



# Road Safety Knowledge and Data

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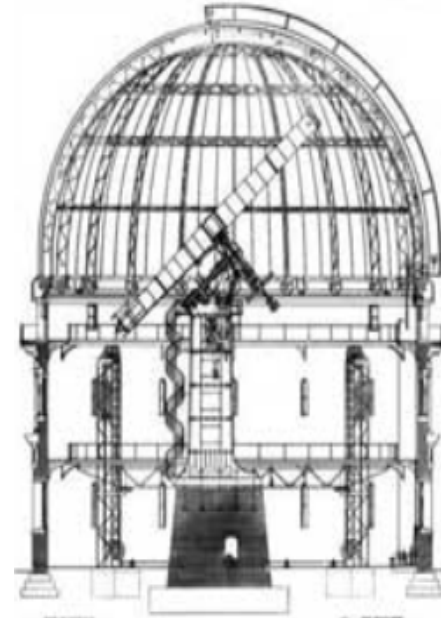
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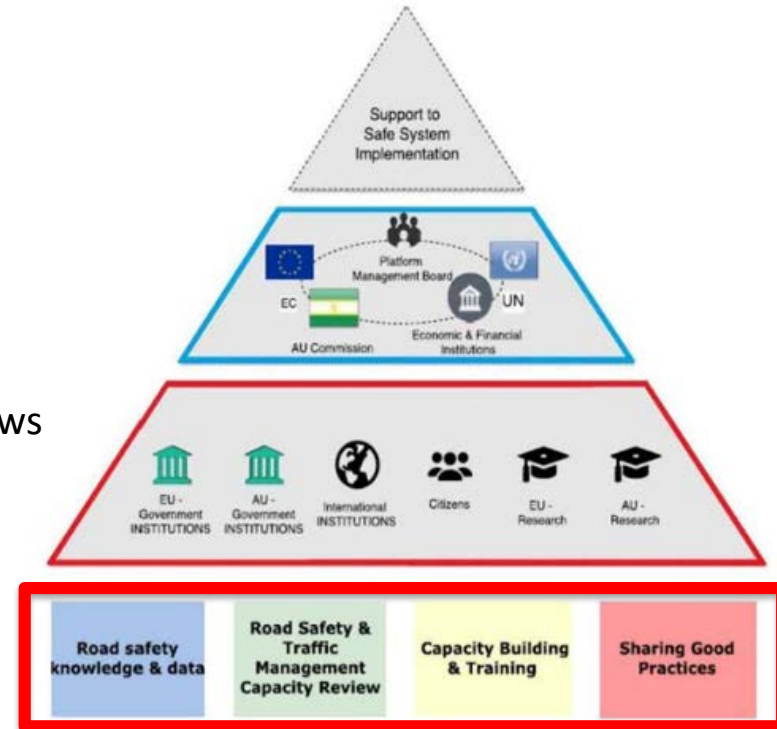
# WP4 Objectives

- **Develop knowledge and management tools** for setting up an **African Road Safety Observatory**
  - **Expand** the knowledge, **support** and **increase** the awareness of African stakeholders, policy makers and end users on road safety
  - Design, develop and implement an **Online *Participative* Road Safety Data and Knowledge Centre** (ERSO served as reference) through crowdsourcing functions



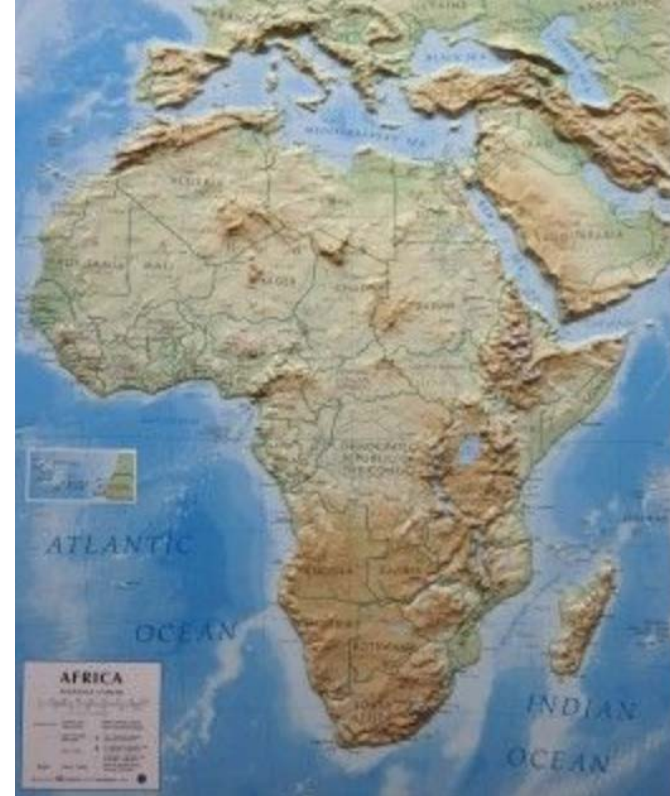
# WP4 Interrelations

- **AfricanRSO** ([www.africanroadsafetyobservatory.org](http://www.africanroadsafetyobservatory.org))
- **Solid interconnection** with SaferAfrica project
- Continuous **update** from the project's 4 core pillars (4 WPs)
  - Road Safety Knowledge & Data
  - Road Safety & Traffic Management Capacity Reviews
  - Capacity Building & Training
  - Sharing Good Practices



# Activities

- **Review of Road Safety Data Collection Systems and Definitions (T4.1)**
- **Road Safety Data and SPI Collection (T4.2)**
- **Data analysis and identification of risk factors (T4.3)**
- **Development of knowledge and management tools (T4.4)**
- **Setup of “participative” road safety knowledge and data centre (T4.5)**



# Limitations for International Comparisons of Road Accident Data

- 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

- 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 that **link police and hospital data** may serve as a **potential solution**



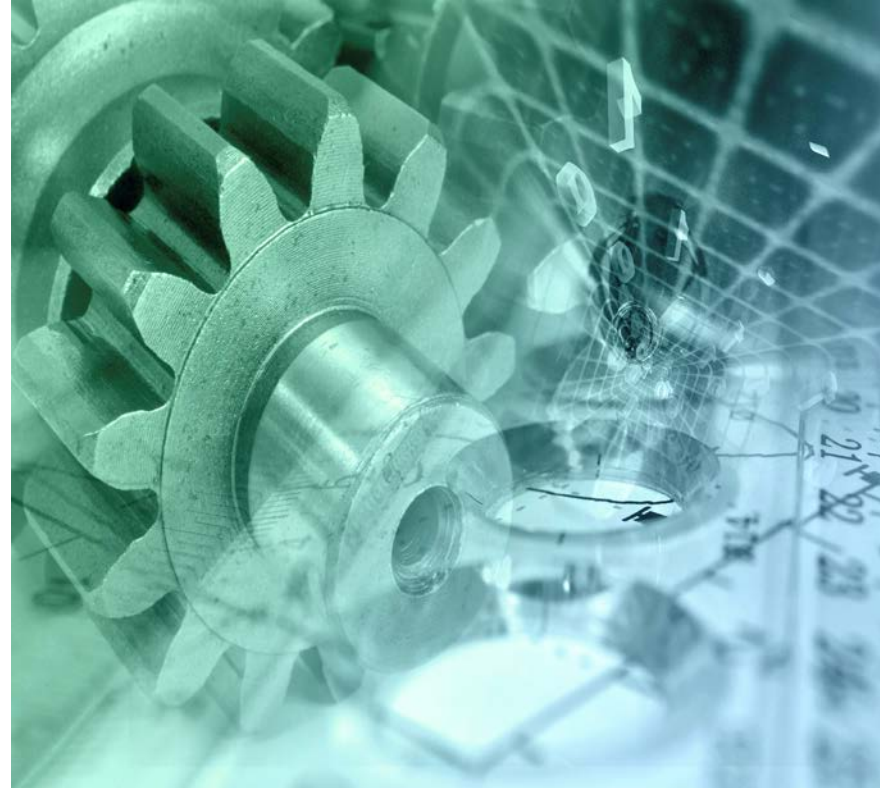
# Limitations for International Comparisons of Road Accident Data

- 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



# 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
  - Ease to collect





# Proposed Data Structure of the Common Road Accident Data Set

Accident related variables		Road related variables		Vehicle related variables		Person related variables	
1 <sup>st</sup> priority	2 <sup>nd</sup> priority	1 <sup>st</sup> priority	2 <sup>nd</sup> priority	1 <sup>st</sup> priority	2 <sup>nd</sup> priority	1 <sup>st</sup> priority	2 <sup>nd</sup> 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							

# Proposed Exposure Data Collection Structure

1 <sup>st</sup> priority	2 <sup>nd</sup> priority
Population	Road length
Driver population	Vehicle kilometres
Vehicle fleet	Person kilometres

PRIORITIES

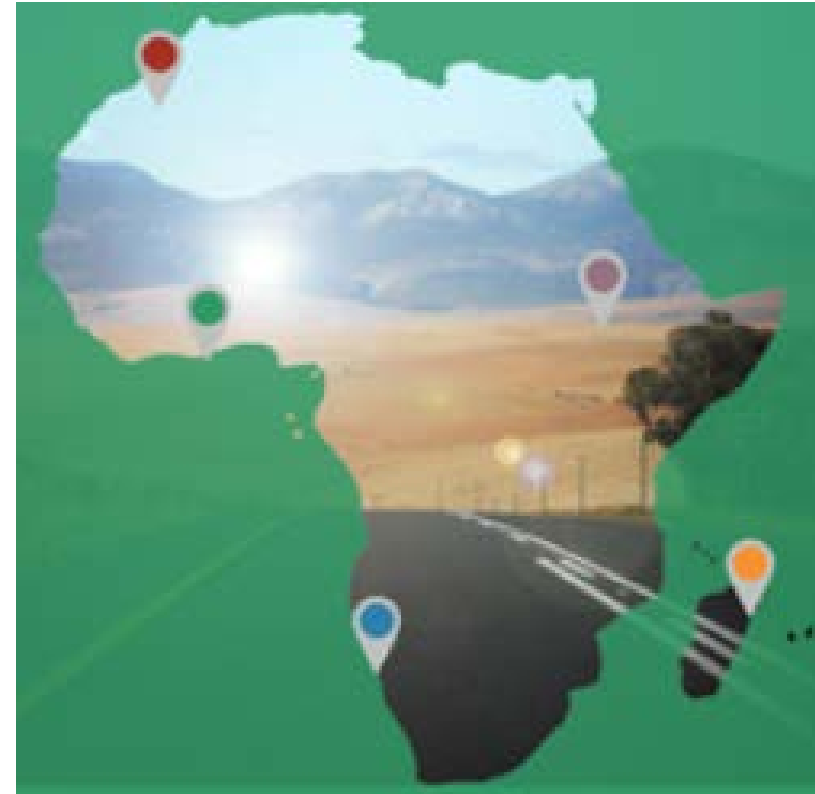
- 
- 1.
  - 2.
  - 3.

# Proposed Road SPI Collection Structure

1 <sup>st</sup> priority	2 <sup>nd</sup> priority
Number of vehicles by year of manufacture (or registration year)	% of drivers over legal limits
Number of vehicles by vehicle type	% of severe or fatally injuries attributed to alcohol
	Speeding
	Daytime wearing rates of seat-belts
	Front seats (passenger cars+vans)
	Rear seats (passenger cars+vans)
	Child restraint systems (children <12 y.o.)
	Front seats (hgvs)
	Daytime wearing rates of helmets
	Motorcyclists
	Moped riders
	Cyclists

# Implementation Roadmap

- 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 need to be rapidly converted to the involved local authorities of each African country through a **network of national experts**
  - SaferAfrica **coordinator** in charge to manage
    - Distribution of recommendations
    - Address needs of the other project activities
  - Steps
    - Identify data set needed as well as costs
    - Secure funding
    - Carry out regular data collection
    - Process (data base) and analyse



# Data Analysis and Identification of Risk Factors

- Road user behaviour
- Infrastructure
- Vehicle
- Post-crash care
- Road Safety Management
  
- Assessment
  - Whole African continent (mainly)
  - By region



# Development of Knowledge and Management Tools

- Statistical reports and fact sheets (updated versions provided as well)
  - 7 Thematic fact sheets
  - Annual statistical report
  - 10 Country fact sheets
- Key publications and resources
- Links to African and international organisations and Stakeholders Groups



# 7 Thematic Fact Sheets

- Gender
- Road User Behavior
- Infrastructure
- Vehicle
- Post-crash Care
- Road Safety Management
- Legislation



# Annual Statistical Report

- Trends of road accidents and injuries over the decade 2007-2016
- Characteristics of road accident fatalities (2016)
- However
  - Serious lack of road safety data in African countries
  - Data not always comparable due to different definitions or under-reporting

ANNUAL STATISTICAL REPORT 2018





# 10 Country Fact Sheets

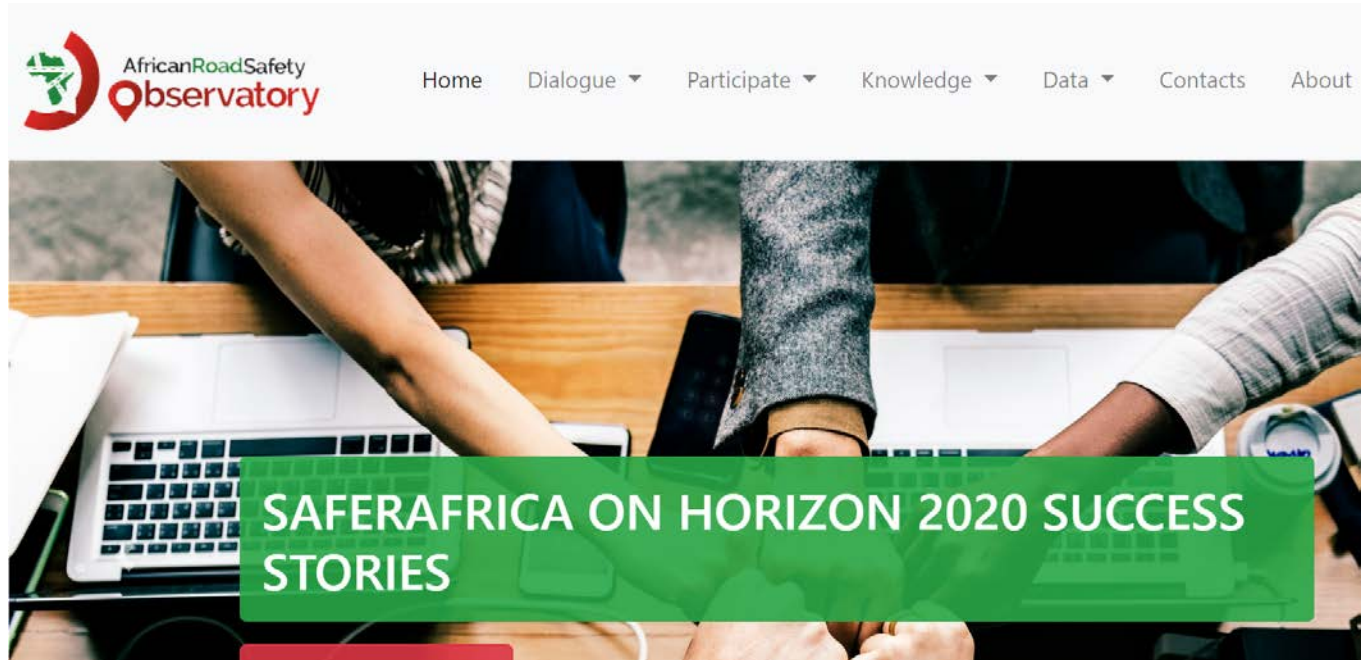
- Country characteristics
- Road safety management
- Infrastructure
- Traffic legislation
- Safety performance indicators
- Road safety outcomes
- Basic Remarks



# African-RSO Structure

- Home
- Dialogue
- Participate
- Knowledge
- Data
- Contacts
- About

[www.africanroadsafetyobservatory.org](http://www.africanroadsafetyobservatory.org)



# Thank you



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