The SaferAfrica Project

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Athens Regional Workshop
On setting up road safety reliable, harmonized and
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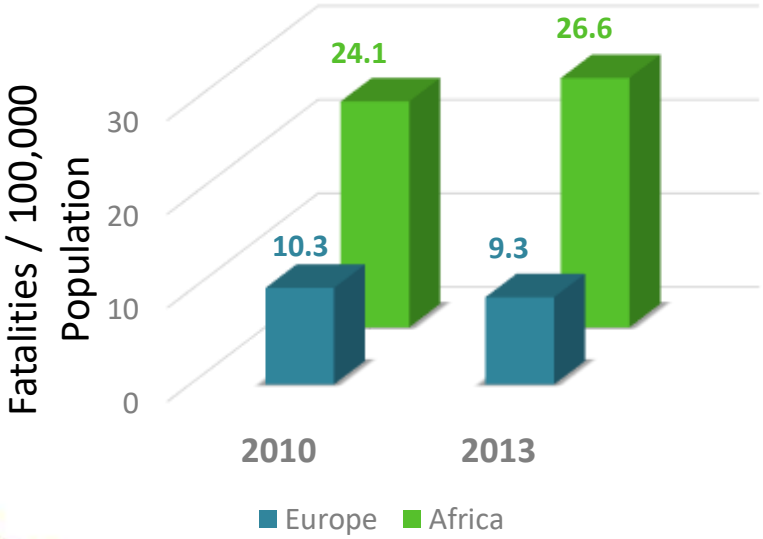
African-European Dialogue Platform on Road Safety

Road Safety in Africa

- Road traffic fatality rates per 100,000 population (WHO 2015)



- Africa presents the **highest traffic fatality rates** globally, with almost three times higher fatality risk than Europe

The SaferAfrica Project

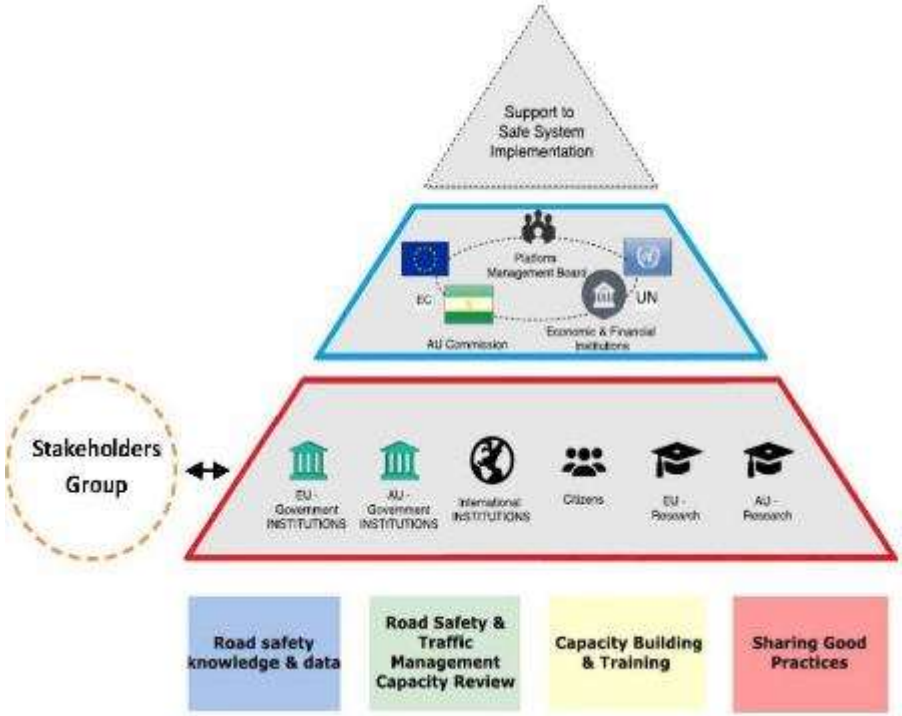
- Funded under the **Horizon 2020 Mobility for Growth**
- Title: SaferAfrica - ***Innovating Dialogue and Problems Appraisal for a Safer Africa***
- Duration: **36 months** (Oct 2016 – Sep 2019)
- Project Leader: **University of Roma – La Sapienza**

- **SaferAfrica Objectives:**
  Create favorable conditions and opportunities for the effective implementation of actions for road safety and traffic management in African countries, by setting up:
  - a **Dialogue Platform** between Africa and Europe
  - the African **Road Safety Observatory**

Partner		Country
1	CTL	Italy
2	NTUA	Greece
3	IBSR	Belgium
4	IRF	Switzerland
5	IFSTTAR	France
6	LOUGH	UK
7	LNEC	Portugal
8	SWOV	Netherlands
9	SITRASS	France
10	APRE	Italy
11	SAFER	Sweden
12	ENSTP	Cameroon
13	HI	Belgium
14	OCAL	Benin
15	ICI	Burkina Faso
16	CITA	Belgium

SaferAfrica Overall Concept

- Institutional level
- Technical level
- Both levels closely interconnected
  - Foster the appropriate match between African road safety policy evolution
  - Enhance knowledge
  - Deliver institutional capacity



African-RSO Objectives

- Assess the implementation of the African Action Plan
- Activate Twinning Programs between Africa and Europe
- Conduct capacity reviews
- Enable sharing of good practices
- Support capacity-building activities
- Assess thoroughly the needs of African stakeholders in terms of knowledge, data and information tools

AFRICAN ROAD SAFETY OBSERVATORY

African-RSO Structure

- About the African-RSO
- Statistics
- Road Safety Management
- Good Practices
- Capacity Building
- Dialogue Platform
- News

www.africanroadsafetyobservatory.org

African-RSO Statistics

- Statistics
- Data Collection
- Indicators
- Infographics
- Analysis
- Underreporting

- Accidents, Exposure, Performance Indicators
- Thorough Quality Control

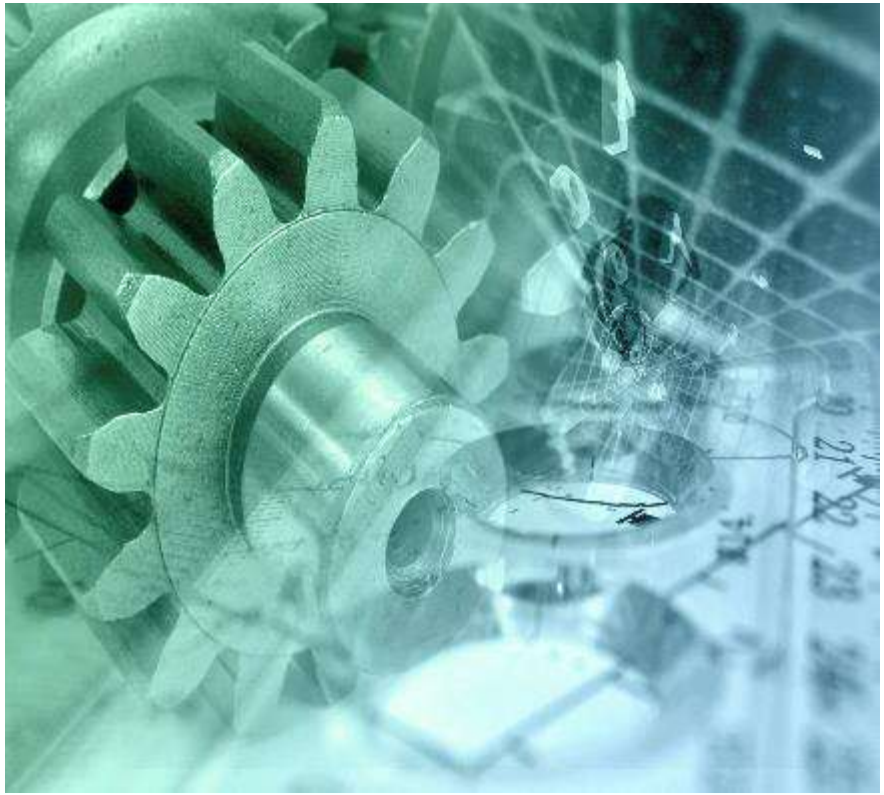
Methodology

Analysis of existing systems and of the findings of the survey in Africa

- Manual of the WHO on Data Systems (2011)
- EC CARE/CADAS Protocol (2018) and SafetyNet (2008) and Dacota (2012) results
- US-NHTSA FARS – NASS Systems
- Survey in the context of Safer Africa project
  - road safety data
  - data collection systems
  - definitions

Type of Data Assessed

- 3 types of data
  - Accident data
  - Exposure data
  - Road safety performance indicators
- Limitations in the collection process
  - experience
  - unavailability
  - lack of standardization
- 2-fold priorities scenario per data type proposed
  - usefulness
  - easiness to collect



Accident Data

- **Common dataset**
  composed of minimum data elements (variables) acts as key tool for ensuring the appropriateness of data captured
- **Uniformity** of accident data crucial for subnational - international comparisons
- **2-step approach** for developing common data collection system
  - improvement and harmonisation of existing data and methods
  - collection of new harmonised data

Common Accident Data Collection System

The minimum set of standardised data elements enables:

- comparability of available road accident data in Africa
  - serving national needs (organizations, authorities, etc.)
- compatibility with international data
- transferability of knowledge and best practices from developed countries
  - taking into account particular local needs and conditions

Accident Data - Definitions and Standards (1/2)

Road fatalities

- **International definition**:
  "the persons who died within 30 days from the day of the accident"
- At present, this definition is **used by a number of African countries** and is suggested to be adopted by the remaining ones
- Some countries have to **modify the data collection process** and develop appropriate conversion factors, prior to the adoption of the common definition

Accident Data - Definitions and Standards (2/2)

Injury severity

- The **minimum injury** for which an accident is recorded by the Police varies among countries

- Important differences among countries between **seriously and slightly injured** persons.

Limitations for International Comparisons of Road Accident Data (1/3)

Incompatibility of data

- different **collection procedures**
- different **definitions of the variables** and values utilized

Sources of data incompatibility

- missing or incomplete national definitions (e.g. for weather conditions)
- different definitions in different countries (e.g. for road types)

Limitations for International Comparisons of Road Accident Data (2/3)

Underreporting

- Issue of **general concern** in Africa
- Affects the degree to which the statistical output of a country's data system reveals the **actual situation of road safety**
- Road accident **databases linking Police and hospital data** may serve as a potential solution

Limitations for International Comparisons of Road Accident Data (3/3)

Additional inaccuracies

- Conditions under which the primary information is collected by the police officer
- The way this information is filled-in later on
- Inadequate training of the Police collecting the information

Accident Data Collection Process

- Police reports
  - **key role** in the accident data collection process
  - responsible for **providing the authorities** with the collected data
  - main tool: **accident data collection form** with clear instructions on
    - filling process
    - data transmission process to the national data file
- Hospital data
  - necessity for **clear guidelines on the collection and coding of variables** to be included in Hospital data
  - identifiers should **match hospital and police data**
- In-depth accident investigations
  - **high level of detail** about each accident and how this can be related to a number of outcomes
  - aimed at **the cause of the accident**, not who was to blame

Accident Data Collection Priorities

- **Common road accident database** in a uniform format
  - continuously updated (compatible - comparable data)
  - allowing for more reliable analyses and assessments across the African countries
- **Selection criteria** for defining minimum data elements
  - data elements - values useful for road accident analysis at both national and international level
  - level of detail of the variables - values corresponds to all data useful for macroscopic data analysis
  - data elements - values comprehensive and concise
  - data difficult to collect should not be included
  - all variables and values refer to casualty road accident
- Data structure to follow the structure proposed in the WHO (2011) manual

Proposed Data Structure of the Common Road Accident Data Set

Accident related variables		Road related variables		Vehicle related variables		Person related variables	
1st priority	2nd priority	1st priority	2nd priority	1st priority	2nd priority	1st priority	2nd priority
Accident ID	Impact type	Type of roadway	Speed limit	Vehicle number	Engine size	Date of birth	Person ID
Accident date		Road functional class	Road obstacles	Vehicle type	Vehicle special function	Gender	Occupant's vehicle number
Accident time		Junction	Road surface conditions	Vehicle make		Type of road user	Pedestrian's linked vehicle number
Accident region - municipality			Traffic control at junction	Vehicle model		Seating position	Safety equipment
Accident location			Road curve	Vehicle model year		Injury severity	Pedestrian manoeuvre
Accident type			Road segment grade	Vehicle manoeuvre		Driving licence issue date	Alcohol use suspected
Weather conditions						Age	Alcohol test
Light conditions							Drug use
Accident severity							

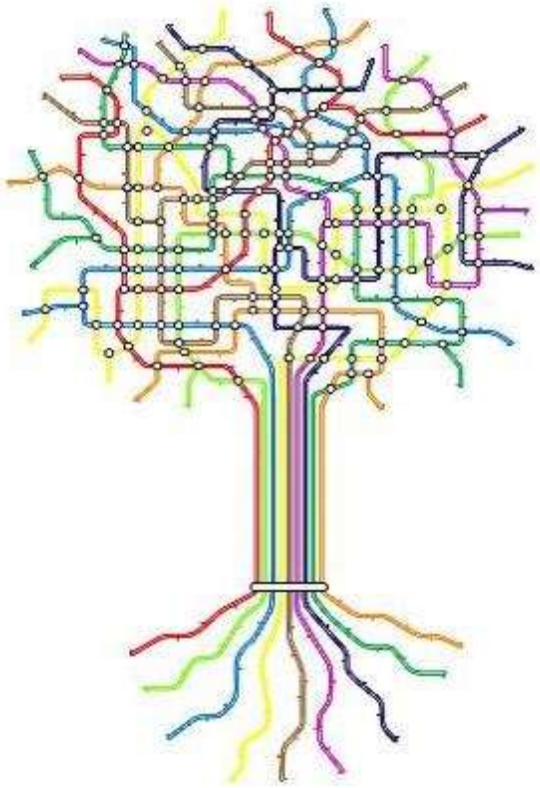
Implementation Roadmap (1/3)

Sampling and costing

- Data elements should be comprehensive, concise and refer to casualty road accidents
- Demanding data (time, cost, collection barriers etc.) to be avoided regardless of their value for road accident analysis
- 2-stage priorities scenarios proposed
  - 1st priority data, no significant cost, data expected to be available in national databases
  - 2nd priority data, cost of surveys depends on country size
- Exposure and SPIs surveys required for the 2nd priority
  - alcohol survey
  - speed survey
  - use of protection systems survey

Implementation Roadmap (2/3)

- Adopt standard data definitions and standard data collection processes
  - data elements - values must be useful for road accident analysis
    - national level
    - international level
  - collection process performed and standardised
    - upon road accident (accident data)
    - on a periodic basis (exposure data – SPI surveys)



Implementation Roadmap (3/3)

General

- Establishment of **capacity at the authorities**
- Summary **sampling and costing**
- Adopt **standard data definitions** and collection processes
- Dedicated **budget**
- Formation of **Pan-African coordinate organization**

SaferAfrica

- Recommendations to be rapidly conversed to the involved local African authorities through a **network of national experts**
- **SaferAfrica coordinator** in charge
- Steps
  - identify data set needed as well as costs
  - secure funding
  - carry out regular data collection
  - process (data base) and analyse

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