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# Safe System maturity and Safe System readiness in three European and three African countries: Results from a cross-national survey

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**Keywords:** Safe System maturity, Safe System readiness, road safety, European, African

## Background

The study provides results from a case comparison of road safety management in three African countries (Tanzania, Ghana, Zambia) with three EU countries, all with a great track record of excellence in traffic safety and practicing Safe Systems principles (Norway, Netherlands and 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. Comparing WHO (2024) estimated numbers of road fatalities per million capita, the rate is on average 8.4 times higher in the three African countries than in the three European countries.

Our previous studies indicate higher levels of Safe System implementation in the European countries, compared with the African countries. The former countries represent a mature Safe System context, the latter an emerging. Nevertheless, interviewees in both African and European countries point to insufficient Safe System implementation and constraining factors. These constraining factors define Safe System readiness, which refers to the extent to which a country, region, or organization has the necessary institutional, regulatory, infrastructural, and cultural conditions in place to successfully implement the Safe System approach to road safety.

## Aim

In this study, we develop and test a quantitative survey framework designed to measure and compare Safe System maturity and Safe System readiness at the national road safety management level. The survey framework is developed based on a previous cross-national focus group interview study focusing on the three European and the three African countries.

The aims of the study is to use this survey to:

- 1) Describe the level of Safe System implementation (i.e. maturity) related to the pillar “Road Safety management” in the three African and the three European countries.

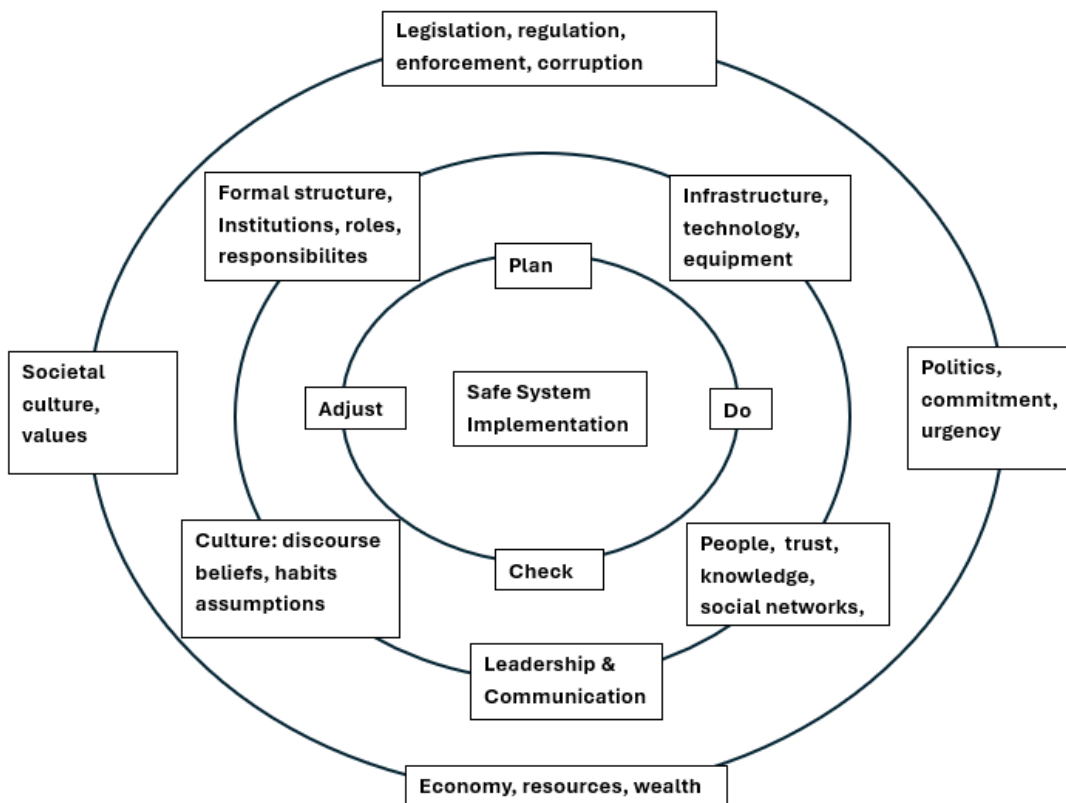
- 2) Map factors influencing the level of Safe System implementation (i.e. the readiness) in the three African and the three European countries.
- 3) Discuss the relevance and usability of the different survey items, to develop the survey into an international measurement tool that can be used to diagnose and improve Safe System maturity and Safe System readiness across national contexts.

## Method

The study is based on quantitative survey data from three European and three African countries. The focus of the survey is road safety management and factors influencing that on the national policy level. The respondents are people working in road and road safety authorities, Non-Governmental Organisations (NGOs), researchers, and other relevant road safety stakeholders.

## Results

The figure shows the model that we developed in the study “Safe System maturity and Safe System readiness in three European and three African countries: A comparison of an emerging versus a mature context” (Nævestad et al under review), that the survey measures.



**Model to understand Safe System readiness across maturity contexts**

The model that the survey measures includes three layers. The core of the model focuses on the output, which refers to the road safety management process of continuous improvement. This refers to Safe system maturity related to the Safe System pillar road safety management. The two other layers describe Safe System readiness. The middle layer focuses on the inter-organisational process influencing readiness. This is based on the Pentagon model (Schiefloe 2011), adapted to national road safety management. The outer layer focuses on societal factors influencing readiness. This is based on previous research on Safe System readiness in mature contexts and emerging contexts, and the empirical results of an interview study in the six studied countries.

## **Conclusions**

A unique contribution of the present study is that it provides a quantitative survey tool to understand Safe System readiness across emerging and mature contexts. The survey tool can be used for defining the level of Safe System maturity and the factors influencing this (Safe System readiness), thereby facilitating targeted improvement measures that may improve road safety.