Working Group
Institutional Coordination and Data Systems
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Key results and outputs of the crash data system improvement activity in the EaP countries

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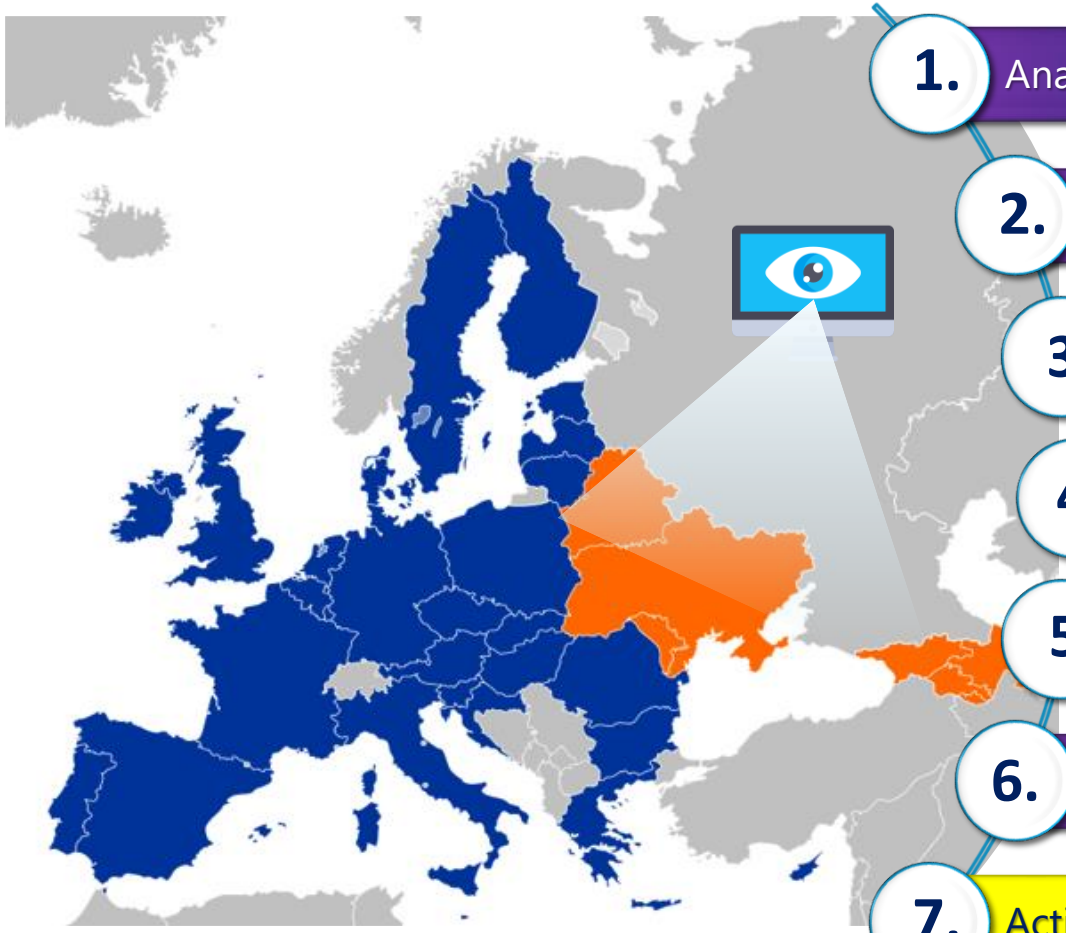
EaP | Eastern Partnership

Main tasks and outputs from the EaP project



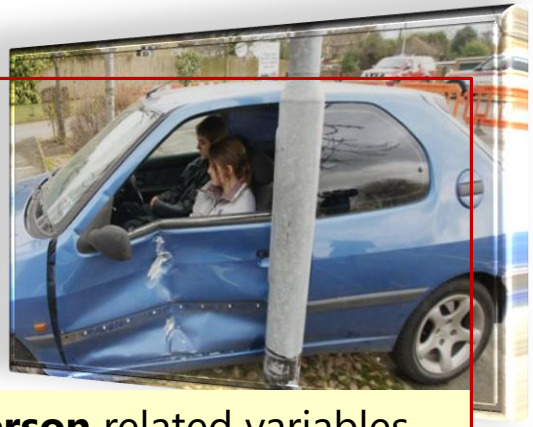
1. Analysis of existing Crash data form per country and comparison with CADaS
2. Benchmarking of Crash Database System in EaPCs model 2018, Impact Indicators
3. Country Notes for Crash data collection and road safety database system in EaP countries
4. Action plans and roadmaps for establishment road safety database in EaPc and improvement of existing crash databases
5. Guideline for specific CADaS variables and best practice in crash data collection
6. Pilot projects for SPIs data collection and CADaS data collection
7. Action plan for establishment of Road safety observatory for EaP countries

1. Analysis of existing Crash data form per country and comparison with CADaS

I Accident related variables

II Road related variables

III Traffic Unit (vehicle and pedestrian) related variables



IV Person related variables

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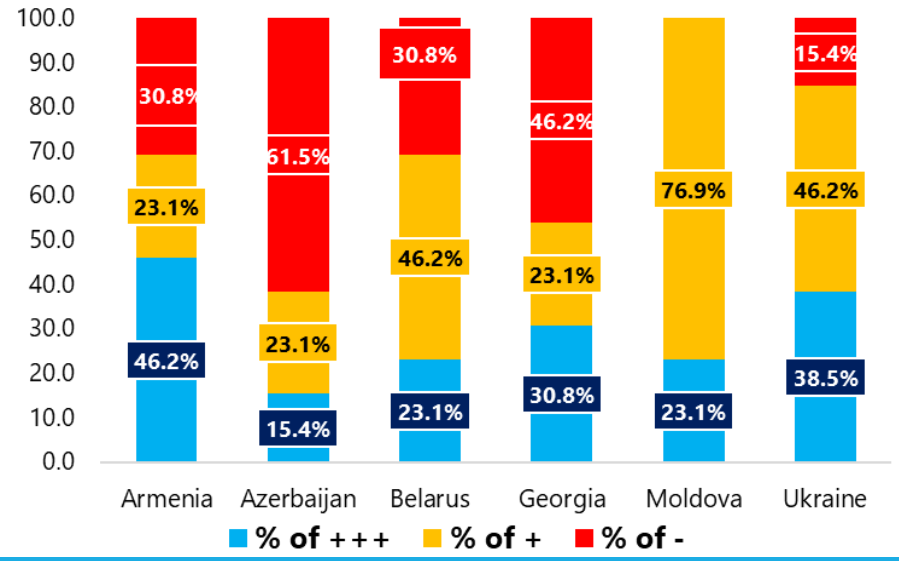
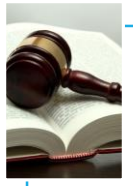
Assessment and comparison of current data sets and data structure of EaP countries with proposed data sets and data structure were recommended by European Commission, particularly CADaS

The document CADaS[1] proposes a minimum set of standardized data on accidents which is to be collected in the Member States of the European Union, and which will allow comparability of data on accidents between countries in Europe. Recording data according to the CADaS recommendations of the European Commission will enable more detailed and reliable analysis of road safety situation, planning of measures to improve road safety, measuring the efficiency of implemented measures, as well as the exchange of experience among countries which apply CADaS protocol.



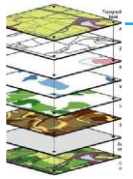
2. Benchmarking of Crash Database System in EaPCs model 2018, Impact Indicators



Legislation

Software Platform

Concept of road safety database



GIS oriented

WEB Oriented

Database availability

Updated

Willingness to data exchange

Institution

Connectivity

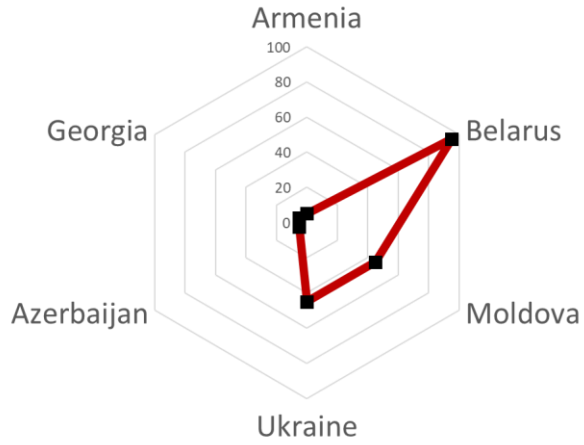
2. Benchmarking of Crash Database System in EaPCs model 2018, Impact Indicators

Main QUESTIONS!

Establishment and management of crash database is direct recognized by Law or sub-law related to road safety

ORACLE, SQL, Other database software platform…

Road safety database concept is RECOGNIZED or NOT RECOGNIZED



Crash database is GIS and WEB oriented, Yes or No?
If Yes is it operational?

Availability of Crash or other road safety data and how often?

Evaluation of data exchange between different institutions/organizations

In charge institution for crash or road safety database development

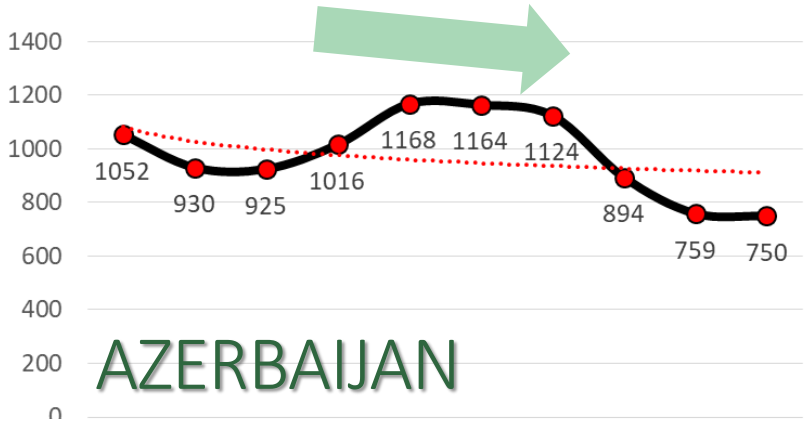
Possibility for connection with other databases and data sets.

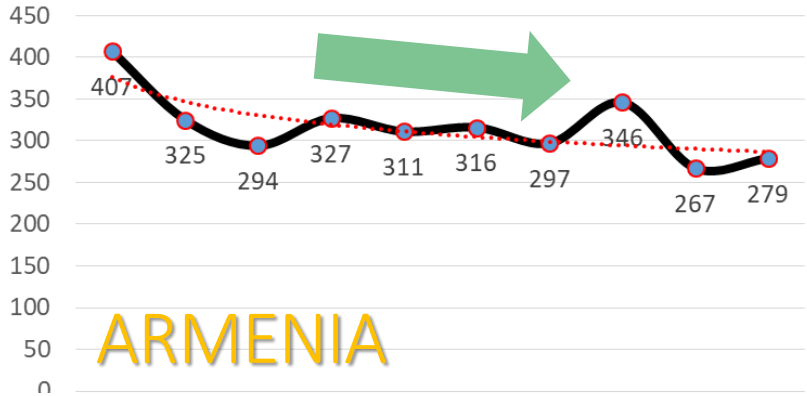
3.

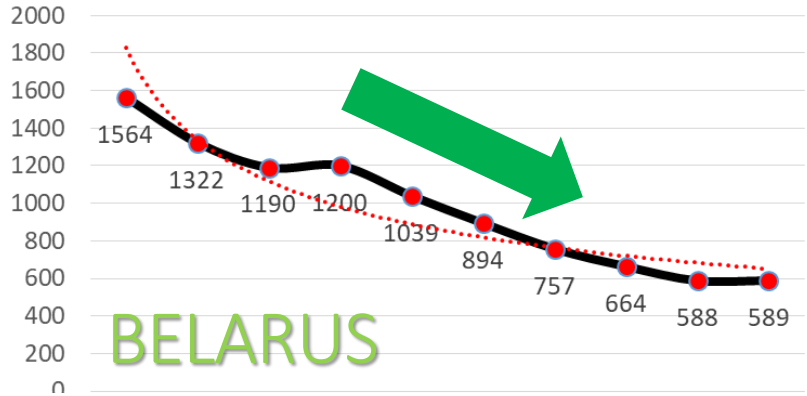
Country notes – Content

1. Road Safety Situation based on available crash data
2. Current situation (present practices) in crash and road safety data collection
3. Benchmarking of Crash and Road Safety Data System
4. Comparison of the structure of road accident data with CADaS
5. Deficiencies requiring attention and recommendations (suggested way forward)

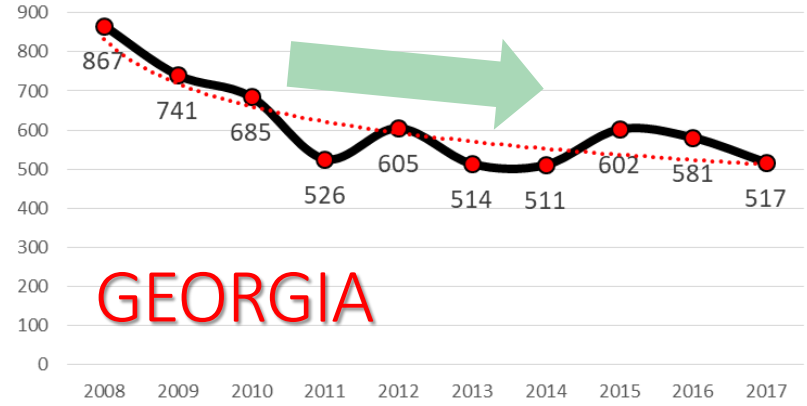
General road accident data in EaP countries – **Number of fatalities**, trend lines

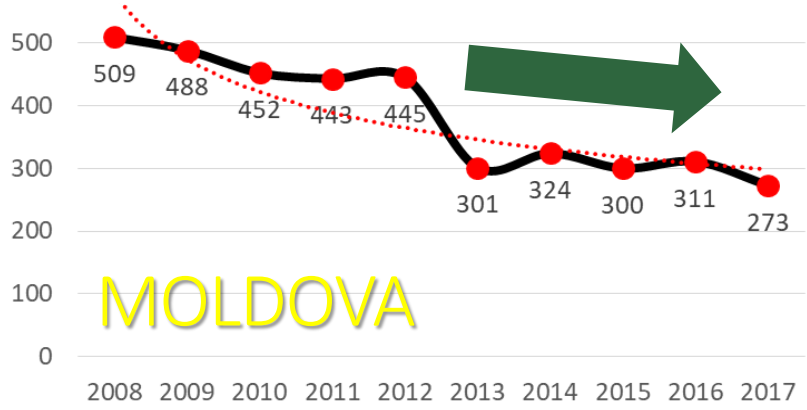


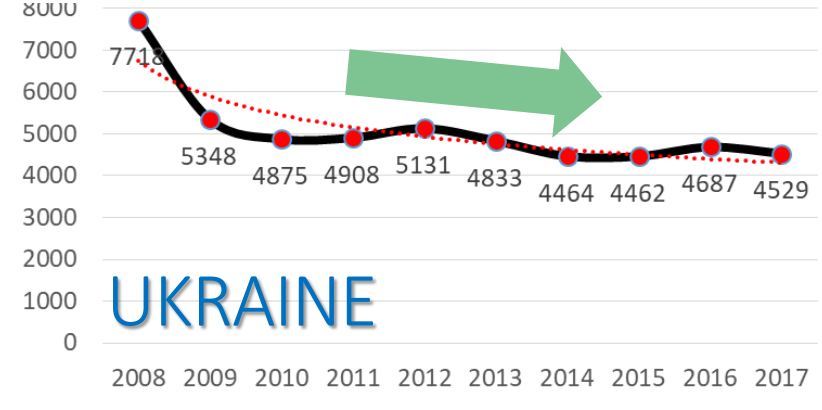




Definitely, underreporting exist!



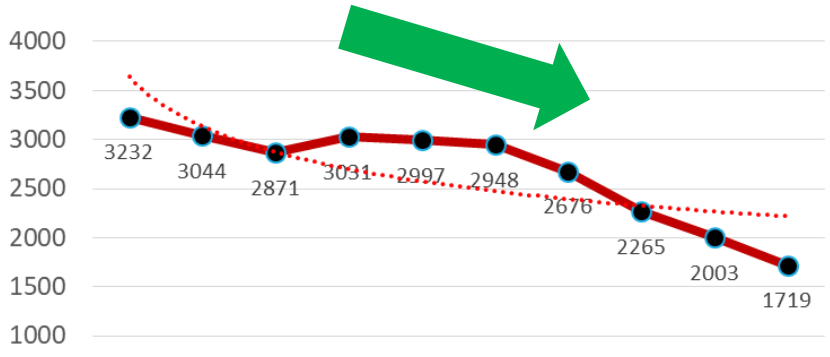


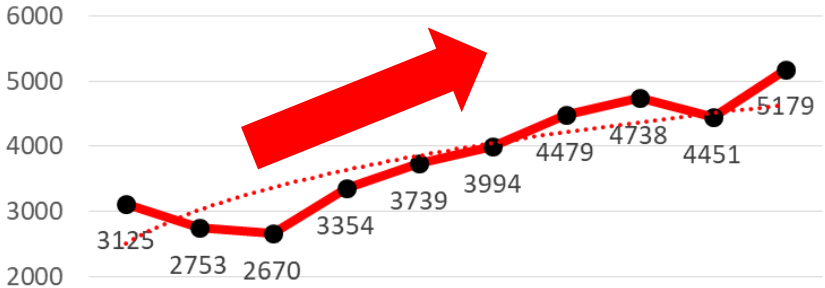


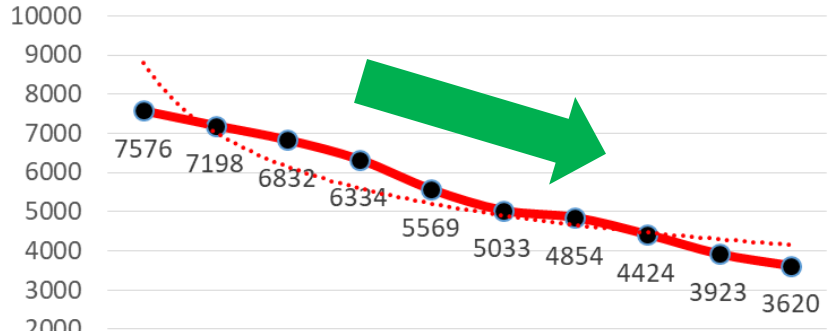
Will be useful to add a slide with comparison of 2016 fatalities and injuiries data as reported by EaP countries and the recently published WHO report:
https://www.who.int/violence_injury_prevention/road_safety_status/2018/en/

It will reinforce the message about underreporting.

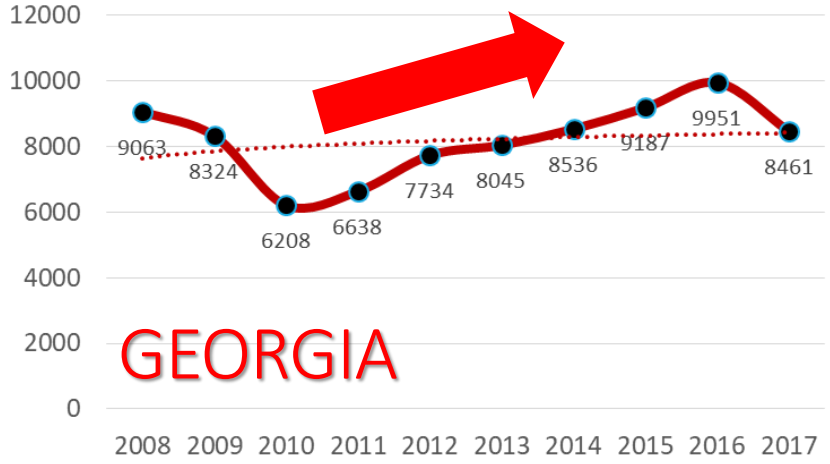
General road accident data in EaP countries – **Number of injuries**, trend lines

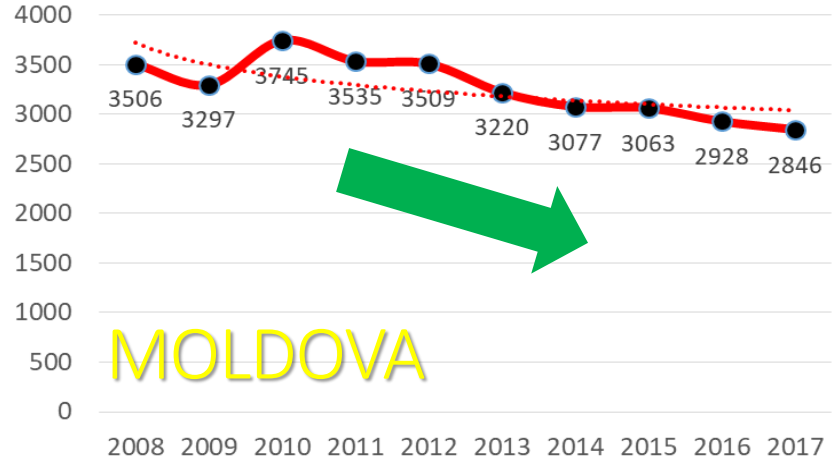


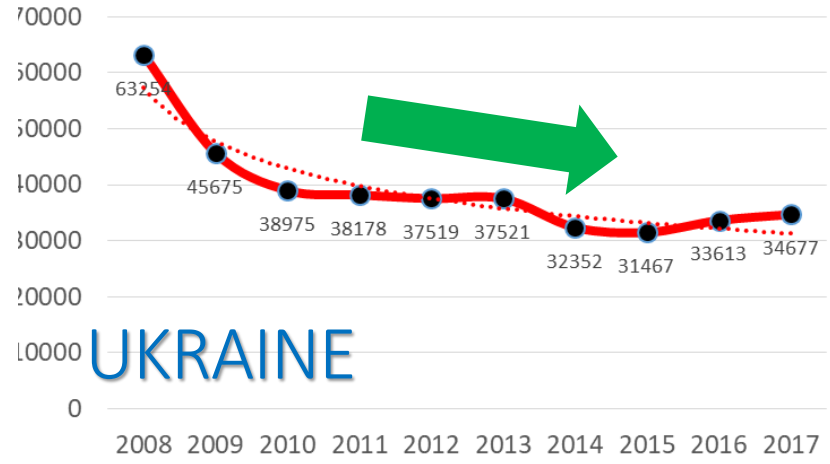


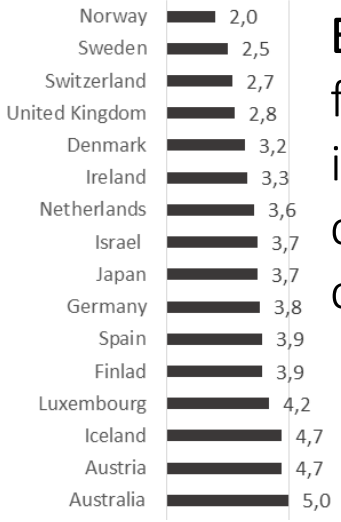


Definitely, underreporting does exist!

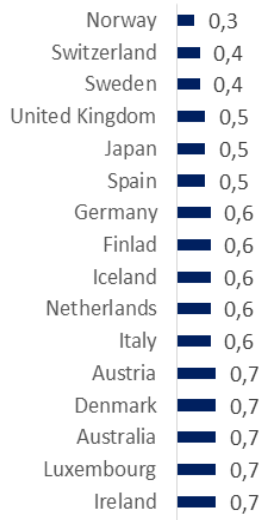




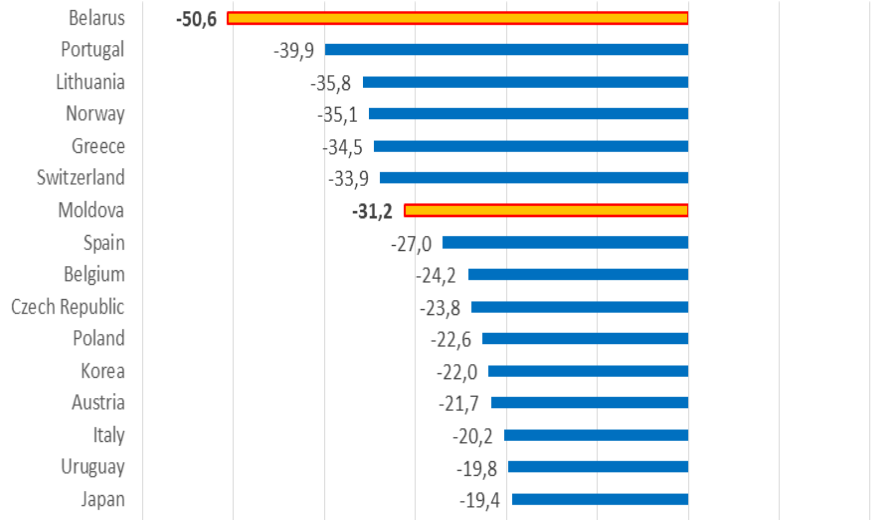




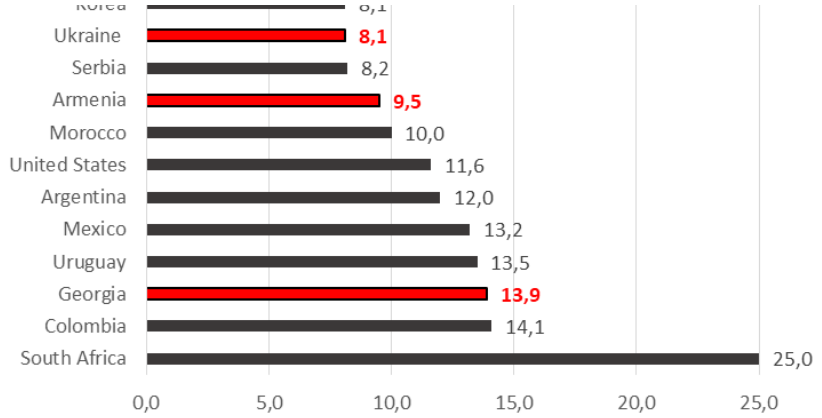
EaP countries, Road fatalities per 100 000 inhabitants in 2017, comparing with **IRTAD** countries

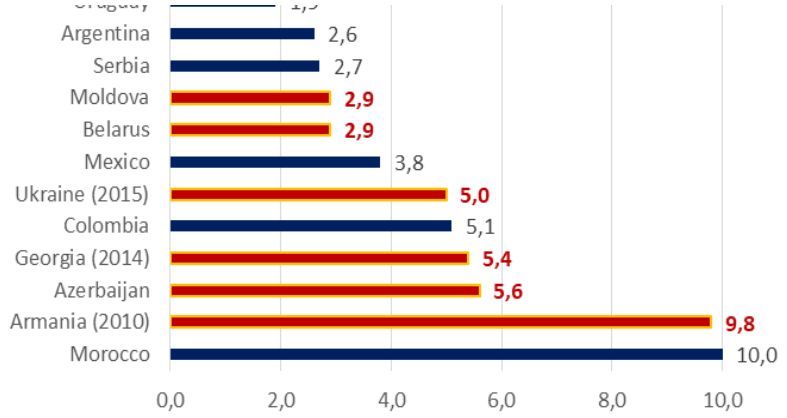


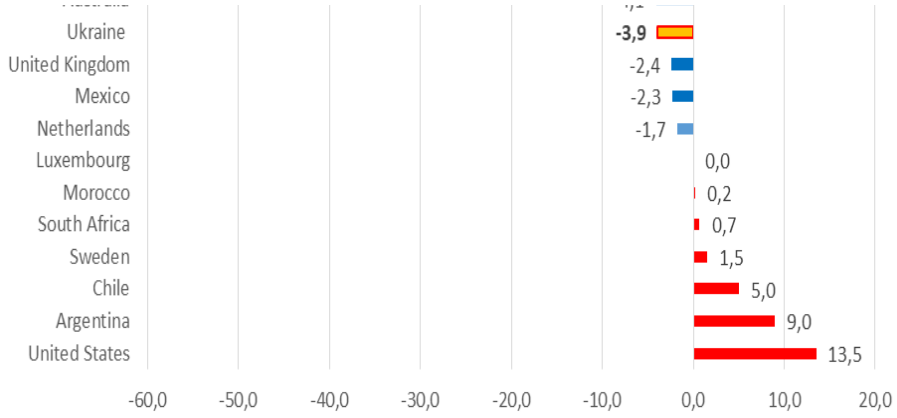
EaP countries, Road fatalities per 10 000 vehicles in 2017, comparing with **IRTAD** countries



Crash data for all EaP countries are not validated! Did not pass standard procedure before publishing as official data in the IRTAD database







Crash Data System Country Notes for each EaP country

Crash data system in the EaP countries

COUNTRY NOTES
ARMENIA

Crash data system in the EaP countries

COUNTRY NOTES
BELARUS

Crash data system in the EaP countries

COUNTRY NOTES
MOLDOVA

Crash data system in the EaP countries

COUNTRY NOTES
AZERBAIJAN

Crash data system in the EaP countries

COUNTRY NOTES
GEORGIA

Crash data system in the EaP countries

COUNTRY NOTES
UKRAINE

4. Action plans and roadmaps – Road safety database and improvement of existing crash databases

(Example from Georgia)

Establishing of National (integrated) Road Safety database for Republic of Georgia				
1	**Improving existing national Crash accident database in Georgia in accordance with CADaS recommendation of European Commission**			
	Timeline	2018	2019	2020
	Period for implementation of activities/Type of activities (month/year)	R DPP PI		
	Lead institution/organisation	Ministry of Interior - Information and Analytical Department, Patrol Police Department and police unit in-charge for crash data collection		
	Expected budget	50,000.00 - 60,000.00 EUR		
	Support	Ministry of Economy and Sustainable Development, State Road Administration (Roads Department), Ministry of Health (NCDC)		
	Expected result	Crash database in Georgia improved and new sets of data included in accordance with CADaS		
2	**Develop GIS oriented state roads reference system about road sections and nodes on national and regional highways and most important regional road network**			
	Timeline	2018	2019	2020
	Period for implementation of activities/Type of activities (month/year)	RFS PI		
	Lead institution/organisation	State Road Administration (Roads Department)		
	Expected budget	150,000.00 - 200,000.00 EUR (10,000 -15,000 km of national road network)		
	Support	Ministry of Economy and Sustainable Development, Ministry of Interior - Information and Analytical Department, Patrol Police Department		
	Expected result	National State Road Reference System established and in use		

3	**Developing software application for better collection of data about injuries and establishing connection between hospitals and patrol police stations**			
	Timeline	2018	2019	2020
	Period for implementation of activities/Type of activities (month/year)	R DPP PI		
	Lead institution/organisation	Ministry of Health (NCDC), Ministry of Interior - Information and Analytical Department and Patrol Police Department		
	Expected budget	50,000.00 - 70,000.00 EUR		
	Support	Ministry of Economy and Sustainable Development, State Road Administration (Roads Department)		
	Expected result	Data collection about injuries in road accidents imporved and data exchange between hospitals (emergency services) and police stations established		
4	**Establishing Trauma Register in National Centre for Disease Control and adoption the definitions of the level of injuries for the Republic of Georgia**			
	Timeline	2018	2019	2020
	Period for implementation of activities/Type of activities (month/year)	R DPP PI		
	Lead institution/organisation	National Centre for Disease Control		
	Expected budget	30,000.00 - 50,000.00 EUR		
	Support	Ministry of Health, Ministry of Economy and Sustainable Development, Ministry of Interior		
	Expected result	Trauma Rregister at NCDC established and in function; Definitions of levels of injuries adopted		

Action plans and roadmaps – Road safety database and improvement of existing crash databases

5	**Directing of patrol police activities and police units in-charge for traffic control and traffic regulation based on data (after full implementation of CADaS protocol)**	
	Timeline	2018 / 2019 / 2020
	Period for implementation of activities/Type of activities (month/year)	R → DPP → PI
	Lead institution/organisation	Ministry of Interior - Information and Analytical Department, Patrol police of the Republic of Georgia and police unit in-charge for crash data collection
	Expected budget	50,000.00 EUR
	Support	Ministry of Economy and Sustainable Development, State Road Administration (Roads Department), Ministry of Health (NCDC)
	Expected result	Leading of patrol police activities based on data with established software application and necessary algorithms in use
6	**FINAL Project: Establishing of National (integrated) Road Safety database for Republic of Georgia**	
	Timeline	2018 / 2019 / 2020
	Period for implementation of activities/Type of activities (month/year)	R → RFS → DPP → PI
	Lead institution/organisation	?
	Expected budget	150,000.00 - 170,000.00 EUR
	Support	Ministry of Economy and Sustainable Development, Ministry of Interior, Ministry of Helath, State Road Administration - Roads Department, National Statistical Office of the Republic of Georgia - GEOSTAT,…other relevant road safety stakeholders
	Expected result	National Road Safety Database of the Republic of Georgia developed, equipment secured and database and software application in function

LEGEND:

R - Usually research activities imply research study and preparation work for project implementation

RFS - The first steps necessary for improving existing regulatory framework and standards

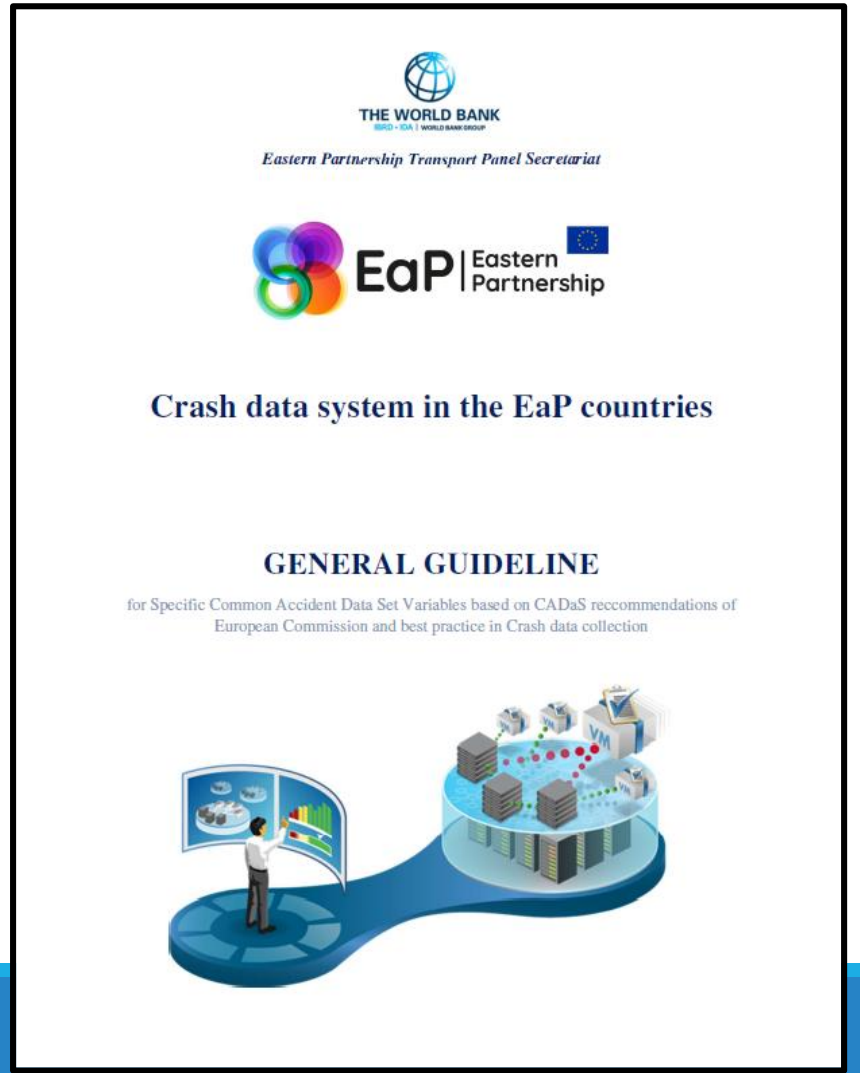
DPP - The mark named Development Project Proposal is dedicated to pilot projects

PI - Project implementation

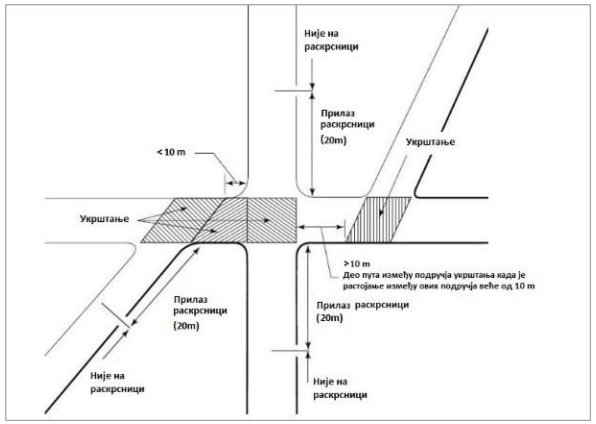
5. Guideline for specific CADaS variables and best practice in crash data collection

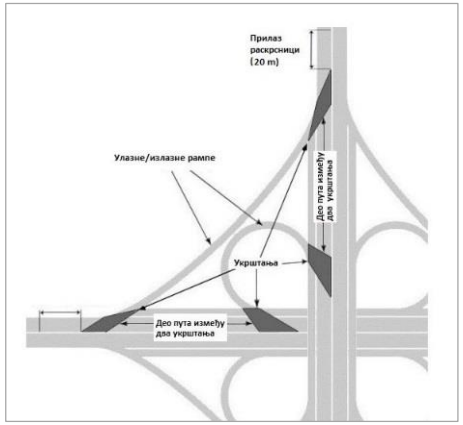
- Depends by level of development
- Different from country to country

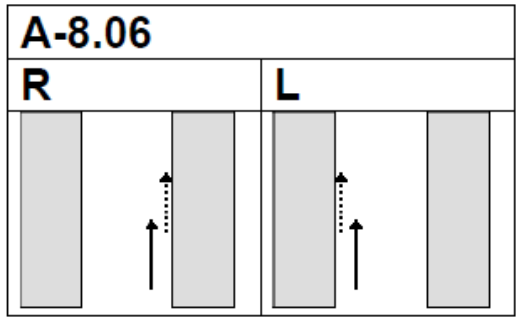
1. **GPS coordinates** of RA (X and Y, or N, E)
2. **Types of RA** in accordance with CADaS and
3. **Contributory factors** in RA data collection
4. **Road related data**:
   - -Specific place of road accident
   - -Relation to junction/interchange
   - -…
5. **Traffic unit manoeuvre**
6. **Injuries as reported**

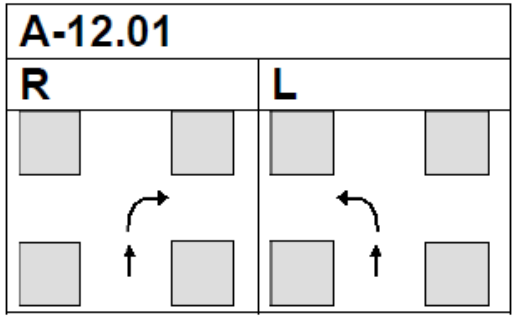


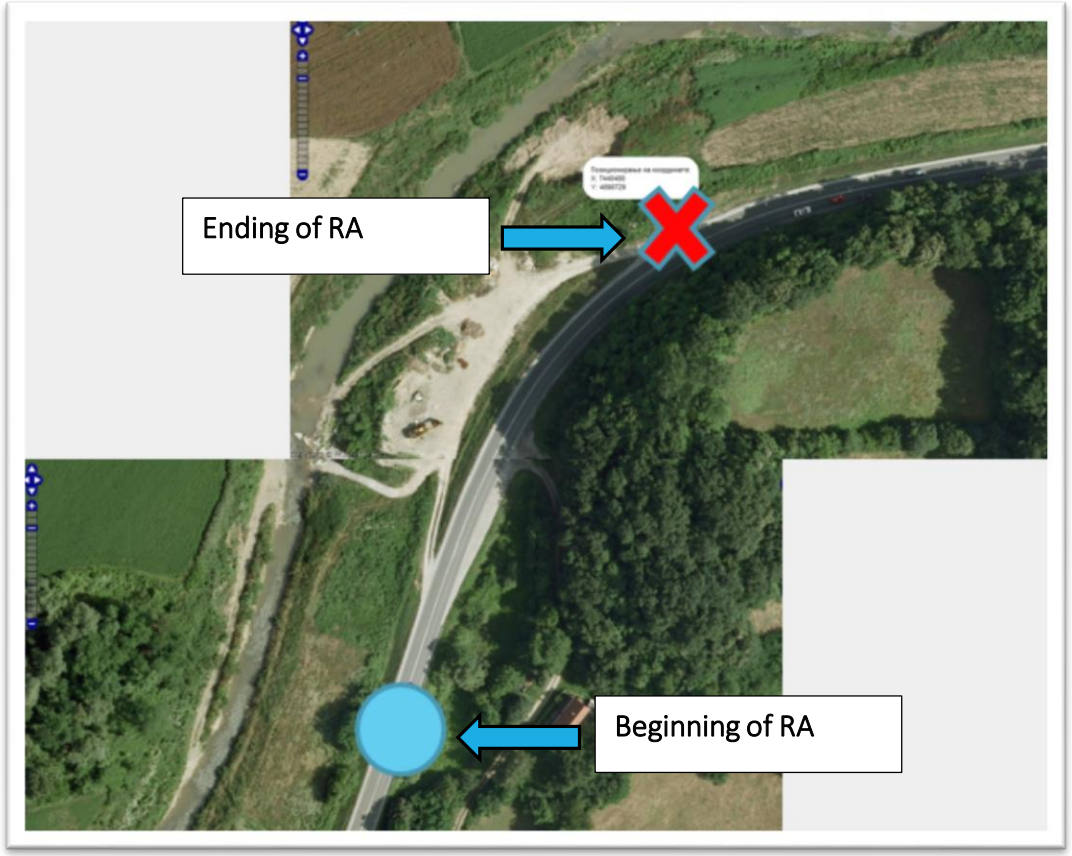
New immediate steps… examples











New immediate steps…
Example of programming work

NOM_TIP_ID	NAME	STATUS
1	ACCIDENTS WITH PEDESTRIANS	A
2	ACCIDENTS WITH PARKED VEHICLES	A
3	SINGLE VEHICLE ACCIDENTS	A
4	AT LEAST TWO VEHICLES – NO TURNING	A
5	AT LEAST TWO VEHICLES – TURNING OR CROSSING	A

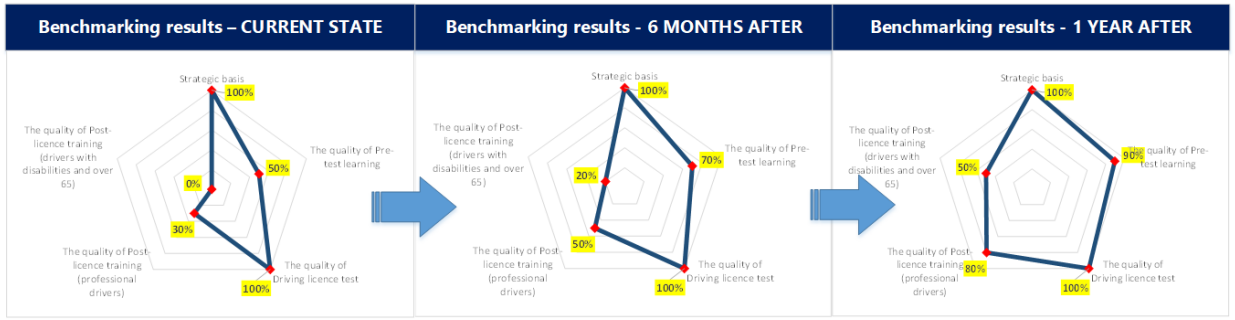
SQL query:

```
Select nom_tip_id, name, status
FROM nez_nom_tipovi
```

6. Pilot projects for SPIs data collection and CADaS data collection

Time	*Proposed duration: 12 months*												Comments
Activity	1	2	3	4	5	6	7	8	9	10	11	12	
Task 1 – SPI Methodology approach													
Task 2 – Benchmarking of road safety performance of countries													
Task 3 – SPI data collection													
Task 4 – Benchmarking data collection													
Task 5 – Analysis of collected data, publishing, addressing…													Downstream work (as per unit price)

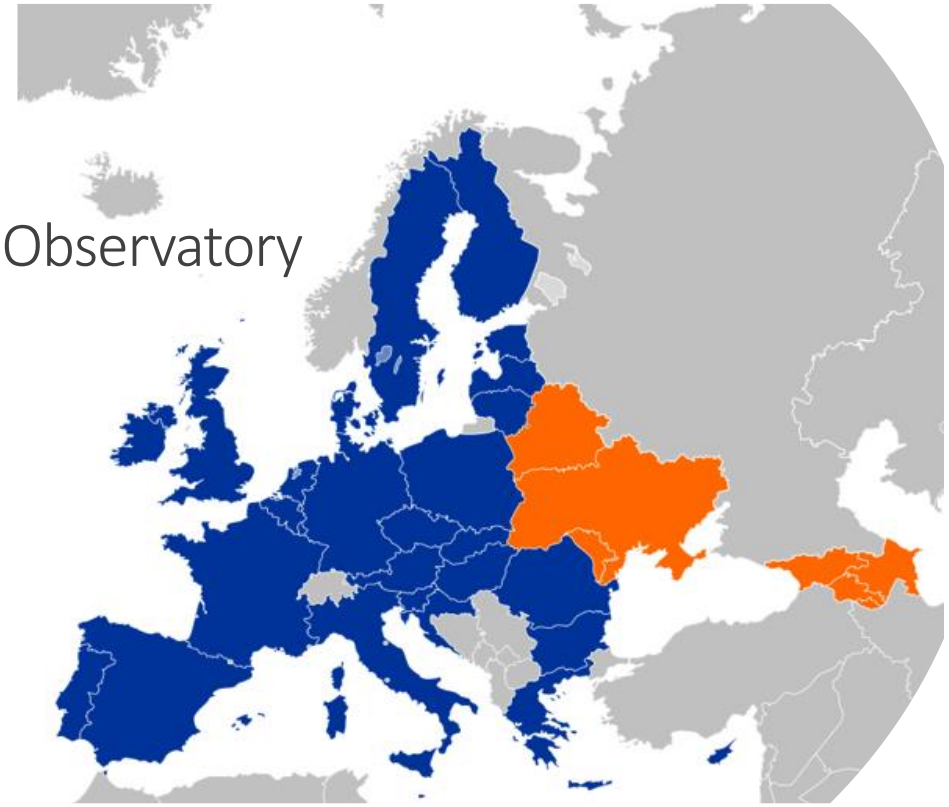
Time	*Proposed duration: 12 months*												Comments
Tech Deliverables	1	2	3	4	5	6	7	8	9	10	11	12	(final versions)
T1 – SPI methodology													2 months
T2 – Benchmarking meth. with adaptation													4 months
T3 – SPI data collection (pilot)													6 months
T4 – Benchmarking data collection													10 months
T5 – Analysis, recommendation													11 months
Final Report													12 months
Mgt Deliverables	1	2	3	4	5	6	7	8	9	10	11	12	
Inception Report													
Quarterly Report													
Final Mgt Report													+ “system established”



7. Action plan for establishment of Road safety observatory for EaP countries

- Potential partners in creation of Observatory
- Principles for creation of Observatory
- Scope of data and info collected and shared via Observatory
- Organization models
- Resources needed
- Financing models
- Formal arrangements needed
- Establishment of Observatory

…RSO will be present later!



THANK YOU FOR YOUR ATTENTION

ANY QUESTIONS?

Dr. Dragoslav Kukić

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