REPORT ABOUT CROWDSOURCING 2

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<thead>
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<tr>
<td>EC</td>
<td>European Commission</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<td>ARSO</td>
<td>African Road Safety Observatory</td>
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Executive Summary

The African Road Safety Observatory is one of the main results of SaferAfrica project. It is a web portal that combines both the traditional functions of gathering, analysing and sharing road safety performance data and a more innovative one aimed at actively involve road users and stakeholders to report data and road safety issues and to provide ideas to improve road safety in Africa. It can be seen as a "participative" web portal, in which various stakeholders can find data and specialised information and provide opinions and information on specific road safety problems.

This deliverable is a result of the activities undertaken in Task 8.2: Crowdsourcing on road safety in Africa. The task is focused on the management of the "participative" area of the African Road Safety Observatory, developed in Task 4.5: Setup of "participative" Road Safety Knowledge and Data Centre. A very well-known problem common to several African countries is lack of available and reliable road safety data sources to support decision making (crash exposure data, crash data, road safety performance indicators). The Task is aimed at bringing new information into play by relying on African online communities, to highlight and track existing and emerging road safety issues in African countries.

The main aim of this document is to describe the results of the analysis of data collected from the SaferAfrica crowdsourcing tool.

In transport applications, crowdsourcing for data collection is quite popular and relies on the use of mobile devices (e.g. smartphones) acting as sensors to fill a gap where traditional traffic monitoring sensors do not exist or are not available for real time reporting.

Within the SaferAfrica project, crowdsourcing would be addressing general (country level) needs and problems of African citizens. More in detail, in SaferAfrica project, crowdsourcing will be used to:

- Collect opinions and road safety needs of an African country from African citizens;
- Report general road safety issues at country level;
- Propose ideas to improve road safety in the country of origin.

To reach the largest number of users the survey “Tell Us What’s Needed in Your Country” was established and disseminated.

According to the collected data it was received a feedback from 17 African Countries which consists of 37 replies: 213 reports and 14 proposals. The majority of reports and proposals came from Cameroon, Ethiopia, Guine and Zambia due to a higher number of involved stakeholders in those countries. Analysis of collected data showed that there could be defined the significant problems in Road Safety in African countries. Thus, countries suffer problems in all the sectors, proposed to choose while reporting: Unsafe Roads, Risk behaviour of road users, Road Safety Management, Unsafe vehicles, Poor post-crash care. But in spite of the presence of answers in all requested
categories, the responders have reported more on the problems of Unsafe Roads and User Behaviour. Also the greater problems could be observed for Urban Roads, Traffic Rules Violations, Speeding of the vehicles and Other subcategories (such as crossing facilities or road safety campaign). The afflicted road users are pedestrians and car occupants who are directly endangered by unsafe roads and inappropriate behaviour.
1 Introduction

1.1 Background

Safer Africa project aims at establishing a Dialogue Platform between Africa and Europe to improve road safety on the African continent. An important objective of the project is to establish a dialogue involving not only African stakeholders but also the general society.

SaferAfrica dissemination activity (Work Package 8) promotes outcomes towards science and road safety development experts and authorities with the objective of increasing knowledge about road safety and traffic management across Africa (and beyond) — and, finally, of increasing its implementation. More specifically, SaferAfrica will engage with a wide range of audiences, which can be differentiated into 3 main target groups (De Angelis et al., 2016):

- The primary target group gathers scientific, technical and institutional end users within the project and on the Dialogue Platform.
- This secondary target cluster includes national and international authorities, decision makers, policy makers and funders (national authorities in Africa, international bodies like World Bank, African Development Bank and Islamic Development Bank).
- The last target group corresponds to the society in general. This means that the awareness about the project should be promoted so that all the citizens can be informed, involved and engaged.

Within this context a road safety knowledge and data centre web site, namely the African Road Safety Observatory has been developed within Task 4.5 and published in July 2018. This web portal includes a specific area dedicated to African stakeholders and citizens’ involvement.

1.2 Outline of task 8.2: Crowdsourcing on road safety in Africa

This task is focused on the management of the “participative” area of the African Road Safety Observatory, developed in Task 4.5. A very well-known problem common to several African countries is lack of available and reliable road safety data sources to support decision making (crash exposure data, crash data, road safety performance indicators). This task is aimed at bringing new information into play by relying on African online communities, in order to highlight and track existing and emerging road safety issues in African countries. This includes:

- Developing and managing crowdsourcing campaigns to gather end users’ feedbacks on specific road safety issues in Africa and establishing, when needed, a discussion on relevant aspects;
- Analysing of collected opinions, reported road safety concerns and proposed solutions;
- Periodical reporting on the participation level and the analysis of citizens and stakeholders’ feedbacks.
1.3 Structure of the report

This document is the second deliverable of Task 8.2 and aims at presenting the general framework for crowdsourcing in SaferAfrica project and describe the adopted crowdsourcing tools.

The document is divided in 5 chapters. The first chapter describes shortly the SaferAfrica project and Task 8.2: Crowdsourcing on road safety in Africa. The second chapter introduces the concept of crowdsourcing. The third chapter presents the SaferAfrica crowdsourcing tools, provides instructions for their use and management and describes survey undertaken into SaferAfrica crowdsourcing activities. The fourth chapter provides a preliminary analysis of the feedbacks collected up to 31/03/2019. Chapter 5 concludes.
2 Crowdsourcing in Safer Africa project

2.1 SaferAfrica Crowdsourcing objectives

As briefly introduced, the African Road Safety Observatory is a web portal that combines both the traditional functions of gathering, analyzing and sharing road safety performance data and a more innovative one aimed at actively involve road users and stakeholders to report data and road safety issues and to provide ideas to improve road safety in Africa. It can be seen as a “participative” web portal, in which various stakeholders can find data and specialized information and provide opinions and information on specific road safety problems.

A reserved area is available to the members of the Dialogue Platform created by SaferAfrica project to encourage and facilitate constructive engagement and dialogue among policy makers, researchers and other stakeholders on road safety in Africa. The Dialogue Platform is composed by a Stakeholders Group of 190 experts as well as a Management Board including 10 top level international Institutions active in the field of road safety (WHO - World Health Organization, FIA, UNECA –United Nation Economic Commission for Africa, World Bank, PIARC – World Road Association, IRF- International Road Federation, AfDB African Development Bank, ITF – IRTAD, International Road Transport Union, beyond, of course, the European Commission).

The involvement of citizens is expected through crowdsourcing functions implemented in the Observatory (i.e. functions/tools allowing the contribution of all stakeholders to the development of the background). The scope of the SaferAfrica crowdsourcing would be addressing general (country level) needs and problems of African citizens. More in detail, in SaferAfrica project, crowdsourcing will be used to:

- Collect opinions and road safety needs of an African country from African citizens;
- Report general road safety issues at country level;
- Propose ideas to improve road safety in the country of origin.

The main target are African citizens and community groups; however, the tool will be open to all, giving the possibility to local authorities, transport policy makers, road safety experts and other stakeholders in Africa to enter in the open discussions.

The SaferAfrica crowdsourcing platform needs to be easily reached and used, taking the form of an online application. The platform has been integrated within the African Road Safety Observatory.

2.2 The SaferAfrica crowdsourcing tools

In the following paragraph a brief description of the SaferAfrica crowdsourcing tools is provided; namely the reporting tool and the web surveys.
Further tools developed within the project are: the **SaferAfrica Dialogue Platform tool** (see Usami et al., 2018), as above described, a forum for discussing the evidence and the recommendations coming from the SaferAfrica project and to foster their adoption in the fields of road safety; the **SaferAfrica Webinars series**, used to promote in a relatively short time period (30 minutes) SaferAfrica key findings so as to foster the dialogue among the experts and the African stakeholders.

It should be noted that **between these tools there is a strong interconnection** as the findings gained from e.g. the citizens through web surveys can be then discussed among stakeholders using the **Dialogue Platform**.

### 2.2.1 Reporting tool

Crowdsourced data can be related to perceived road safety issues, needs and suggestions to improve road safety in a country. Residents, closer to the existing problems, act like sensors in a country filling the gap of the lack of information available. The **reporting tool of the African Road Safety Observatory** is targeted to African citizens and road safety stakeholders. Due to its nature as a mean to involve a multitude of people, the tool is provided in **three languages** (English, French and Portuguese) and can be easily reached by both desktop and mobile devices (tablet or smartphone) using an internet connection, with a view to getting the largest number of users. Participation is promoted by dissemination through social media campaigns and the active involvement of African road safety stakeholders.

**To begin the process of reporting** a road safety issue/solution, one must first create an account in the **African Road Safety Observatory** web site. This can be done at the **Register** page.

Once an account is created, log into the new account. Move your cursor to the top of the horizontal menu bar and click on the word **“Crowdsourcing”** from the “Participate” drop down list. The Crowdsourcing page has 4 different tabs:

- Explore
- Report or Propose a solution
- Proposals
- Reports

The **“Explore” tab** is a tool for viewing on map the confirmed reports and proposals (Figure 1). On the right side of the page there is a filter selection that allow users to choose which markers will be shown on the map: either reports, proposals or their subcategories.
Figure 1 The “Explore” tab with map and filters

Clicking on a marker on the map shows a popup containing the information about the report/proposal and a “Comments” button. Clicking on this button redirects to the page of the report/proposal where users can see posted comments and/or submit their own, otherwise clicking outside of the popup will return them to the map.

The “Report or Propose a solution” tab is the reporting tool. Here is shown a map with a placeholder on it. Using drag-and-drop functionality, users can move the placeholder over the country they would like to report. After positioning the placeholder, a submission form is opened. Moving at the edge of the map while holding the marker will move the map in that direction. Once released the marker over an African country (otherwise an error popup will show off), users can fill the submission form.

Note that users must be logged in to submit new reports or proposals, otherwise they will be asked to “Register” or “Sign in” in place of the “Send” button.
Starting from February 2019 it is available a “Tell Us What's Needed in your Country!” survey on the African RSO web-site (Figure 3). This specific survey is aimed at integrating the crowdsourcing reporting tool reach. To get the widest audience participating in the survey, it has been translated into three languages: English, French and Portuguese.
2.3 Web surveys

In contrast to the reporting tool, web surveys are more specifically targeted to African road safety stakeholders since, in most cases, they required a background in road safety topics. Surveys addressed different issues such as providing opinions on recommendations to be adopted within the African Road Safety Action, data collection priorities, travel habits and transferability of international road safety good practices in African Countries. All web surveys, are published in a dedicated page of the African RSO (Figure 4).

Survey questionnaires can be accessed in several ways: through a related Consultation space in the Dialogue Platform web tool (see Usami et al., 2018), by providing the page link to potentially interested stakeholders by e-mail or sharing it on social media. Anyone who visits the page can fill out the questionnaire. After the end of the survey/consultation answers data are easily exported on a spreadsheet through the Google Form functionality and then analysed.
2.4  Dissemination

Since the crowdsourcing aims to involve as many people as possible, the dissemination of the questionnaires and surveys plays a significant role.

Participation in SaferAfrica crowdsourcing is promoted in several ways, mostly through the SaferAfrica Newsletter¹ and social media possibly using the three languages: English, French and Portuguese. As already mentioned, the “Tell Us What’s Needed in your Country!” survey was launched into the AfricanRSO web-site to promote crowdsourcing (see Figure 5).

The members of the Stakeholders group were reached more formally through an invitation email.

Figure 5 News on SaferAfrica website

The project web-site section ‘News on SaferAfrica website’ acts as an amplifier of the African RSO crowdsourcing (Figure 5). This is further supported by promoting the relevant news about open Surveys on social media such as Twitter (Figure 6,) and LinkedIn (Figure 6) using the accounts of SaferAfrica project.

Figure 6 News on Twitter account (Left) and Linkedin (Right)
3 Crowdsourced Data Analysis

A key assignment within the SaferAfrica project is to thoroughly assess the needs of stakeholders involved in road safety in terms of knowledge and information tools and convey a clear view of current road safety practices followed in Africa. For this purpose, survey analysis was exploited.

Two analysis of the survey were made, one **quantitative**, to understand the reach and the general topics addressed by the respondents, and one **qualitative** to present some preliminary results-based analysis on crowdsourced data.

3.1 Quantitative analysis

The **aims of the quantitative analysis** are to understand:

- sharing between reports and proposals;
- the geographical distribution of the feedbacks;
- the coverage at continental and regional level;
- the level of engagement per country;
- the most frequently reported road-user categories perceived at risk;
- the most frequently reported Road Safety Pillars (and issues);
- the most frequently addressed Road Safety Pillars.

According to the collected data, up to March 31\textsuperscript{st} 2019, 23 reports and 14 proposals have been recorded coming from 18 African Countries (Figure 7).

![Figure 7 Reports-Proposals ratio](image)
The analysis by African regions shows that most of the reports come from Eastern and Western parts of Africa (Figure 8). This is also reflected by the distribution of the stakeholders within the SaferAfrica Dialogue Platform.

By involving stakeholders in the project, the SaferAfrica team received responses mainly from countries in East and West Africa which explains the higher level of feedback on the survey from these parts of the continent. For better visualization the country distribution is depicted in Figure 9.

![Figure 8 Geo distribution of feedback](image)

![Figure 9 Responses visualization on Africa map](image)
The majority of reports and proposals came from Cameroon (21%), Ethiopia (13%), Guinea (13%) and Zambia (13%) (Figure 10). The higher level of feedback from these countries is due to a higher number of involved stakeholders from those countries.

In Figure 11 it is depicted the Distribution of response / proposal by country. As was mentioned before, there are 5 responses from Cameroon – 4 reports and 1 proposal, from Guinea and from Zambia there are 4 and 3 replies respectively.

The survey requires to define a general road safety issue that the respondent want to report on. Road safety issues are presented in 5 categories: Poor post-crash care, Risk behavior of road users, Road Safety Management, Unsafe Roads and Unsafe vehicles. When composing a report, users
select the category to which their application most strongly relates, selecting it from the drop-down list. As shown in the Table 1 Category distribution of stakeholders’ feedback and Figure 12 the most reported categories are Risk behavior of Road Users and Unsafe Roads. Thus, in spite of the presence of answers in all requested categories, the responders have placed greater emphasis on the problems of roads and user behavior. Also as depicted in the Figure 13, according to the survey feedback, the greater problems could be observed for Urban Roads, Traffic Rules Violations, Speeding of the vehicles and Other subcategories (such as crossing facilities, road safety campaign and education and etc., according to analysis of some responses with selected subcategory).

Table 1 Category distribution of stakeholders’ feedback

<table>
<thead>
<tr>
<th>Area</th>
<th>Poor post-crash care</th>
<th>Risk behaviour of road users</th>
<th>Road Safety Management</th>
<th>Unsafe Roads</th>
<th>Unsafe vehicles</th>
<th>Total</th>
</tr>
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<td>Northern Africa</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Eastern Africa</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Western Africa</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Middle Africa</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>13</td>
<td>8</td>
<td>13</td>
<td>2</td>
<td>37</td>
</tr>
</tbody>
</table>

Figure 12 Category distribution of stakeholders’ feedback
Users were asked to select the category of users which is affected by the reported issue. According to the responses (Table 2, Figure 14) the most vulnerable categories are Pedestrians and Car occupants. The high level of pedestrians and car occupants’ vulnerability is fairly expected because of reported Unsafe Roads and Risky User Behavior categories in which the problem directly affects the vulnerability of this type of users.

**Table 2 Distribution of user category**

<table>
<thead>
<tr>
<th>Area</th>
<th>Car occupants</th>
<th>Cyclists</th>
<th>Other</th>
<th>Pedestrians</th>
<th>Powered Two wheelers</th>
<th>Professional drivers</th>
<th>Public Transport users</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Africa</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Eastern Africa</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Western Africa</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>12</td>
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<tr>
<td>Middle Africa</td>
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<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7</strong></td>
<td><strong>1</strong></td>
<td><strong>5</strong></td>
<td><strong>15</strong></td>
<td><strong>5</strong></td>
<td><strong>3</strong></td>
<td><strong>1</strong></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>
3.2 Qualitative analysis

The primary aim of a Qualitative Research is to present some preliminary results providing some insight on the current road safety situation in some African countries based on crowdsourced data. As already mentioned, using the crowdsourcing tool of the African RSO, African citizens can report a road safety-related problem in their country by locating it into a map or propose a solution to improve road safety. The analysis helps to reflect the current conditions in Africa and provides the knowledge to be used for road safety-related decision making.

According to the data collected up to March 2019, 35 feedbacks have been received from 18 African Countries – 23 reports and 14 proposals. The majority of them came from Cameroon (21%), Ethiopia (13%), Guinea (13%) and Zambia (13%). For this analysis, French and Portuguese feedbacks were translated into English.

As already presented, when reporting a problem (or a solution), users assigned a category choosing the most appropriate from: Road Safety Management, Unsafe Roads, Unsafe vehicles, Risk behaviour of road users, Poor post-crash care. As shown in the Figure 12 the most reported category are Risk behaviour of Road Users and Unsafe Roads.

Unsafe Roads. The majority of the problems reported in this area concern poor road conditions such as lack of median barriers, pedestrian crossings, footpaths and cycling facilities, inadequate traffic signs, road markings and absence of any kind of traffic-calming measures which lead to a high accident rate and injury risk.
User Behaviour. Drivers are reported to not respect traffic rules and to be often distracted by other passengers or pedestrians. The inappropriate use of socio technological gadgets (e.g. smartphones, ear-piece, car stereos) has been also highlighted. Some drivers were not trained in a proper, well licensed driving school. For example, in Nigeria some women are trained by their husbands rather than by driving school. Passengers and drivers neglect using seat-belts, cyclists prefer to ride without helmets. In Zambia, an observation study undertaken by the Zambia Road Safety Trust (ZRST) in Lusaka revealed an astonishing number of parents who allow their children to travel in cars without restrained in seatbelts or properly restrained, placing their lives and safety at risk. According to the Zambia police, over 1598 children suffered serious traffic injuries in 2014 – that’s almost three children per day in preventable road accidents. Some feedbacks complain about pedestrians and cyclists behaviour, disregarding the rules, walking/riding on the roadway, crossing at unauthorized (or simply unidentified) places, creating a high risk of accidents. This reflects in some way a simplistic and resigned sense that road safety is a problem due to noncompliance of road users to traffic law. So, for example, in Benin, as reported by a survey participant: “Vulnerable users, namely pedestrians (schoolchildren, pupils, workers, people with disabilities, the elderly, etc.) and motorized two-wheeler drivers are involved in about 6% of road accidents in Benin. Three main causes are to be noted when pedestrians are involved in collisions: - irregular crossing by pedestrians, - the refusal of priority for pedestrians by motorists, drivers of heavy goods vehicles, motorcyclists and cyclists, - finally road infrastructures unsuitable for pedestrians to facilitate their circulation. This justifies the registration of several cases of accidents in circulation and around schools in Benin. It is therefore important that actions are taken to protect pedestrians and especially learners.”

Unsafe Vehicles. Poverty prompts drivers to overload their vehicles to make extra money as well as lack of public transport which create another substantial problem of overloaded vehicles. For example, in Cameroon a survey of the young schoolchildren who use two motorized wheels revealed that when there are many of them on a motorcycle they pay half price. The “motorcycle taximan” also wants to earn a little more, therefore, he often does not drive off until the number of passengers on the motorcycle reaches 4 or more.

Post-crash care. Along with these issues low-level post-crash data, lack of adequate capabilities in the health sector and medical post-crash help, high pollution were also raised. For example, in Guinea, for lack of an appropriate response, when a traffic accident occurs, it is the witnesses or at least bystanders who provide assistance to the victims. These “people of good will” who are not initiated into first aid actions dangerously manipulate the victims, thus compromising their chance of survival. Even if a toll-free number exists, this is often ineffective and is used for other types of rescue, such as fires, drownings, etc. As for the data sources (Police, Gendarmerie, Fire Brigade, Hospitals, etc.), they are totally disconnected from each other.

Road Safety Management. Lack of government policies that will compel road users to adhere to safety guides, incomplete alignment of policies and laws and insufficient funding, poor institutional coordination, lack of funds to implement the recommendations, corruption, and lack of campaign on Road Safety only exacerbate the already complicated situation in African countries. The suggestions and proposals on how to improve the situation are based on a priority to establish road infrastructure safety management procedures (Persia et al., 2016). The implementation of car-free pedestrian zones, clearly marked zebra crossings, footpaths on both sides of all streets, pedestrian and cycle traffic lights, intersection modifications, cycle streets, cycle lanes and cycle paths in order
to save lives according to European experience could be a solution to the majority of problems in Unsafe Road sector. There should be adequate advocacy, sensitization and awareness campaigns on drug abuses, alcoholism using traditional rulers, schools, mosque, churches, motor-parks, markets and road shows. Vehicle owners should be mandated to pass through driving schools and obtain driving license before driving any type of motor vehicles on roads. The development of public transport for those who cannot afford the luxury of taking a city taxi and who is compelled to use overloaded vehicles is a way to improve this poser.

The absence of leading road safety management agencies in African countries is felt at the root of the fuzzy institutional governance with conflicting interests. In a report about the situation in South Africa, it is stated: "All progressive and economically viable institutions like airlines, medical institutions, financial institutions etc. in South Africa are heavily regulated manned by trained professionals. If the South African taxi industry is to progress and improve the road safety record, it has to embrace the professional culture through capacity building, training and be regulated. To achieve this, the South African Government is obliged or to outsource regulators to manage the industry by training all the key stakeholder in line with the required service delivery."

Indeed, there are scattered road safety structures at different levels without real collaboration and coordination. In general, it is clear to everyone that without a coordinated management in the field of road traffic and safety it will be impossible to achieve the expected results in improving road safety in African countries.
4 Conclusions

This document presents the main objectives of crowdsourcing in the SaferAfrica project and provides a description of the participatory tool developed within the project.

Collecting opinions and highlights on road safety needs from African citizens could be a useful support for assessing general road safety needs at country level, especially considering the poor availability and reliability of road safety data in many Africa countries. Another important feature is gathering new ideas to improve road safety in a country from residents, closer to the existing issues. To this end, the SaferAfrica crowdsourcing tool needs to be open to all, giving the possibility to local authorities, transport policy makers, road safety experts and other stakeholders in Africa to enter in the open discussions.

Due to its very nature, SaferAfrica crowdsourcing tool is a responsive web application, which can be used either by desktop devices, or via mobile devices (tablet or smartphone), using the internet connection to reach the largest number of users.

To begin the process of reporting a road safety issue/solution, the user must first create an account in the African Road Safety Observatory web site and log into the new account. Then using the menu bar and following the easy instructions provided the user is guided in leaving his/her report or solution. The web tool enables discussion of submitted by adding comments to existing problems/solutions reported. When clicking on an existing post there is the opportunity to leave a comment.

To promote data collection citizen surveys were created and managed through the Google Form tool. One of them is “Tell Us What's Needed in Your Country”, that was disseminated between stakeholders involved in the project, in the ARSO website, Twitter and LinkedIn accounts.

According to the collected data it was received a feedback from 18 African Countries which consists of 37 replies: 23 reports and 14 proposals. The majority of reports and proposals came from Cameroon, Ethiopia, Guinea and Zambia due to a higher number of involved stakeholders in these countries.

Analysis of collected data on crowdsourcing web-tool showed that there could be defined the significant problems in Road Safety in African countries. Thus, countries suffer problems in all the sectors: Unsafe Roads (lack of median barriers, pedestrian crossings and footpaths and cycling facilities, inadequate traffic signs and road markings), Risk behaviour of road users (neglect of seat-belt and helmet usage, disrespect of road rules, usage of psycho-active substances and alcohol on the road), Road Safety Management (Lack of government policies, incomplete alignment of policies, poor institutional coordination), Unsafe vehicles, Poor post-crash care (low-level post-crash data, lack of adequate in post-crash help, high pollution). But despite the presence of answers in all requested categories, the crucial problems are defined for Unsafe Roads and User Behavior. Also, the greater problems could be observed for Urban Roads, Traffic Rules Violations, Speeding of the vehicles and Other subcategories (such as crossing facilities or road safety campaign). The afflicted
road users are pedestrians and car occupants who are directly endangered by unsafe roads and inappropriate behaviour.

The proposals to improve the current situation are mainly focusing on the development of a unified system of road traffic management, which will include prompt control of roads and vehicles, carry out campaigns to improve road traffic education among all segments of the population and enhance the collaboration between institutions and agencies.
5 References


Main webpage of Google form. [Internet]. Available from: https://www.google.com/forms/about/

