



Survey Analysis Report-First results

EVALUATING COUNTRY LEVEL ADHERENCE TO CRASH-RELATED VARIABLES

Produced for the ARSO Steering Committee review





Mustapha AZZOUZI Transport & Road Safety Specialist

mustaphazzouzi@gmail.com

Survey Analysis R

- Survey Analysis Report
- 183 values related to 45 variables;
- 33 countries (1st AGM);
- 16 countries have responded, i.e 48%;





1st Deep dive:

BENIN

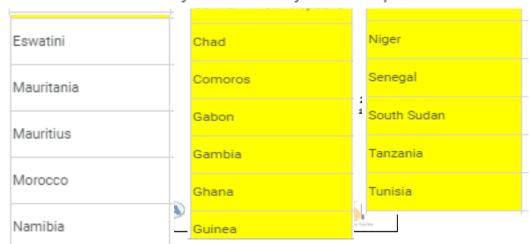
MOROCCO IVORY COAST MAURITUIS ESWATINI
Guinea-Bissau UGANDA MAURITANIA MALI
TOGO ZIMBABWE DR-Congo NIGER

NIGERIA

NAMIBIA

SIERRA LEONE

Table 1: List of countries that filled in the questionnaire.



1st Deep dive: Results Situation

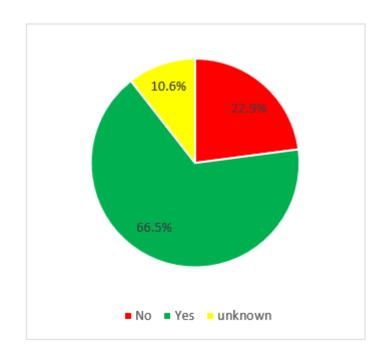


Figure 1: Variables collected by surveyed countries

Among the 45 variables, the 16 countries have reported the collection of 66% of the them.

21% of the values are not filled in by the countries (we do not have certitude if they collect them or not).

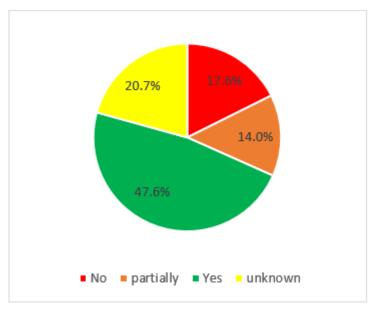
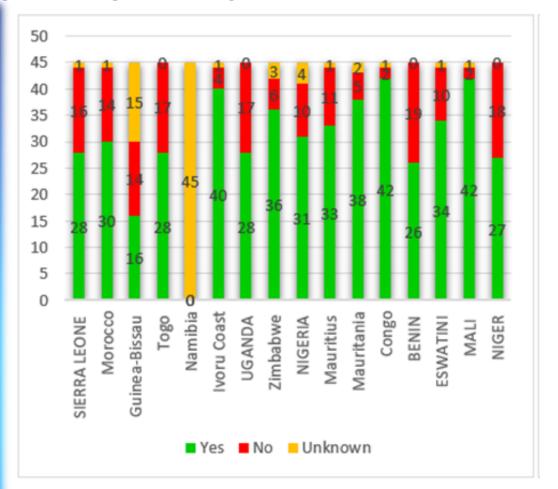


Figure 2: Values collected by surveyed countries

1st Deep dive: Results Situation

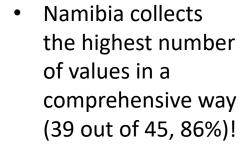


- Namibia did not fill in the column of collected variables;
- Guinea-Bissau did not provide information on 15 variables.

Figure 3: Number of variables collected by country

On average, surveyed countries collect 30 out of 45 variables (66%). A very encouraging percentage in order to reach a database that respects the proposed minimum data set.

1st Deep dive: Results Situation



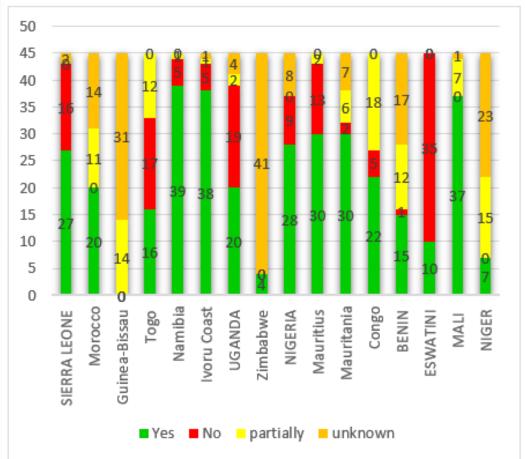
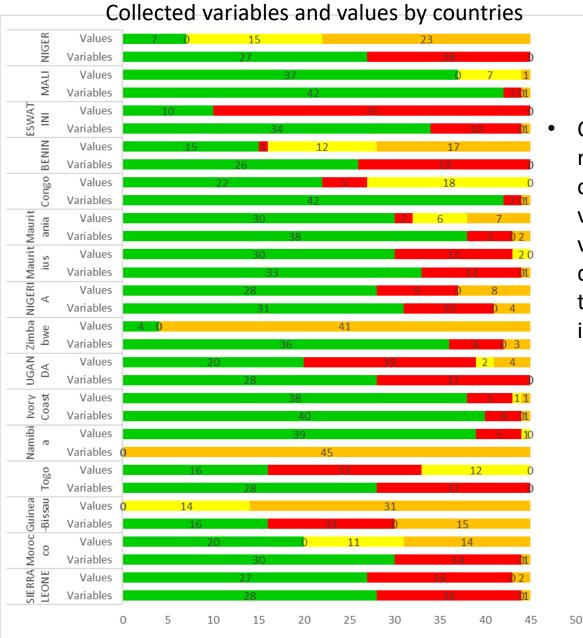


Figure 4: Number of collected values by countries

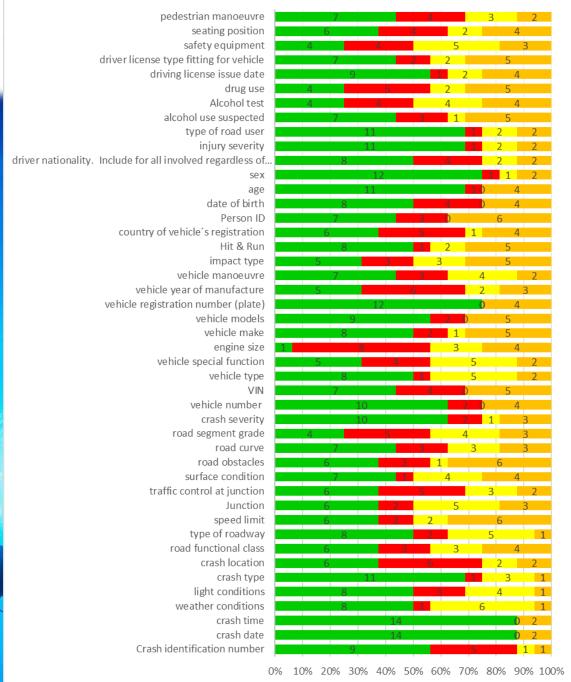
As for values, surveyed countries reported that they collect 21 values out of 45 in a comprehensive way (46%) and 6 out of 45 in a partial way (13%): low percentages to meet the proposed minimum data set.



Partially Unknown

1st Deep dive: Results Situation

reported that they collect more variables than values. which is quite logical since the variables are informed by values.



sults

1st Deep dive: Results Situation

As for values, they are collected on average by 8 out of 16 countries in a comprehensive way and by 2 out of 16 countries in a partial way (10%).

"crash date" and "Crash time" are the most collected variables

Figure 7: Number of countries by callected values (related to variables)

1st Deep dive: Results Situation

 The first factor considered is # variables collected by each country. In case of equality between two or more countries, the second factor is # values collected in a comprehensive way;

	#Variables		#Values					
	Yes/45	No	Unknown	Yes		Partially	No	Unknown
MALI	42	2	1		37	7	0	1
Congo	42	2	1	\odot	22	18	5	0
Ivory Coast	40	4	1		38	1	5	1
Mauritania	38	5	2	1	30	6	2	7
Zimbabwe	36	6	3	\bigcirc	4	0	0	41
ESWATINI	34	10	1	lacksquare	10	0	35	0
Mauritius	33	11	1	1	30	2	13	0
NIGERIA	31	10	4	1	28	0	9	8
Morocco	30	14	1	lacksquare	20	11	0	14
SIERRA LEONE	28	16	1	1	27	0	16	2
UGANDA	28	17	0	\odot	20	2	19	4
Togo	28	17	0	\odot	16	12	17	0
NIGER	27	18	0	\bigcirc	7	15	0	23
BENIN	26	19	0	lacksquare	15	12	1	17
Guinea-Bissau	16	14	15	\bigcirc	0	14	0	31
Namibia	0	0	45		39	1	5	0

Table 2 : Countries ranking regarding the number of collected variables

1st Deep dive: Results Situation

Mini ARSO data set:

similarities with other observatories, one could argue than in initial stages, instead of the 45 variables, the focus is set on a smaller number of them.

We adopt the MiniCADAS (Common Accident Data Set) approach as the CADAs and ARSO minimum crash data variables are practically identical.

MiniARSO could be set up as an earlier goal so that all countries secure first full completion of the lesser number of crash-related variables.



1st Deep dive: Results Situation

Mini ARSO data set: the proposed 25 crash-related variables in MiniARSO

	Mini RASO variables			
1	Crash identification number			
2	crash date			
3	crash time			
4	weather conditions			
5	light conditions			
6	crash type			
7	crash location			
8	type of roadway			
9	speed limit			
10				
11	traffic control at junction			
12	crash severity			
13	vehicle type			
14	vehicle special function			
15	vehicle year of manufacture			
16	country of vehicle's registration			
17	Person ID			
18	date of birth			
19	sex			
20	driver nationality. Include for all involved regardless of driver status			
21	injury severity			
22	type of road user			
23	Alcohol test			
24	drug use			
25	safety equipment			

Mini ARSO data set:

1st Deep dive: Results Situation

The number of MiniARSO-required variables already collected in the surveyed countries is shown below (the number could be even higher once a second review is done):

	ARSO/45	%/ARSO	MiniARSO/25	%/MiniARSO
SIERRA LEONE	28	62%	15	60%
Morocco	30	67%	19	76%
Guinea-Bissau	16	36%	8	32%
Togo	28	62%	15	60%
Ivory Coast	40	89%	23	92%
UGANDA	24	53%	11	44%
Zimbabwe	36	80%	23	92%
NIGERIA	31	69%	17	68%
Mauritius	33	73%	19	76%
Mauritania	38	84%	21	84%
DR-Congo	41	91%	22	88%
BENIN	26	58%	19	76%
ESWATINI	34	76%	20	80%
MALI	42	93%	24	96%
NIGER	27	60%	18	72%
Namibia	0	0%	0	0%

ARSO and MiniARSO Percent agreements by country



Mini ARSO data set:

1st Deep dive: Results Situation

The following is a descriptive table of MiniARSO crash-related data variables and their percent (%) inclusion in existing crash-related.

	Crash-related data	Road-related data	Vehicle-related data	Person-related data
SIERRA LEONE	28%	4%	8%	20%
Morocco	24%	12%	20%	20%
Guinea-Bissau	16%	0%	0%	16%
Togo	20%	12%	8%	20%
Ivory Coast	32%	16%	16%	28%
UGANDA	16%	4%	12%	12%
Zimbabwe	32%	16%	20%	24%
NIGERIA	24%	12%	12%	20%
Mauritius	32%	16%	12%	16%
Mauritania	32%	16%	12%	24%
DR-Congo	20%	16%	20%	32%
BENIN	28%	12%	16%	20%
ESWATINI	28%	16%	12%	24%
MALI	32%	16%	16%	32%
NIGER	32%	12%	8%	20%
Namibia	0%	0%	0%	0%





Survey Analysis Report

Conclusion

- Even though we are far from being at a good place, we are better than we though. On first call, 16 out of 33 countries replied with information on their data collection practices;
- Of these countries, it can be said that one could start by **requesting them to submit calendar year 2017 and 2018 data for a preliminary ARSO-related analysis.** Instead of the full ARSO set, maybe this preliminary analysis could be done with MiniARSO;
- In coming months, we could build from the experience gained by issuing a second call of the survey. In this occasion all 55 AU member states would be targeted.





Survey Analysis Report-First results

Thank you! UNTRY LEVEL ADHERENCE TO

EVALUATING COUNTRY LEVEL ADHERENCE TO CRASH-RELATED VARIABLES

Produced for the ARSO Steering Committee review





Mustapha AZZOUZI

Transport & Road Safety Specialist mustaphazzouzi@gmail.com