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Africa Transport  
Policy Program



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# African Universities and Road Safety Data, Research and Analysis

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# Global Agenda: Road Safety & the UN SDGs



Goal 3: Ensure healthy lives & promote well-being for all at all<sup>2</sup> ages

- Target 3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents.



Goal 11: Make cities and human settlements inclusive, safe, resilient, and sustainable

- Target 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

# Data and cooperation is essential

- The **African Road Safety Action Plan 2011-2020** followed the five pillars of the UN Decade of Action: road safety management, safe roads and mobility, safe vehicles, safe road users and post-crash response
- The **African Road Safety Charter** provides a comprehensive statement in support of a modern, relevant response to the crisis we face in Africa
- Both the Action Plan and the Charter identify data systems and cooperation as essential elements to what is needed



# Objectives

- To accelerate country-level improvements in data collection, analyses and decision making,
- The establishment of regional networks where capacity building, software and hardware decisions, definition of variables, and others are nurtured and pushed for.
- Fostering a positive emulation between countries to improve their crash data systems, raise road safety on the policy agenda and share data and information
- Bringing in international institutions, success stories, tested procedures, a group-based work dynamic



# Background Context: Lomé, March 2017

- At the March 2017 meeting of the African Union Specialized Technical Committee (STC) on Transport, Transcontinental and Interregional Infrastructures, Energy and Tourism (TIIET) in Lome, the African Ministers requested work from the Africa Transport Policy Program (SSATP) with the African Union Commission (AUC) and the United Nations Economic Commission for Africa (UNECA)
- A minimum set of road safety indicators for each country was requested to ensure comparability between African countries
- This work is a key step towards the development of a regional road safety observatory



# The OISEVI model



- SSATP, AUC and UNECA recognised that there was an opportunity to promote better road safety data and cooperation across Africa
- A successful model for this had been established in Latin America – countries coming together under a road safety observatory to develop better data systems, and strengthen their road safety effort



# Third Workshop - establishing ARSO: Marrakech, November 2018

- Held alongside the 1<sup>st</sup> African Road Safety Forum organised by the Government of Morocco
- Nineteen participating countries reviewed, discussed and approved:
  - the proposed **Bylaws** for an African Road Safety Observatory, which had been prepared since Abuja
  - a proposed **Work Plan** for ARSO for 2019-2021
  - Final set of **Crash Data** variables
- Invited all African countries to join ARSO/OASR under agreed Bylaws
- Requested SSATP to initiate endorsement process with African Union for ARSO to become a specialised agency of AUC

# ARSO – Vision and Work Plan 2019-21

- ARSO’s **vision** is that it is *“the regional forum on road safety data, policies and practices to ensure the protection of human life on the roads of Africa”*
- The **mission** of ARSO is to *“foster international and continental cooperation in Africa and to generate robust road safety data and analysis to positively impact on public policies for road safety, influence and technically assess the main actors responsible for road safety in African Member Countries (AMCs), in order to substantially reduce road traffic crashes, and their consequences”*
- Six pillars
  1. Developing the network of the Observatory and its relationship with road safety stakeholders
  2. Improving tools and methodologies for collection of crash data and other safety-related data
  3. Monitoring intermediate safety performance indicators
  4. Creating and updating a common road safety database
  5. Conducting analysis on topics of joint interest
  6. Publication of periodical reports on road safety





# ARSO – Objectives

- a) Collect, manage and analyse road crash data
- b) Provide technical assistance for African Member Countries (AMCs) on data collection systems, standards and norms
- c) Foster the establishment of national road safety observatories
- d) Share technical material, software and necessary tools for collecting and analysing road safety data
- e) Provide capacity building on technical issues and guidelines related to road safety
- f) Facilitate twinning arrangements between countries striving to enhance their road crash data and countries with good crash data
- g) Establish cooperation agreements for implementing and evaluating action plans among AMCs
- h) Share information and foster dialogue on road safety within Africa
- i) Support the creation of a governing body and a lead agency for road safety in every AMC, as well as strengthen existing ones
- j) Establish an African Regional database of the statistical progress on road safety of African country members
- k) Monitor the progress on road safety of each AMC
- l) Promote good practice on national and regional road safety policies and strategies
- m) Help assess how to reduce factors that lead to serious road injuries in AMCs



# Work Program Selected examples

## P1. Developing the network

- Annual meeting of road safety directors
- Annual meeting of road safety data experts (methodologies, tools, analysis )
- Website
- Newsletter



## P2. Improving data

### 2.A) Crash data

- Compile, synthesize and share with countries all existing country data reviews
  - Besides public reporting to IRF, WHO and other international bodies, during past 2 years more than 56 country reviews have been done for at least 33 of 55 African countries including Safer Africa's, EuroMed and others
- Audit of crash data where necessary in cooperation other experts recommendations
- Twinning where necessary (over 3 years)
- Implementation of DRIVER (WB's tool for data analysis )
- Training of police officers



# crash variables

Agreement on minimum disaggregated crash-related variables reached during 2<sup>nd</sup> workshop in Abuja (Nigeria) in July 2018,

**Appendix B. Recommended crash-related minimum data set and data sources**

42 people could vote, 2 opted out, thus 40. Excludes V, V, T and M

All accepted, 4 added in. The one with most votes against in vehicle engine. Out of 49 variables, 20 had no vote against, 5 only 1, 8 had 2, 5 had 3, 8 had 4, and 1 had 8, 10 and 11 each. Most of the variables with a higher number of votes against are vehicle related, including vehicle engine (11) and vehicle model (10).

\*

When looking into what is strictly needed from police officers, the 48 variables get down to 21 since all others can be collected in other databases.



		Data sources								
		Preference order (1= best to 6= least preferred)								
Vote against	Crash related indicators	Death certificate	Hospital record	Police report	Insurance report	Driver license	Vehicle registry	Road inventory	National ID	
0	1 Crash identification number  <b>Definition:</b> The unique identifier (e.g. a 10-digit number) within a given year that identifies a particular crash. <b>Obligation:</b> Mandatory <b>Data type:</b> Numeric or character string <b>Comments:</b> the police usually assign this value, as they are responsible at the crash scene. Other systems may reference the incident using this number.	2	3	1	N/A	N/A	N/A	N/A	N/A	
0	2 Crash date  <b>Definition:</b> The date (day, month and year), on which the crash occurred.	4	3	1	2	N/A	N/A	N/A	N/A	



P2...

	Number of countries	Total population (000s)	Total reported road deaths by countries	Total WHO road death counts
<b>World (total)</b>	<b>194</b>	<b>7 312 528</b>	<b>622 268</b>	<b>1 207 617</b>
<b>Africa</b>	<b>49</b>	<b>1 001 415</b>	<b>63 830</b>	<b>242 772</b>

## 2.B Certification and Vital registration data

- Standardized vital registration data collections tools and methodologies
- Linkages of vital statistics data to road safety/transport data
- Series of WHO workshops, forthcoming multi-country workshop:
- Training/Capacity building on International Classifications of Diseases- ICD10/11- especially of death coding and certification.



# P2

## 2.C Sharing/Linking police and health data

- Setting up common procedures for sharing and then linking police with hospital data and other sources of crash related data.

Training Session

## 2D Driver license registration

- Detailed survey on existing inventories in African counties
- Identify good practices
- Develop recommendations country by country
- Implementation of the recommendations

## 2.E Traffic and mobility data

- Exchange information on best practices regarding the collection of traffic data (vehicle –kilometres, mobility patterns, etc....
- Study on the potential of big data



## P3. Safety performance indicators

- Identify indicators (among the UN voluntary performance indicators) that deserve work in common (e.g. seatbelt use, speed, helmet wearing ...)
- Identify road safety performance indicators which are specific to the African region
- Adopt methodology to collect data for these indicators
- Undertake measurement campaigns (maybe one per year )



## P4. Common safety database

- Finalise list of aggregated variables to be collected by the Observatory
  - Using the disaggregated list of variables to be collected at country level
- Develop option for the creation of a road safety database for Africa
  - based on national aggregated data
  - based on disaggregated data
- Elaboration and diffusion of a questionnaire to collect data
- Development and maintenance of the database Countries collect data at the disaggregated level (locally)
  - i.e., individual level data
- For ease of technical requirements and technical secretariat capacity, countries will submit aggregated data initially
  - E.g., counts
- IT work to evaluate needs for disaggregated data management capacities
  - Evaluating existing models like IRTAD or OISEVI (aggregated) or CARE, ERSO (disaggregated)
- Eventually, disaggregated data will be submitted





## P6. Periodic report(s) on Road Safety in Africa

- Prepare report(s) to report on :
  - improvement in road safety data
  - most recent data , including performance indicators
  - Modalities of dissemination of the report...workshop? Website? annual road safety forums?



# ARSO – Governance

- Three entities were proposed under the bylaws:
  1. General Assembly: Primary decision making body
  2. Steering Committee: Elected by the General Assembly, from which a President is elected
  3. Expert Data Group: Responsible for core data and information function
- The bylaws also:
  - allow entities other than African Country Members to join, in a non-voting capacity
    - Academia, NGOs, Private Sector etc



# ARSO First General Assembly – Durban, June 2019

- Attended by about 100 participants from about 40-member states
- Delegates were from Ministries of Transport, Road Safety Lead Agencies, Health and Police Commission of the member States, Private sector, CSOs, RECs and Development partners.



# The key agreements reached

- **Establishment of ARSO:** SSATP in collaboration with AUC, AfDB and UNECA will work on the appropriate methodology for the effective establishment of the ARSO as a specialized agency of the African Union in line with the requirements of the African Road Safety Charter. This will include having the draft bye-laws cleared by the AU Statutory Committee on Justice. A consultant will work with committee to ensure compliance. In the interim, the Interim Steering Committee will continue to operate and move the agenda forward
- **Work Plan:** Member countries will be assisted to prioritize the development of their Civil and vital registration systems for better data on deaths from road traffic crash. Continue collaboration with WHO on this matter. An initial 10 countries have had joint training and at least one more workshop will be held before the end of the calendar year.
- SSATP/ARSO Secretariat to develop and facilitate a training workshops on road crash data in line with the WHO Manual, the ARSO agreed upon crash-related minimum variables & DRIVER if appropriate
- ARSO member countries, in collaboration with UNECE, will promote national/sub regional workshops to assess feasibility and implementation of UN Conventions in African countries.
- ARSO to promote attitudinal and behavioral data collection in all African countries according to international standards;
- *ARSO to work with AfDB to establish capacity building programs such as the regional Centers of Excellence being promoted by the Bank.*
- *ARSO to spearhead international and regional collaboration amongst African countries which will help governments to improve their road safety data quality and collection systems*
- **Acceding to African Road Safety Charter.** The AU will send out a memorandum outlining procedures for African countries to accede to and ratify the African Road Safety Charter by the end of July, 2019
- **Preparing for Stockholm Ministerial:** AU will convene a meeting of African member states at a date to be determined for a consultation on the African member states common position as well as concrete measures for the post UN Decade strategy.



# resolutions

- SSATP be commended for its leadership role in establishing the Observatory
- The effectiveness and continuity of operation of any observatory, including the ARSO Observatory, will depend on its status and mandate;
- **Countries adopt best practices on data collection and policy implementation.**
- **Promote improvements on fatality data collection and analysis to avoid the need for modelling**
- **To improve consistency and accuracy of records, terminology should be consistent nationally and across sub-regions;**
- The African Member States endorse the African Road Safety Charter by lobbying the relevant Ministers to sign/ratify it;



# How can universities and research centers help?

## Open discussion

- The aims of the session are to:

Increase appreciation of the value of the data-driven, evidence-based approach to road safety (and transport policy more generally):

- The need for data in resource allocation, policy setting, selection of intervention type and location, advocacy, monitoring, research and evaluation.

- The need for capacity building in data mining and research.

the opportunities in the ARSO in road safety data and management  
Initiate the conversation and identify steps towards development of a collaborative network centers of excellence for road safety data, analysis and research



# Proceedings of GA and information on ARSO

- English: <https://www.ssatp.org/en/events/first-general-assembly-african-road-safety-observatory>
- French: <https://www.ssatp.org/fr/events/premi%C3%A8re-assembl%C3%A9e-g%C3%A9n%C3%A9rale-de-lobservatoire-africain-de-la-s%C3%A9curit%C3%A9-routi%C3%A8re>