



Systematic comparison of Safe Systems implementation in in three African and three European countries: Analysis of influencing factors and recommendations

Tor-Olav Nævestad^{1*}, Enoch F. Sam², Haneen Farah³, Daniel Mwamba⁴, Jaqueline Masaki⁵, Laxman Sing Bisht³, Thomas Osman Myioba⁴, Aliaksei Laureshyn⁶, Matilda Magnusson⁶, Rune Elvik¹, Jenny Blom¹

*lead presenter: ton@toi.no

1 Institute of Transport Economics, Norway

2 University of Education, Ghana

3 TU Delft, Delft, Netherlands

4 Zambia Road Safety Trust, Zambia

5 University of Dar es Salaam, Tanzania

6 Lund University, Sweden

Keywords: Road safety, Safe system, African countries, European countries

Introduction

The study provides a case comparison of road safety management in three African countries (Tanzania, Ghana, Zambia) with three EU countries with record of excellence in traffic safety and practicing Safe Systems principles (Norway, Netherlands, Sweden). Norway, Sweden, and the Netherlands are early adopters of what has been termed the Safe System Approach (termed “Sustainable safety” in the Netherlands). Norway and Sweden have the highest road safety level in world. This has to a great extent been attributed to the implementation of the Safe system approach.

The aims of the study are to: 1) Examine the alignment with Safe System principles in the road safety management systems in each country, 2) Examine factors influencing the level of alignment and 3) Develop recommendations as to how the African countries can learn from the Safe System countries in their road safety management.

Research methodology

Analysing the studied countries’ alignment with Safe system principles for road safety management, we use a 12-point checklist, which was developed by Varhely (2016) through a systematic literature review. We use two methods to fulfil the study aims. The first is an analysis of key road safety documents, e.g. road safety plans, national transport plans. The second is semi-structured interviews, mainly focus-group interviews, with 62 people working with road safety in the six countries.



Results

The European countries' road safety management systems are mainly in line with the Safe Systems principles for road safety management. The African countries do not have visions and road safety policies like Vision Zero or Sustainable safety, e.g. with the principles of Safe System when it comes to system owner responsibility, forgiving and anticipating road system etc. However, safe System implementation is not just about vision, it also concerns the continuous improvement process: "Plan-Do-Check-Adjust". What the European Safe System countries have in common is the existence of a continuous improvement process. They have: 1) Relatively good statistics and data on accidents, exposure and risk for different groups, 2) Comprehensive safety performance indicators (SPIs), 3) Quantified targets related to SPIs, 4) Strategies and action plans to improve the SPIs to reach the targets, 5) Relatively clearly defined responsibilities for implementation of the measures in the action plans and 6) Performance related to this process (SPIs, targets) is monitored relatively regularly (e.g. annually). The African countries do not have this continuous improvement process to the same extent. The last road safety policies from Tanzania are e.g. from 2009.

Discussion and conclusions

The African data indicates challenges related to implementation of formal strategies and plans, while these seem to be far more "alive" (i.e. implemented) in the European countries. Thus, there seems to be a larger discrepancy between formal and informal aspects of road safety management in the African countries than the European; between plans and implementation. We especially point to low institutional road safety influence and lacking funding in the African countries to explain this.

The point of departure for the recommendations to the African countries is resource scarcity, which requires prioritizations. The first recommendation is to choose one main road safety challenge and have a primary effort on this (e.g. pedestrian fatalities). This means to have a living continuous improvement process related to one main challenge, instead of several. The second recommendation is to establish or strengthening the lead agencies for road safety and the third is that action plans should have unique/dedicated budget for the activities. Fourth, given that road safety commitment among decision makers is fundamental, estimating the economic costs related to road traffic accidents also seems important, as this might create a "sense of urgency".

The present study is part of the AfroSAFE project, funded by the European Union. Grant agreement ID: 101069500