African-European Dialogue Platform on Road Safety

Newsletter

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SaferAfrica Newsletter is the official, semi-annual newsletter from the Horizon 2020 SaferAfrica Project. Each SaferAfrica Newsletter issue aims to disseminate project updates as well as news and comments on road safety management. It is developed and compiled with contributions from the SaferAfrica Consortium Partners and relevant stakeholders.
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Road safety data collection and storage are critical for a series of procedures to improve road safety. However, capturing accurate and complete road safety data is a difficult and complex issue. The main problems faced when recording road accidents are the unclear determination of road accident location, insufficient or incorrect recording of information and insufficient accident coverage.

Concerning road safety data availability, it is widely known that there is a serious lack of road safety data in African countries. Even when data are available, for example through international databases (WHO, IRF), little is known about data collection systems, data definitions, etc. Only few countries dispose suitable time series of road fatality data and especially for the latest available decade 2005-2014, only 21 African countries have available data for more than five years. The greatest lack in data concerns risk exposure and safety performance indicators.

Another key issue is the comparability of the data and the potential of using different databases in a complementary way. Concerning the fatality data, different definitions are used among African countries. WHO provides the primary data as received by the national sources, in the country profiles of its reports which adjust them to the 30-days definition and publish them. However, these data are not directly comparable because of differences in the quality of data collection processes among the countries. In order to take into account under-reporting issues and achieve comparability, WHO has developed statistical models to estimate the number of fatalities. While IRF uses the 30-days definition for the killed persons in road accidents, the data that publishes are those reported by the national sources, which use different definitions. Thus, the data from different countries are not comparable without being processed first and attention is needed when combining the two databases.

Concerning the data on exposure and road safety performance, the comparability of the countries with available data is not totally reliable, since the data refer to different years, with a difference of more than ten years in some cases (e.g. road network density). Moreover, there is not much information on the collection methods that ensures an appropriate comparison.

Within SaferAfrica, recommendations for a minimum set of harmonized data collection procedures and definitions that could be applied in the short- to medium term to improve African data collection systems (based on the WHO Safety Data Manual) were drafted. The recommendations for all types of data (accident, exposure and safety performance) consist of a minimum set of data elements and a common collection system. In addition, a two-step approach is proposed, including the improvement and harmonization of the existing data and methods the collection of new harmonised data. As far as road accident data are concerned, the data collection form used by the police, is recommended to be revised frequently, include detailed information on the vehicles and road users involved in the accident, as well as adopt all existing standardized international definitions of variables and values. Concerning road fatalities, the international 30-days definition is recommended to be adopted by the African countries. Underreporting is also an issue that should be tackled, so that the databases are further improved and comparability of the data among the countries is reached. The data are recommended to be adjusted by means of linking police data with hospital data. When developing a common accident data system, the minimum data elements should be defined based on selection criteria, concerning the usefulness of the selected variables and values, the level of disaggregation and the difficulty of their collection. All variables and values should refer to casualty road accidents. Additionally, the accident data structure is suggested to comprise four categories of variables, which are related to crash, road, vehicle and road user characteristics. Regarding the exposure and performance indicators, the respective variables and values are recommended to be defined in a way that they will be compatible to the accident data. The exposure measures concern two groups of data, the road traffic estimates and the road user at risk estimates. Collection processes concern travel surveys and traffic count systems, while national registers may also provide useful and commonly used exposure data, such as population, drivers’ population, vehicle fleet etc.

Road safety performance indicators could be estimated either by using observational techniques or based on national statistics and data collected by national registers.
Inception Report: a useful instrument to reflect the road safety situation in a country

The cases of Cameroon and South Africa

by Research Centre for Transport and Logistics - CTL, Sapienza Università di Roma

An inception report serves as a primary input to facilitate discussions between the experts conducting road safety management capacity reviews on behalf of the SaferAfrica project and senior officials involved in road safety in a country. In addition, the inception report is useful for reflecting on the road safety situation in a country and it also serves to ensure that the stakeholders share a common understanding on how the project will be conducted.

An inception report will be prepared for road safety management and capacity review for five countries. The countries represent the main geographic areas of Africa and 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. The Road Safety Management Capacity Review provides an assessment of the extent to which Cameroon and South Africa agencies have the necessary elements in place as well ascapacity to achieve the road safety outcomes.

Cameroon lacks of central coordination

Cameroon is among the worst performing countries when it comes to road safety. The drivers, vehicles, and roads are generally with low standard and there is a lack of enforcement and supporting road safety infrastructure, all contribute to a declining road safety situation. The country lacks appropriate resources to remedy the current issues therefore skills are needed across all pillars: Road safety management, Safer roads and mobility, Safer vehicles, Safer road users, Post-Crash response to support a safe road system.

The functions relating to funding, legislation, monitoring and evaluation, research and promotion are not a real structural part of road safety management and appear to be the responsibility of one or more departments and/or ministries without any form of central coordination.

South Africa: a national strategy is needed

What Nelson Mandela said about poverty seems to be very true for road crashes as well: “Like slavery and apartheid, poverty is not natural. It is man-made and it can be overcome and eradicated by the actions of human beings.” This certainly applies to all these preventable road crashes and injuries.

South Africa has one of the worst traffic mortality rates in the world: 25.1 fatalities per 100,000 inhabitants.

The traffic accidents are by no means inevitable, caused by random, unpredictable events. On the contrary, traffic accidents are to a large extent predictable and preventable.

We have seen many examples worldwide that proving that road traffic injuries are not difficult to prevent.

There is a sound body of scientific evidence available to guide these human actions. We have to diagnose road traffic injuries in South Africa and come up with an effective national road safety strategy. This strategy should consist of two main components: a ‘management’ component and an ‘intervention’ component.

The reflection of road safety described in this report is no more than a quick scan. It needs to be supplemented by a combination of interviews and discussions as set out by the RSMCR assessment framework.
On 11 October 2017, in Marrakech within the 6th IRTAD Conference "Better Road Safety Data for Better Safety Outcomes", SaferAfrica workshop was held, titled: "Fostering Cooperation between Africa and Europe on Road Safety Observatories".

The SaferAfrica workshop was primarily aimed at enabling discussion among major SaferAfrica stakeholders, with a specific focus on International organizations on the topic of traffic accident data and our newly born African Road Safety Observatory.

Professor Luca Persia from the Research Centre for Transport and Logistics of "Sapienza" University of Rome chaired the Workshop in his capacity of SaferAfrica Project Coordinator, introducing the SaferAfrica Project approach and its main features. Following a rich agenda of interventions from the invited speakers generated a lively debate on the raised topics. A session of interventions from the public ended the workshop.

From stakeholder engagement to reality – check: main issues raised

Professor Persia presented the overall SaferAfrica approach and model, pointing at the stakeholder engagement as a key success factor for the entire project, which faces ambitious challenges with a view for providing sound policy recommendations on road safety data management.

Subsequently, Professor George Yannis, from the National Technical University of Athens presented the Pan-African Road Safety Knowledge and Data centre as a tool to enable stakeholders’ discussion in order to assess and produce useful recommendations for a safer Africa.

Ms. Tawia Addo-Ashong, from the African Transport Policy Program, SSATP—World Bank pointed at the urgent need for building multilevel partnership on road safety, at the same time highlighting the complexity of such a task.

Main focus should be on capacity building & good practices transferability, according to Mr. Benacer Boulaajoul from the Comité National de Prévention des Accidents de la Circulation - CNPAC, while working on the Country-level commitment should be a priority in order to enable the SaferAfrica Road Safety Observatory beyond Horizon 2020, Mr. Souleymane Abdallah from UNECA said.

Mr. Dominique Mignot, from IFSTARR, partner of the SaferAfrica Consortium, confirmed the project effort for fostering dialogue on road safety and traffic management. Mr. William Bird from the European Commission, DG Research, identified SaferAfrica approach itself as a key asset of the project, primarily focusing on openness and knowledge sharing. Adopting and maintaining a step-by-step approach, specifically taking into account the African context, was one of the recommendations raised by Mr. Fred Wegman from International Traffic Safety Data and Analysis Group - IRTAD. Critical issues, which make Africa different from Europe, namely: communication, technical support, extra time needed, should be properly taken into account according to Mr. Kacem Iaych from WHO. Finally, Maria Segui Gomez from Fédération Internationale de l’Automobile - FIA identified the work on a number of proper road safety indicators, to be tracked by International Organizations, as the core challenge for SaferAfrica.

Before ending the workshop, prof. Persia left the floor to participants in the room, which mainly pointed at stakeholder engagement as, again, the very key issue.

Prof. Persia, on behalf of the SaferAfrica Consortium thanked all the speakers and participants for the great interest showed in SaferAfrica Project and for all the useful points raised through the workshop, which will be of great usefulness for our future work.
Organised by the International Road Federation - IRF Geneva, the day before the official opening of the 18th edition of the IRF World Meeting, a Transport Ministers Forum was held in Delhi, India on 13th November 2017.

Highlighting how rise in road accidents is increasing burden on healthcare in low and middle-income countries including India, Union Minister of Health J.P. Nadda said about 48% of hospital beds in surgical wards are occupied by road traffic injury patients in these countries.

Nadda said road traffic deaths and injuries are forecast to rise by about 65% by 2020. In low and middle-income countries, these fatalities are expected to increase by 80% and the majority of these victims are the vulnerable road users (VRUs) - pedestrians, cyclists and two-wheeler riders. Nadda further said that the political commitment and a will to achieve can bring about significant and rapid decline in road injuries and requires planning at all levels, capacity creation, involvement of all sectors and good data.

Transport Ministers from eight countries along with Shri Yudhvir Singh Malik, Secretary (RT&H), Ministry of Road Transport & Highways, Mr. Jean Todt, UN Secretary General’s Special Envoy for Road Safety, Mr. Kiran K. Kapila, Chairman, IRF Geneva, heads of key international organisations and donor agencies, NGOs, private sector representatives were also present at the occasion.

The UN Special Envoy welcomed the reforms put forward by the Government of India to the Motor Vehicles Act and highlighted that, if adopted and implemented, these could save thousands of lives.

The Ministerial meeting culminated in the signing of the Delhi Declaration. Ministers and high representatives strongly reaffirm in the document their commitment to road safety. The Declaration stresses key road safety measures, including the importance of UN legal instruments, capacity building, Minimum Vehicle Safety Standards (including Electronic Stability Control Systems) and the need to mobilise funding.

The document encourages all the car manufactures to sign up to a UN agreement on minimum vehicle safety standards, covering passive and active safety requirements including making fitting of Electronic Stability Control (ESC) systems mandatory for all new vehicles by all the governments worldwide. Some major countries including Canada and Australia have already made installation of Electronic Stability Control (ESC) mandatory in all new vehicles. Electronic stability control (ESC) is an active safety feature designed to reduce the number and severity of motor vehicle crashes that result from a loss of control. ESC is very effective at reducing the number of severe motor vehicle crashes involving both passenger cars and sport utility vehicles (SUVs). As per various studies ESC reduces fatal single-vehicle crash risk by 49%, and fatal multiple-vehicle crash risk by 20% for both cars and SUVs. ESC also helps prevent rollovers.

The Delhi Declaration reaffirms the importance of improving road management systems and to introduce
road safety audits for new construction projects as well as road safety assessment programmes and star rating systems for the existing networks while recognising the need for capacity building to this effect. It emphasizes the need to strengthen pre-hospital care, including emergency health services and the immediate post-crash response, through the implementation of appropriate legislation, capacity-building and improvement of timely access to health care.

“Governments should commit to implement professional driver qualification frameworks, including training, certification and licensing, restricted hours of driving and working conditions with focus on addressing the main causes of accidents or crashes involving heavy commercial vehicles. Also they should commit to enhance road safety culture of all road users through road safety education in schools and awareness programmes, particularly in developing countries” said Mr. Kiran Kapila, IRF Chairman, speaking to the press after the release of the Delhi Declaration.

“Each country has to tailor the right solutions for its peculiar problems. Effective evidence-based measures do exist. We are all here to share our respective expertise and to support each other. Road safety is a personal matter as it concerns each and every individual,” he concluded.

Faithful to its mission “To promote the development of roads and road networks that enable access and sustainable mobility for all” the IRF keeps facilitating and fostering partnerships at all levels in the sector. It has been doing so for the past 70 years.
The EU funded SafetyCube project has opened up the new road safety Decision Support System (DSS) to enable policy-makers to have access through the web to a vast repository of information about road risks and safety measures. The DSS has been developed by teams from 17 organisations in 12 different countries over a three year period. It is address the problems often encountered by policy makers who aim to introduce new road safety measures.

- What are the risks and problem areas that need to be addressed to improve safety? What is the relative contribution to casualties and to societal cost?
- What are the most appropriate measures that will address these risks? How effective are they? Which are the most cost beneficial?
- What is the supporting evidence and how can it be accessed to underpin formal policies?

Much of the information about risks and measures can be found in the scientific literature but this is often difficult to access and to structure by policy-makers and their advisers. SafetyCube has reviewed many thousands of published studies to extract the relevant data and to compile them in a friendly, searchable format. It now includes the information from over 1,200 studies with more than 7,500 estimates of risks/measures effects on behaviour infrastructure; vehicle, post impact care.

Every estimate of the magnitude of a risk or a specific measure is coded and made available through the website.

In addition to direct access to the key data on road safety risks and measures, the project has produced over 150 Synopses, which consolidate this information for specific risks and measures. Each full synopsis presents a short summary, a more detailed scientific overview and a section with the full supporting data.

In many cases policy makers prefer to have information about the cost effectiveness of a measure in order to provide impact studies. The DSS includes more than 50 cost-benefit analyses of specific measures that are made available as stand-alone documents, searchable through the DSS interface. The DSS also includes a custom cost effectiveness calculator that enables users to base estimates on the most recent information about road safety costs and benefits. Where required, default values can be over-written by the users own data.

Delivering a long waited powerful tool

The SafetyCube DSS objective is to provide the European and global road safety community with a user friendly, web-based, interactive Decision Support Tool to properly substantiate their road safety decisions for actions, measures, programmes, policies and strategies to be implemented at local, regional, national, European and international level.

The SafetyCube DSS is the first integrated road safety support system developed in Europe. It offers for the first time scientific evidence on: risks and not only measures; risks and measures not only on infrastructure; a very large number of estimates of risks and measures effects; links between risks factors and measures.

The SafetyCube DSS aims to be a reference system for road safety in Europe and will be constantly improved and enhanced.

The SafetyCube DSS can be accessed through www.roadsafety-dss.eu
The cost and burden to society caused by the annual death and serious injury on roads is heavy. In fact, it is recognized that safety issues are common in the EU and beyond, requiring a worldwide cooperative approach. Indeed, investing in collaborative R&I to prevent such fatalities from occurring in the first place is a priority in the Horizon 2020 in order to drastically reduce congestion and accident costs, and virtually eradicating road deaths by 2050. This aim is strengthened by the Transport White Paper, which calls for better actions to “move towards the target of zero fatalities in road transport by 2050 and reduce by half the number of road deaths by 2020.”

In particular, the Societal Challenge 4 “Smart, Green and Integrated Transport” of Horizon 2020 is targeted to the achievement of “a European transport system that is resource-efficient, climate-and-environmentally-friendly, safe and seamless for the benefit of all citizens, the economy and society”, taking the steps from the Transport White Paper 2011 as well as from the ambitious new policy targets set by the EU Road Safety Action Plan 2011-2020, aiming at a 50% reduction in fatalities between 2010 and 2020.

The key challenges of Road Safety span from the high risks for Vulnerable Road Users (2-wheelers, Pedestrians), the increasingly unsafe behavior (drugs, medicines, distraction, use of mobile phones while driving, etc.), and the growing number of serious injuries to the missing investment in road infrastructure maintenance and construction, the new generation of alternatively powered, sub-compacts cars (EV), the incompatibility of vehicles and structures, and the ageing population.

How do we tackle such challenges?

The EU Road Safety Action Plan sets out a number of initiatives focusing on improvements to vehicles, infrastructure and road user behavior, namely: Improved safety measures for trucks and cars; Building safer roads; Developing intelligent vehicles; Strengthening licensing and training; Better enforcement; Targeting injuries; A new focus on motorcyclists.

To be effective these initiatives require an increase in complementary research and innovation. For this reason, the ‘Smart green and integrated transport’ Work Programme has a dedicated theme on safety issues related to road transport, which is characterized by the highest number of accidents and fatalities compared to other transport modes, and by the high vulnerability of large groups of users.

This aspect was the core of the 2014 call “Traffic safety analysis and integrated approach towards the safety of Vulnerable Road Users”. However, all components of the road transport system have to contribute to reach the highest possible level of safety. That is why in 2016-17 special attention was devoted to the role of road infrastructure, and recent developments in transport connectivity and automation. The Horizon 2020 calls “Transport infrastructure to increase the transport system safety at modal and intermodal level (including nodes and interchanges)” and “Road infrastructure to support the transition to automation and the coexistence of conventional and automated vehicles on the same network” have received wide interest in the research community. The selected projects promise positive developments towards the completion of the Safety System in the new era of digitalization and automation.

The new calls 2018-20 in Horizon 2020

By supporting innovative connected and automated driving technologies and mobility solutions, the calls 2018-20 will contribute to innovative mobility. Indeed, further knowledge is needed on safety in relation to accident response and to the new mobility environment. The incorporation of economic, social and environmental dimensions is important in order to improve the current
transport system, increase its robustness and support safety, security and quality of life. **Actions under these calls are expected** to contribute to more road safety as well as to better traffic flow, less congestion, fuel efficiency and reduce carbon emissions. New shared and fully automated mobility services can help decrease the total number of cars on the road, alleviating the overall traffic. Actions will **contribute to UN’s Sustainable Development Goals 11** “Make cities and human settlements inclusive, safe, resilient and sustainable” and **3.6** “By 2020, halve the number of global deaths and injuries from road traffic accidents”.

### Key road safety – relevant topics for 2018-19:

- **MG-2-7-2019**: Safety in an evolving road mobility environment
  The scope of this topic is to assure the development of robust solutions with the aim to improve transport users’ and road workers’ safety. In order to be properly addressed, traffic safety needs to be articulated in terms that are relevant for the connected and automated transport system.

- **LC-MG-1-2-2018**: Sustainable multi-modal inter-urban transport, regional mobility and spatial planning
  Action on urban mobility is embedded into a wider urban and territorial strategy set by the Sustainable Urban Mobility Plans. These Plans should be developed in cooperation across different policy areas and sectors (transport, land-use and spatial planning, environment, economic development, social policy, health, road safety, etc.); across different levels of government and administration; as well as with authorities in neighboring areas – both urban and rural.

- **MG-2-1-2018**: Human Factors in Transport Safety
  The challenge of this topic is to improve transport safety through a more timely, focused and integrated adoption of human factors in the design of road or rail vehicles, vessels or aircraft, infrastructure and the mobility system, taking advantage of automation as well as increasing knowledge of enhanced human machine interactions to further advance the use of automation without introducing new, previously unknown, safety risks. More knowledge is needed on how automation changes human behavior and the capability to react appropriately to fast emerging situations in a complex environment.

- **LC-GV-05-2019**: InCo flagship on “Urban mobility and sustainable electrification in large urban areas in developing and emerging economies”
  Proposals should address comparative demonstrations activities and pilots in cities in Europe, Asia, African and/or CELAC countries: Innovative concepts for electrified road public transport (passenger and freight), jointly designed through International Partnerships as a contribution to a wider sustainable mobility concept, from the perspective of a seamless mobility, taking in account the acceptance of users (travelers or freight operator). Comparative demonstrations activities and pilots (in European and Chinese’s Cities, African, CELAC countries) of such jointly designed concepts developed by local partners.

- **DT-ART-03-2019**: Human centred design for the new driver role in highly automated vehicles
  Proposals for this topic should focus on the design of safe human - machine interfaces for vehicles with highly automated driving functions and the safe and controlled transfer between use cases of different SAE automation levels (between level 4 to/from levels 3 or 2) for all types of drivers. The research will help achieve the European Transport White Paper “Vision Zero” objective by preventing road accidents caused by human errors.

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1. Topics for 2020 are not taken into consideration.
**NEWS**

**Benchmarking of road safety in Latin America**

“Benchmarking de la seguridad vial en América Latina” is the report recently issued by the International Transport Forum in 2017. It describes and compares the management and performance of road safety in 10 Latin American countries: Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Mexico, Paraguay and Uruguay. This report is based on a compared analysis that allows identifying differences and similarities in the performance of road safety.

More info

**United Nations Secretary General Report “Improving global road safety”**


More info

**Road Safety 2016: how is your country doing?**

The European Commission has recently realized a report containing an overview on Road Safety in Europe during 2016. The objective of the European Commission in this field is to halve the percentage of road fatalities in Europe by 2020 and the leaflet is aimed to show the progress made since 2010 to achieve this goal.

More info

**SaferAfrica at the African Road Safety Forum (FASeR) 2017**

On 26-28 October 2017, the third edition of the African Road Safety Forum (FASeR) was held in Ouagadougou, Burkina Fasu. Several industry experts gathered to discuss safety issues and the growing rate of traffic related deaths. On the first day, experts from SaferAfrica presented the project, with a specific focus on the dialogue platform and the case study on the Abidjan-Lagos corridor.

More info

**EVENTS**


Results from the SafetyCube project will be presented during the final conference, to be held in Vienna, with a special focus on the SafetyCube Decision Support System (DSS). The conference will bring together experts, stakeholders and decision makers from across Europe to discuss the latest developments in road safety.

More info

**23-25 May 2018: ITF Summit on “Transport Safety and Security”**

On 23-25 May 2018, the International Transport Forum will organize in Leizpig (Germany) the Summit “Transport Safety and Security”: this is the world’s largest meeting of transport ministers and the premier global transport policy event. The event will address different kind of topics: from terrorism and cyber-security to road safety and extreme weather disruption, including the risks and benefits of automated driving.

More info