Session 2: Support for road safety improvement in Africa

Road safety knowledge and data in Africa

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Background

- Great need and challenge to **develop knowledge and management tools** to support road safety capacity building and decision making in Africa

- Great need and challenge to expand the knowledge and to support and increase the awareness of **African stakeholders, policy makers and end users** on road safety

If you cannot measure it you cannot improve it.

Objective

- Design, develop and implement an **Online Participative Data and Knowledge Observatory** for road safety in Africa, including crowdsourcing functions

  - Collecting, analyzing and facilitating the dissemination of road safety data including safety performance indicators
  - Identifying risk factors
  - Supporting the definition of effective and efficient policies - measures
  - Providing specialized information - opinions on specific issues for users
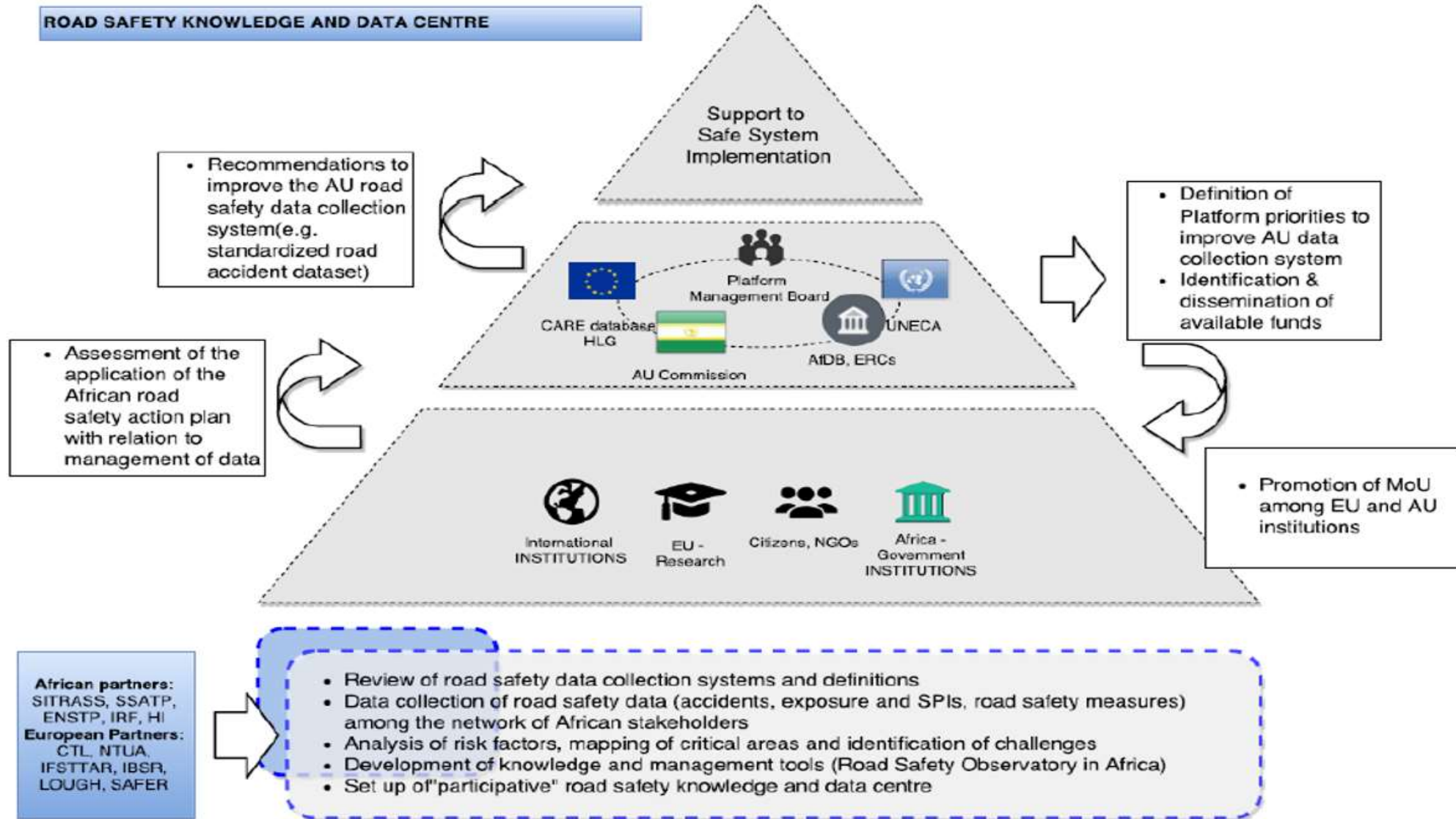 - Mapping critical areas

Exploiting experience from previous projects

- **SafetyNET** : the main output (**European Road Safety Observatory**) serves as a reference tool and will be:
  - adjusted to the specific needs of African stakeholders, the particularities of road safety problems, and the availability and quality of data in African countries
  - integrated with crowdsourcing functions to facilitate the participation of experts and end users

- **DaCoTa** : improved ERSO and performed detailed surveys on road safety management systems
  - findings will inform capacity reviews of country road safety and traffic management

- **SUNflower, SUNflower6+, SUNflowerNext** developed a methodology to benchmark road safety at the country level
  - findings will feed into the comparison of different countries' road safety levels and the identification of accident risk factors

- **Traffic accident databases in Cameroon**: project for the design and implementation of traffic accident databases and an informational system
  - involves the collection, management and analysis of national traffic accident data

- **SafetyCube** : project aimed at providing a new DSS to develop an in-depth understanding of the causes of road accidents and to guide road safety stakeholders in identifying optimal cost-effective measures
  - the project's analytic methods will identify risk factors, facilitate cost-benefit analyses, and enhance ERSO

SaferAfrica project overall concept

ROAD SAFETY KNOWLEDGE AND DATA CENTRE

Support to Safe System Implementation

- Recommendations to improve the AU road safety data collection system(e.g. standardized road accident dataset)

- Assessment of the application of the African road safety action plan with relation to management of data

Platform Management Board

CARE database HLG

AU Commission

AfDB, ERCs

UNECA

- Definition of Platform priorities to improve AU data collection system
- Identification & dissemination of available funds

- Promotion of MoU among EU and AU institutions

International INSTITUTIONS

EU - Research

Citizens, NGOs

Africa - Government INSTITUTIONS

African partners: SITRASS, SSATP, ENSTP, IRF, HI
European Partners: CTL, NTUA, IFSTTAR, IBSR, LOUGH, SAFER

- Review of road safety data collection systems and definitions
- Data collection of road safety data (accidents, exposure and SPIs, road safety measures) among the network of African stakeholders
- Analysis of risk factors, mapping of critical areas and identification of challenges
- Development of knowledge and management tools (Road Safety Observatory in Africa)
- Set up of "participative" road safety knowledge and data centre

Implementation Steps

Step	Effort
1	Review of road safety data collection systems and definitions
2	Road safety data and Safety Performance Indicator collection
3	Data analysis and identification of risk factors
4	Development of knowledge and management tools
5	Setup of "participative" Road Safety Knowledge and Data Observatory

- **Questionnaire compilation** for the assessment of current status regarding basic aspects of road safety data and definitions

- **Distribution of large-scale survey** to African road safety data experts to determine
  - national data collection systems (e.g. accident forms processing)
  - definitions of basic variables (e.g. fatalities)

- **Join together information on data**
  - collection (e.g. fatality data, exposure data and SPI data)
  - processing and storage (e.g. practices for recording road accident casualties)

- **Conduct a comparative analysis** of data collection systems and definitions in order to identify
  - good practices
  - priority areas for improvement

- **Deliver a pilot study** with selected countries
  - aiming to assess the effects of improved data definitions and collection procedures on data quality and accuracy

- **Produce recommendations** for a minimum set of harmonised data collection procedures and definitions applied in the short-to medium-term
  - aiming to improve African data collection systems

- **Implementation of a comprehensive data collection system among African countries** through a large-scale survey with a common methodology
  - based on the results of methodological step 1
  - exploiting initially existing data from international sources (e.g. WHO, IRF, etc.)
  - aiming to gather existing data on road fatalities and injuries, as well as related exposure data
    - number of registered vehicles, length of the road, etc.
    - SPIs (road user behavior, road and vehicle conditions)

3. Data analysis and identification of risk factors

- **Develop a data organisation and analysis system** in order to:
  - produce usable indicators
  - develop an evidence base of the problems at stake
  - map the critical areas and challenges, both per region and per topic (e.g. speed, drinking, lack of user protection devices, infrastructure type, vehicle deficits, seasonality, etc.)

The data organisation and analysis system **will simplify ranking** of:
- countries (e.g. in terms of road safety performance on different topics)
- topics (e.g. magnitude of the problem, spatial and temporal evolution, persistence, etc.)

A synthesis of the results will enable priority areas for road safety actions and interventions to be identified either as topics or countries with high road safety improvement potential

4. Development of knowledge and management tools

- **Knowledge and management tools** will be developed based on
  - results from the analyses
  - existing knowledge and management tools from the literature

  aiming to support stakeholders, policy makers and other users of the Road Safety Data and Knowledge Platform in obtaining
  - evidence-based views of road safety problems and challenges
 - insights for potential actions and priorities

Tools will include
1. Statistical reports and fact sheets
2. Key publications and resources
3. Links to African and international organisations and Stakeholders Groups

- **Web-based platform development** to support the dialogue activities, designed to raise awareness and create knowledge

  - designed ergonomically and user-friendly
  - supporting crowdsourcing functions to facilitate the participation, knowledge and experience interaction between stakeholders, experts and end users
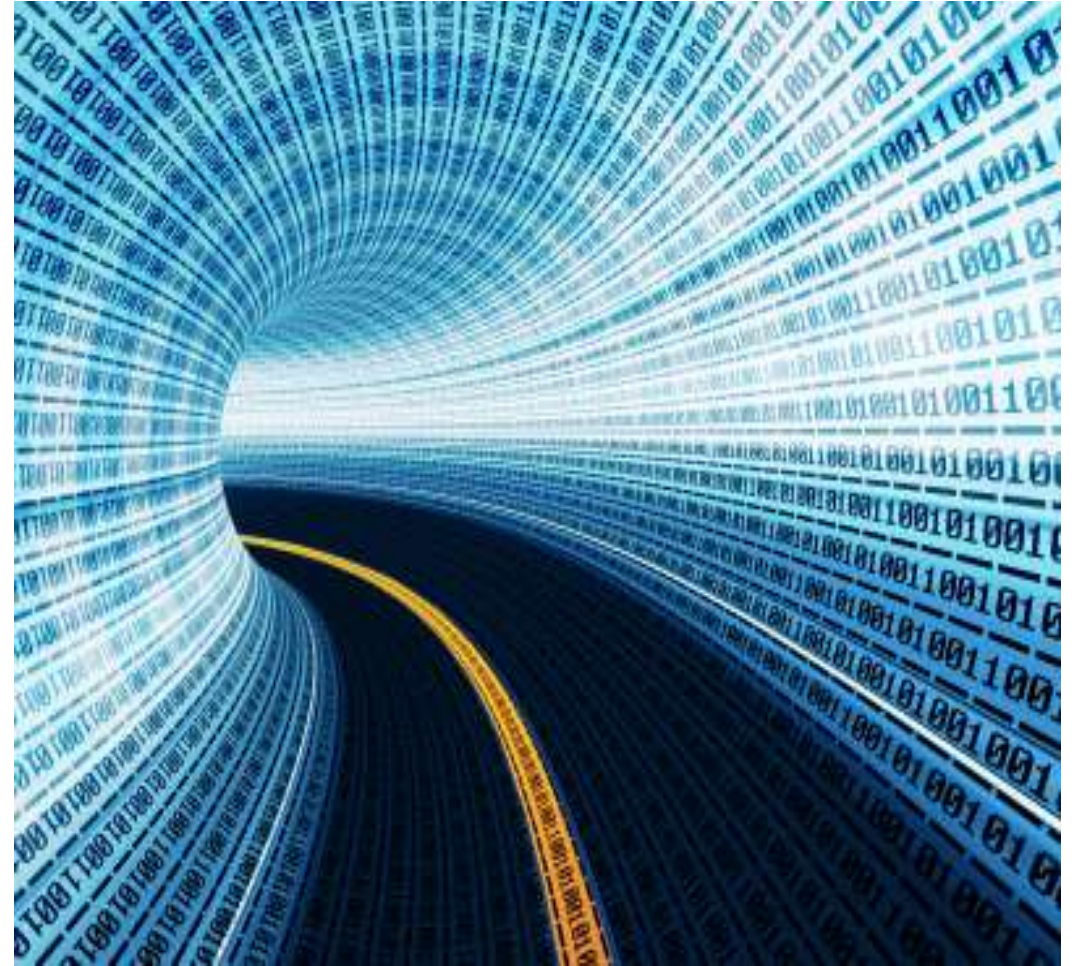
In Conclusion

- The Road Safety Knowledge and Data Observatory is not only a challenging Decision Support Tool, but also **a valuable training tool**, educating road safety stakeholders for the need of systematic effort

- Particular attention is needed to:
  - working closely **with the Stakeholders**
  - follow effective **quality control** procedures (preferably pro-active)

IRTAD-SaferAfrica Joint Workshop
Fostering strategic cooperation between Africa and Europe on road safety
Rome, 12 October 2016

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