program of scheduled publicity and awareness campaigns, coordinated with police enforcement programs, targeting high-risk road user groups and their extended social and business networks in the OSS project.
   2.6 Monitoring and evaluation systems for annual publicity and awareness campaigns to track message recall and relevance (coordinated with monitoring and evaluation component).
   2.7 Identification of suppliers of market research, public relations, and advertising services with sufficient capacity to produce, implement, and monitor specified publicity and awareness campaigns.
   2.8 Draft tender specification documents for the procurement of the required research, production, and media services.
   2.9 Assistance with the evaluation of bids for research, production, and media services.
   2.10 On-the-job support for the implementation of publicity and awareness campaigns.

3. Train regional and national police staff at all levels in the implementation of annual enforcement programs in the OSS project
   3.2 Preparation and delivery of a basic training program to upgrade the traffic safety knowledge and skills of road policing staff
   3.3 Preparation and delivery of an advanced training course on general deterrence theory and practice and related operational strategies and tactics
   3.4 Preparation and delivery of management training on the supervision of program implementation by operational staff.

4. Train designated road safety agency and police staff in the design and implementation of annual publicity and awareness campaigns in the OSS project
4.1 Preparation and delivery of training programs addressing the principles and practices of effective publicity and awareness campaigns for road safety, and related monitoring and evaluation procedures.

5. Evaluate the efficiency and effectiveness of police enforcement programs in the OSS project.
   5.1 Design and conduct of evaluations of police enforcement programs in the OSS project (coordinated with the project monitoring and evaluation component).
   5.2 Recommended improvements to police enforcement programs (developed in output 1.3), based on the evaluation findings in the OSS project.

6. Evaluate the efficiency and effectiveness of publicity and awareness campaigns that support police enforcement targeting unsafe behaviours in the OSS project.
   6.1 Design and conduct evaluations of publicity and awareness campaigns in the OSS project (coordinated with the monitoring and evaluation component).
   6.2 Recommended improvements to publicity and awareness campaigns that support police enforcement programs targeting unsafe behaviours (to be fed back into programs developed in output 1.5), based on the evaluation findings in the project.

7. Prepare a post-project police enforcement program and guidelines to achieve the general deterrence of identified unsafe behaviours throughout all Ouagadougou black spots.
   7.1 Post-project enforcement program, including program cost estimates and implementation schedule.
   7.2 Guidelines for police enforcement programs to achieve general deterrence of identified unsafe behaviours throughout all Ouagadougou black spots.

8. Prepare a post-project publicity and awareness campaign and guidelines to support police enforcement programs targeting unsafe behaviours throughout all Ouagadougou black spots.
   8.1 Post-project publicity and awareness campaigns, including campaign cost estimates and implementation schedule.
   8.2 Guidelines detailing requirements for publicity and awareness campaigns that support police enforcement programs targeting unsafe behaviours throughout all Ouagadougou black spots.

Scheduling of tasks

PHASE III & IV: Detailed project specification & Project implementation

- Duration of project. Support the preparation, implementation, evaluation, and revision of
  - police enforcement programs in the OSS project, and related staff training.
  - publicity and awareness campaigns that support police enforcement programs in the OSS project and related staff training.
- Final year of project. Support the preparation of a
  - post-project program and guidelines for police enforcement programs throughout all Ouagadougou black spots;
  - publicity and awareness campaign and guidelines to support police enforcement programs throughout all Ouagadougou black spots.

Professional skills and experience required

Enforcement management specialist

A specialist with more than 10 years of experience in traffic enforcement leadership, coordination, and policy advice in a national police agency operating a successful general deterrence model.
demonstrated ability to communicate road safety enforcement philosophy and tactics to a broad audience is essential. Previous experience in a law enforcement training facility is desirable.

**Enforcement operations specialist**

A specialist with more than 10 years of road policing experience, including line management of traffic enforcement staff. Practical experience in the design, implementation, and management of road safety enforcement strategies in a national police agency operating a successful general deterrence model is essential. A demonstrated ability to communicate road safety enforcement philosophy and tactics to a broad audience is also essential. Previous experience in a law enforcement training facility is desirable.

**Enforcement equipment specialist**

A specialist with about 10 years of experience in the specification, sourcing, evaluation, and procurement of road safety equipment and tools in a national police agency operating a successful general deterrence model. A demonstrated understanding of modern operational safety enforcement practices is essential.

**Enforcement training specialist**

A specialist with about 10 years of experience in the design, implementation, and evaluation of police officer and recruit training and development programs. Operational experience in a national police training college is essential.

**Communications specialist**

A specialist with more than 10 years of experience in managing research-based advertising and public relations in road safety or a similar field. Previous account management experience in an advertising agency or public relations firm is desirable. Experience with successful social marketing campaigns is essential.

**Community survey specialist**

A specialist with more than 10 years of market research experience in quantitative and qualitative community attitude surveys. Experience in conducting community attitude surveys in developing and transitional countries is desirable.

**Road safety analysis specialist**

An internationally recognized specialist with more than 10 years of experience conducting scientific analyses of the road environment, vehicle, and human factors contributing to road crashes and injuries. Hands-on experience in quantitative evaluations of safety interventions and outcomes is essential. Experience in road safety analyses in developing and transitional countries is desirable.

*For all team members, a demonstrated ability to work with and gain the trust of senior government officials and professional peers is essential.*

**Support from the International Road Policing Organization (RoadPOL)**

RoadPOL support is recommended for the delivery of these outputs because of the specialist nature of road policing and the preference of road policing agencies to work on a peer-to-peer basis with officers from other relevant police agencies.
5.4 Terms of reference 4: Community development, awareness rising in companies and education in schools.

Project component 2 & 3

Technical assistance for community development, corporate social responsibility and education programs in schools

Background

The Ouagadougou Safe System (OSS) project focuses on powered two-wheelers (PTW) and PTW users identified as being the most impacted by road accidents. It follows up on a previous study (Nikiema, et al, 2017) and relates to identified black spot areas,

10 Plateforme De Surveillance d'Accidents De La Route à Ouagadougou http://traumatismes.africasys.com/main#
1.1 Guidelines for the allocation of OSS project community development and school-based education funds, including grant eligibility criteria, application processes, and monitoring and evaluation requirements

1.2 Guidelines for corporate social responsibility and school-based road safety programs seeking to support the achievement of OSS project objectives. These guidelines should include road safety priorities, available road safety resources, preferred coordination arrangements, and potential partnership and branding opportunities

1.3 On-the-job support for the implementation of community development, corporate social responsibility and school-based road safety programs in the OSS project.

2. Train road agency and associated regional and national consulting company staff in the delivery of community development and school-based education programs and promotion of corporate social responsibility programs designed to support the infrastructure safety programs, road safety enforcement programs, and publicity and awareness campaigns in the OSS project.

2.1 Preparation and delivery of training programs in the use of the guidelines for the allocation of OSS road safety project community development and school-based education funds and corporate social responsibility programs in the OSS project.

3. Evaluate the efficiency and effectiveness of community development, corporate social responsibility, and school-based education programs designed to support the infrastructure safety programs, road safety enforcement programs, and publicity and awareness campaigns in the project.

3.1 Design and conduct of evaluations of community development and school-based education programs and (where agreed) corporate social responsibility programs in the OSS project (coordinated with the project monitoring and evaluation component)

3.2 Revision of the guidelines (developed in outputs 1.1 and 1.2), based on the evaluation findings in the OSS project.

4. Prepare a post-project program and guidelines

4.1 Post-project community development, corporate social responsibility, and school-based education programs, including program cost estimates and implementation schedule.

4.2 Guidelines for improving community development, corporate social responsibility and school-based education programs.

Scheduling of tasks

PHASE III & IV: Detailed project specification & Project implementation

- **Duration of project.** Support the preparation, implementation, and evaluation of community development programs and corporate social responsibility programs in the OSS project and related staff training.

- **Final year of project.** Support the preparation of post-project community development and corporate social responsibility programs and guidelines designed to support infrastructure safety programs, safety enforcement programs, and publicity and awareness campaigns.

Professional skills and experience required

**Community development specialist**

An internationally recognized community development specialist with more than 10 years of experience in the design, delivery, and evaluation of community-based road safety programs designed to support the delivery of national road safety strategies. Experience in community road safety projects in developing and transition countries is desirable.

**Corporate social responsibility specialist**
An internationally recognized corporate social responsibility specialist with more than 10 years of experience in the design, delivery, and evaluation of corporate road safety programs designed to support the delivery of national road safety strategies. Experience in corporate safety projects in developing and transition countries is desirable.

*For all team members, a demonstrated ability to work with and gain the trust of senior government officials and professional peers is essential.*
5.5 Terms of reference 5: Improving post-crash response.

**Project component 3**

**Technical assistance for improved post-crash response and medical emergency services**

**Background**

The Ouagadougou Safe System (OSS) project focuses on powered two-wheelers (PTW) and PTW users identified as being the most impacted by road accidents. It follows up on a previous study (Nikiema, et al, 2017) and relates to identified black spot areas\(^1\), namely:

- Centre-ville (surrounding area of Rond-Point des Nations);
- Grand Rond-Point de Tampouy (surrounding area of Rond-point de la Jeunesse);
- Carrefour de la Patte d'Oie (Rond-point Naba Wobgo);
- Avenue France-Afrique (surrounding area of Rond-point Patte d'Oie);
- Connection with the road to Bobo-Dioulasso (signalized intersection);
- Connection with the road to Fada N’Gourma (signalized intersection).

Post-crash response contains many different aspects. One of the most crucial factors is the first response on the spot and the transportation of victims to an adequate emergency unit. In Ouagadougou, the first response is mostly provided by bystanders and police officers. Transportation is done by the civil protection service whose officers had basic training and only have basic ambulances (not medical ambulances) available to operate. Most accidents with 2-wheelers (especially when occupants don’t wear their helmets) leads to severe injuries. More specific training of the ambulance staff on first care of trauma victims could prevent secondary injury.

**Objectives**

The objectives of the required consulting services are as follows:

- Support the improvement and evaluation of post-crash response and emergency medical services in the project area.
- Train post-crash response and emergency medical services staff and other potential first responders at crashes in improved post-crash response procedures.
- Support the preparation of a post-project program of improved post-crash response and emergency medical services throughout all Ouagadougou black spots, based on successful experience in the OSS project.

\(^1\) Plateforme De Surveillance d’Accidents De La Route à Ouagadougou [http://traumatismes.africasys.com/main]
Main tasks and outputs

The outputs of the required technical assistance services are as follows:

1. **Prepare and support improved post-crash and emergency medical response services programs in the OSS project.**
   - 1.1. Identify priorities for improved post-crash response services in the project (namely considering the outcomes of the Expertise-France project).
   - 1.2. Plan annual programs of (seasonally) scheduled improved post-crash response services in the project.
   - 1.3. Specify and evaluate costs of equipment and facilities, communications systems, and staffing requirements for improved post-crash response services in the project.
   - 1.4. Draft tender specification documents for the procurement of equipment and facilities.
   - 1.5. Provide on-the-job support for the implementation of improved rescue and post-crash response services in the project.

2. **Improve capacity of Ouagadougou’s emergency staff.**
   - 2.1. Prepare and deliver training programs for improved post-crash response services in the project.

3. **Evaluate improved post-crash and emergency medical response services programs in the OSS project.**
   - 3.1. Design and conduct the evaluations of improved post-crash and emergency medical response services in the OSS project (coordinated with the project monitoring and evaluation component).
   - 3.2. Recommend improvements to post-crash and emergency medical response services throughout all Ouagadougou black spots (to be fed back into programs developed in output 1.2), based on the evaluation results from 3.1.

4. **Exploitation of post-crash response services project results.**
   - 4.1. Draft guidelines detailing requirements for improved post-crash and emergency medical response services.
   - 4.2. Delineate a post-project, strategic program for country wide advancing of post-crash and emergency medical response services, including cost estimates and implementation schedule.

Scheduling of tasks

PHASE III & IV: Detailed project specification & Project implementation

- **Duration of project.** Prepare and support the preparation and implementation of improved post-crash response services in the OSS project, and related staff and other first responder training.
- **Final year of project.** Assist the preparation of a post-project, post-crash response services program and guidelines.

Professional skills and experience required

**Post-crash response specialist**

A specialist with more than 10 years of experience in the design, implementation, and management of post-crash response and first responder training programs in developing and transitional countries. Thorough knowledge of international best practice and experience in working with senior officials and specialist staff in national health agencies in developing and transitional countries is essential.
Emergency medical services specialist

A specialist with more than 10 years of experience in the design, implementation, and management of emergency medical services in developing and transitional countries. Thorough knowledge of international best practice and experience in working with senior officials and specialist staff in national health agencies in developing and transitional countries are essential.

For all team members, a demonstrated ability to work with and gain the trust of senior government officials and professional peers is essential.
5.6 Terms of reference 6: Reform of the regulations on powered two-wheelers and their use.

Project component 3, 4 & 5

Technical assistance for policy reforms related to powered two-wheelers, and powered two-wheelers users.

Background

The Ouagadougou Safe System (OSS) project focuses on powered two-wheelers (PTW) and PTW users identified as being the most impacted by road accidents. It follows up on a previous study (Nikiema, et al, 2017) and relates to identified black spot areas12, namely:
- Centre-ville (surrounding area of Rond-Point des Nations);
- Grand Rond-Point de Tampouy (surrounding area of Rond-point de la Jeunesse);
- Carrefour de la Patte d’Oie (Rond-point Naba Wobgo);
- Avenue France-Afrique (surrounding area of Rond-point Patte d’Oie);
- Connection with the road to Bobo-Dioulasso (signalized intersection);
- Connection with the road to Fada N’Gourma (signalized intersection).

Official statistics of 2016 (Cardoso, et al. 2018) indicates that 85% of all registered vehicles are powered two-wheelers. In reality it would probably be much more, because a significant percentage of 2-wheelers were not registered. A lot of existing regulations concerning these vehicles are not adapted to reality and to recent market developments. Besides that, people don't comply with rules concerning driver license, technical inspection and speed limits.

Powered two-wheelers are also the only way to be mobile for a large percentage of the population due to their low income and the low prices of these vehicles.

Adapting regulations based on a realistic and actual assessment of reality needs to be done.

Objectives

The objectives of the required consulting services are as follows:
- Evaluate
  - powered two-wheeler vehicle safety regulatory systems.
  - PTW users safety regulatory systems (driver and passenger)
- Make recommendations for
  - improved powered two-wheeler safety.
  - improved powered two-wheelers users' safety
- Support the implementation of
  - powered two-wheeler safety reforms.
  - Powered two-wheelers users' safety reforms

Main tasks and outputs

The output of the required technical assistance services are as follows:

1. Review powered two-wheeler vehicle and user safety standards and rules, compliance regimes, and safety performance in the OSS project.

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12 Plateforme De Surveillance d’Accidents De La Route à Ouagadougou http://traumatismes.africasys.com/main
1.1. Quantification of the scale of powered two-wheeler vehicle/user transport in the OSS project and projected traffic growth and safety performance over the coming decade

1.2. Benchmarking of powered two-wheeler vehicle/user safety standards and rules, compliance regimes, and safety performance in the OSS project, countries and region against international country and regional best practice.

2. Recommend reforms to powered two-wheeler vehicle/user and infrastructure performance safety standards and rules and compliance regimes in the OSS project.

2.1. Specification of powered two wheeler vehicle/user safety reform options in the OSS project with estimated costs and benefits, identifying the preferred option

2.2. Preparation and delivery of training programs on recommended reform option to the relevant OSS road safety project staff.

3. Support the implementation of recommended reforms.

3.1. Specification of a powered two wheeler vehicle/user safety reform implementation strategy, identifying related consultation processes, a legislative change program, promotional requirements, and monitoring and evaluation systems

3.2. Preparation of a post-project program for ongoing reform activities, including program cost estimates and implementation schedule.

Scheduling of tasks

PHASE III & IV: Detailed project specification & Project implementation

- **Duration of project.** Support the powered two-wheeler vehicle/user safety policy reform process in the OSS project and related staff training.

- **Final year of project.** Support the preparation of a post-project program for ongoing powered two-wheeler vehicle safety reforms.

**Professional skills and experience required**

**Powered two-wheelers and user safety specialist**

A specialist with more than 10 years of experience in the area of powered two wheeler vehicle and user safety. Knowledge of and experience in international standards for powered two wheeler vehicles and the international powered two wheeler safety best practices, including testing and certification are essential. Previous experience working in national powered two wheeler safety programmes, preferably in a developing or transitional country, or for an international road safety agency active on powered two wheeler safety is desirable.

**Powered two wheeler driver testing and licensing specialist**

A specialist with more than 10 years of experience with powered two wheeler driver training, testing, and licensing in a national jurisdiction or an international organisation active on Powered Two Wheeler safety. A thorough knowledge of international best practice— including graduated driver licensing systems—is essential. Previous experience in the provision of advisory services to a national driver testing and licensing agency in a developing or transitional country is desirable.

**Registry management specialist**

A specialist with more than 10 years of experience in the management of modern registry systems for vehicles and drivers and the related business procedures and technology. Extensive experience working
at the senior management level in a national registry is essential. Previous experience working with a national registry in a developing or transitional country is desirable.

**Road safety analysis specialist**

An internationally recognized specialist with more than 10 years of experience conducting scientific analyses of the road environment, vehicle, and human factors contributing to road crashes and injuries related to Powered Two Wheeler use. Hands-on experience in quantitative evaluations of road safety interventions and outcomes is essential. Experience in road safety analyses in developing and transitional countries is desirable.

**Road safety legislation specialist**

A specialist with more than 10 years of experience in transport sector legislation, with specific knowledge of Powered Two Wheeler related traffic safety legislation for and regulation of road networks in a national context. Previous experience with road safety legislation in developing or transitional countries is desirable.

*For all team members, a demonstrated ability to work with and gain the trust of senior government officials and professional peers is essential.*

**Support from national, regional, and international industry organizations**

Valuable support for the driver training–related aspects of the recommended powered two wheeler vehicle driver safety reforms can be provided by industry organizations with proven experience in the management of driver safety. Support from the International Motorcycle Manufacturers Association (AIMM) may be helpful for vehicle specification issues.
## 5.7 Terms of reference 7: Implementation of monitoring and evaluation systems

**Project component 5**

*Technical assistance for project management support and the implementation of monitoring and evaluation systems, performance measures and periodic surveys*

### Background

The Ouagadougou Safe System (OSS) project focuses on powered two-wheelers (PTW) and PTW users identified as being the most impacted by road accidents. It follows up on a previous study (Nikiema, et al, 2017) and relates to identified black spot areas, namely:
- Centre-ville (surrounding area of Rond-Point des Nations);
- Grand Rond-Point de Tampouy (surrounding area of Rond-point de la Jeunesse);
- Carrefour de la Patte d’Oie (Rond-point Naba Wobgo);
- Avenue France-Afrique (surrounding area of Rond-point Patte d’Oie);
- Connection with the road to Bobo-Dioulasso (signalized intersection);
- Connection with the road to Fada N’Gourma (signalized intersection).

Developing road safety interventions and implementing initiatives at different levels is of course recommended. But they must be based on good and reliable data, not only on general accident statistics, but also on other key performance indicators, furthermore, the effects of interventions have to be assessed. Only in this way, may actions be effective and their effect proved, and pleading for continued investment in road safety interventions be successful.

### Objectives

The objectives of the required consulting services are as follows:
- Advise on and support the designated lead and road safety agencies arrangements, coordination structures and working procedures, and project promotional activities for the OSS project.
- Train designated lead and road safety agencies’ staff in project coordination and promotional support roles.
- Support the preparation of a post-project road safety program.
- Support the establishment of project monitoring and evaluation systems in the OSS project.
- Train monitoring and evaluation agency staff, and associated regional and national consultants, in the implementation and management of the monitoring and evaluation systems in the OSS project.
- Support the preparation of a post-project program for the establishment of a monitoring and evaluation system, based on successful experience in the OSS project.

### Main tasks and outputs

The output of the required technical assistance services are as follows:

1. **Advise on and support OSS project management.**
   1.1 Specification of project coordination arrangements and preparation of related schedules for meetings of the project’s steering group, working group, and consultative group and guidelines for the content and conduct of the meetings and related activities, including project promotional initiatives
   1.2 On-the-job support for the implementation of OSS project management meetings and activities.

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2. Evaluate the efficiency and effectiveness of the monitoring and evaluation systems in the OSS project (and control corridors and areas).

   2.1 Design and conduct of monitoring and evaluation system review
   2.2 Revision of monitoring and evaluation procedures (to be fed back into procedures developed in output 1.1), based on the evaluation findings in the OSS project (and control corridors and areas).

3. Train designated
   - lead and road safety agencies and stakeholders’ staff in OSS project coordination and promotional support roles.
     3.1 Preparation and delivery of training programs in the use of the guidelines prepared for the content and conduct of OSS project management meetings and related activities.
   - monitoring and evaluation agency staff, and associated regional and national consulting company staff, in monitoring and evaluation systems.
     3.2 Preparation and delivery of basic and advanced training programs in the implementation and management of monitoring and evaluation systems.

4. Design and support project monitoring and evaluation systems for the OSS project.
   4.1 Specification of road safety performance measures in the OSS project (and control corridors and areas) to monitor risk exposure and road network characteristics, final safety outcomes, intermediate safety outcomes, and intervention outputs, as well as sampling frames for the surveys required to monitor identified measures, quarterly and annual reporting procedures and formats, and evaluation procedures to assess effectiveness of interventions
   4.2 Draft tender specification documents for the procurement of the required survey equipment and data processing and storage systems.
   4.3 Procedural guidelines for the conduct of surveys, data processing, and quarterly and annual reporting.
   4.4 Identification of suppliers of data surveying services with sufficient capacity to undertake monitoring programs in the OSS project (and control corridors and areas)
   4.5 Draft tender specification documents for the procurement of the required data surveying services
   4.6 On-the-job support for the baseline and ongoing data surveys; data processing, storage, and analysis; and the preparation of quarterly and annual performance reports
   4.7 Review (and adjustment) of project results indicators using the baseline measures and the first 12 months of survey data.

5. Support the preparation of a post-OSS project program and guidelines of a monitoring and evaluation system throughout all Ouagadougou black spots.
   5.1 Preparation of a post-project program of integrated activities for all OSS project’s components and related guidelines, including program cost estimates and recommended implementation schedule
   5.2 Specification of designated lead agency reforms and multisectoral partnership and stakeholder arrangements for sustained improvements in road safety.
   5.3 Post-OSS project monitoring and evaluation program, including sampling frames for surveys of identified performance measures, program cost estimates, and implementation schedule.
   5.4 Guidelines for data surveys, data processing and storage, reporting of results, and performance evaluation throughout all Ouagadougou black spots.

Scheduling of tasks

PHASE IV: Project implementation
- Duration of project.
  o Support the designated lead agency management of the OSS project
  o Design and support the implementation, evaluation, and revision of monitoring and evaluation systems in the OSS project and related staff training
- Final year of project.
  o Support the preparation of a post-project program and guidelines, and associated lead agency reforms, for the improvement of road safety performance.
  o Prepare a post-project program and guidelines for the monitoring and evaluation of safety performance throughout the OSS

Professional skills and experience required

Road safety management specialist
Internationally recognized road safety management specialist with more than 10 years of leadership of experience in the development and implementation of national and regional road safety strategies. Demonstrated success in working with lead agencies and associated safety-related agencies at the departmental head and ministerial levels is essential.

Road safety analysis specialist
An internationally recognized specialist with more than 10 years of experience in conducting scientific analyses of the road environment, vehicle, and human factors contributing to road crashes and injuries. Hands-on experience in quantitative evaluations of safety interventions and outcomes is essential. Experience in road safety analyses in developing and transitional countries is desirable.

Monitoring and evaluation specialist(s)
One or more specialists with more than 10 years of experience in the design and implementation of traffic, vehicle, and road user monitoring and evaluation systems in the road environment. Knowledge of sample design methods and related measurement equipment requirements is required. Experience in road safety monitoring and evaluation in developing and transitional countries is desirable.

Community survey specialist
A specialist with more than 10 years of market research experience with quantitative and qualitative community attitude surveys. Experience in conducting community attitude surveys in developing and transitional countries is desirable.

For all team members, a demonstrated ability to work with and gain the trust of senior government officials and professional peers is essential.

Support from the International Road Traffic Accident Database Group (IRTAD)
IRTAD support is recommended for the delivery of these outputs.
6 References


Plateforme De Surveillance d'Accidents De La Route à Ouagadougou http://traumatismes.africasys.com/main#
