



# Eastern Partnership

WG2 – Good practice enforcement indicators



**EaP** | Eastern Partnership



**THE WORLD BANK**

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Minsk, October 17<sup>th</sup>, 2018

# Background

- ✓ As part of road safety cooperation between EaP countries in road safety Working Group 2 on Speed Management and Traffic Enforcement, the WB aims to support improvements in speed enforcement, seatbelts use and other traffic laws, and eventually contribute to sustainable reduction in number of traffic fatalities in these countries, by means of:
  - developing comparison of EaP countries performance in traffic enforcement;
  - identifying most likely challenges in speed and other traffic laws enforcements based on international good practice;
  - exchange of international good practices in improving enforcement;
  - developing relevant projects for international financing, which should contribute to improvements.

# Objectives

- ✓ To define key indicators, on the basis of international good practice, for monitoring and benchmarking country performance on traffic law enforcement by EaP countries
- ✓ to support a process of data collection and analysis for benchmarking purposes on the basis of indicators related to traffic laws enforcement
  - Speed enforcement
  - Use of restraint systems (seat belts, helmets, child restraint systems)
  - Alcohol Enforcement

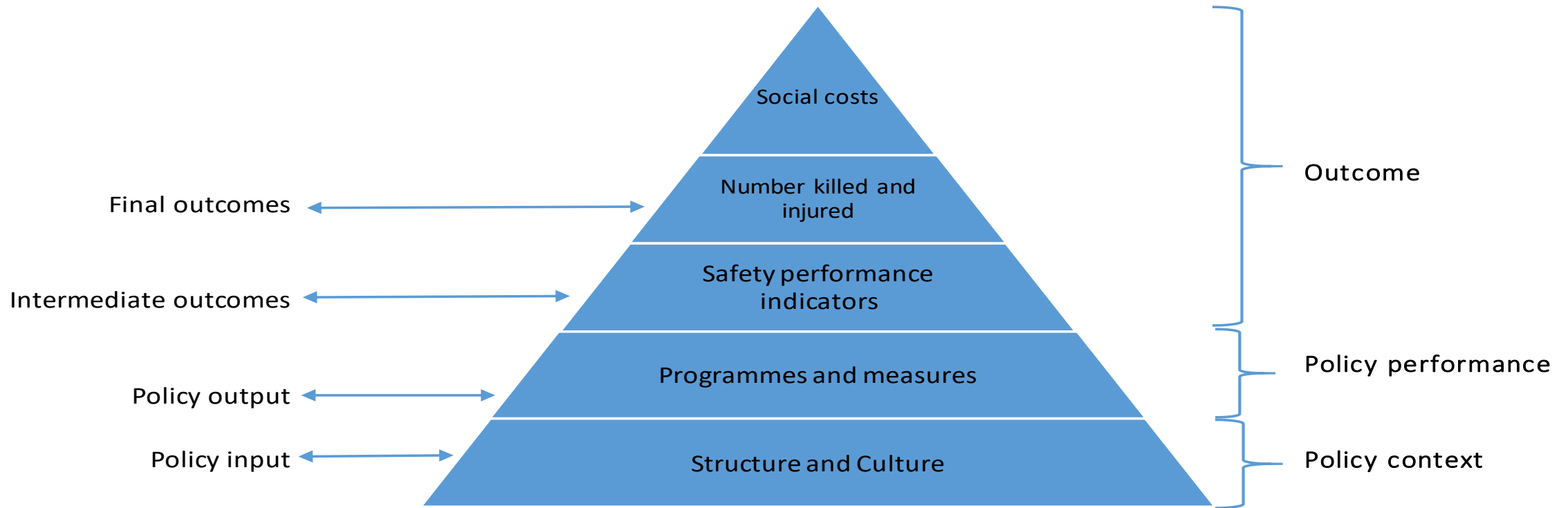
# Structure of the presentation

- ✓ A framework for benchmarking traffic law enforcement
- ✓ Key indicators
- ✓ Proposed actions for data collection and analysis

# A framework for benchmarking traffic laws enforcement

# Benchmarking framework

- ✓ A target hierarchy of five levels of results-focused road safety management systems



# Policy input and output

- ✓ **Structural and cultural characteristics** (i.e. policy input) refer to the structure and results focus of the road safety management system, the socio-economic background and the resulting road safety attitudes and perceptions.
- ✓ This is consequently related to **safety measures and programs** (i.e. policy output), resulting from these structural and cultural characteristics.

# Intermediate and final outcomes

- ✓ To link the first two layers to the actual road crash outcomes, an intermediate layer contains **key road safety performance indicators** (SPIs) on issues regarding:
  - road user behaviour (e.g. speeding, drinking and driving)
  - state of the road infrastructure and the vehicle fleet
- ✓ Final outcomes in terms of **road casualties** are necessary to understand the scale and detailed nature of safety problem.
- ✓ The top of the pyramid includes an estimate of the **social costs** of road crashes.



# The added value of measuring ‘intermediate outcomes’

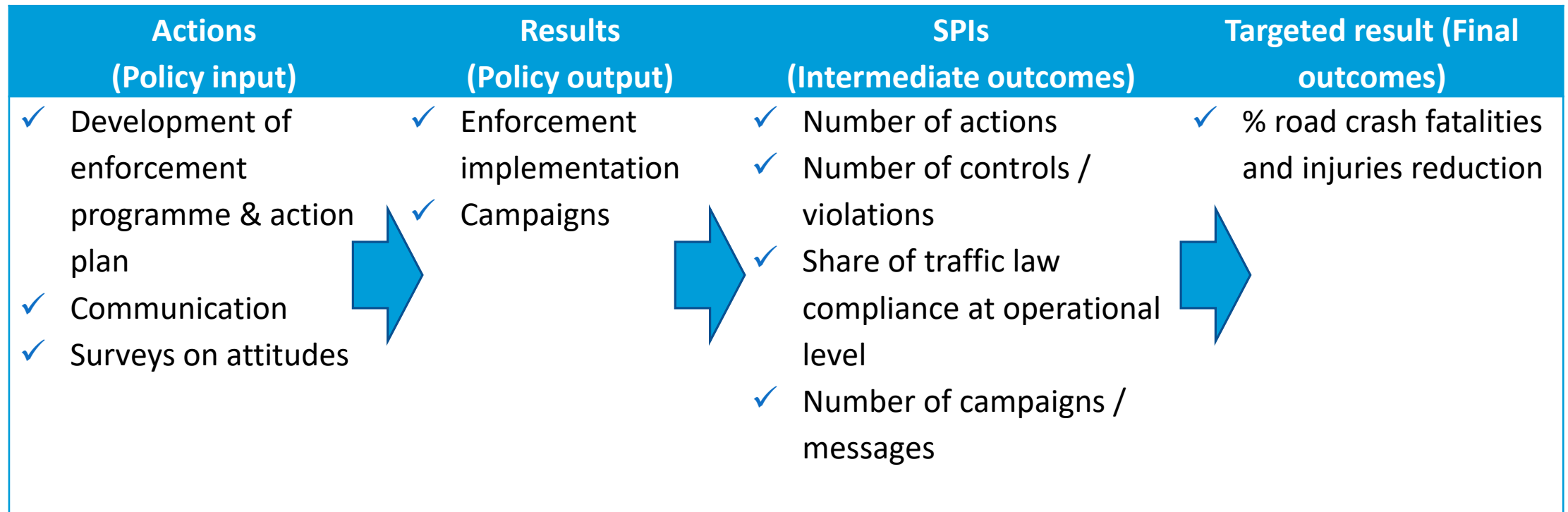
- ✓ SPIs are by definition representative of **the operational level of road safety**, which is directly affected by structural and cultural characteristics and road safety policies.
- ✓ The impact of road safety policies, and specific programmes and measures on road safety performance is indirect.
- ✓ The purpose of using intermediate outcomes (SPIs) is to fill the gap in the **lack of knowledge on causal relationships** between policies / interventions and final outcomes

# Results focus in traffic law enforcement

- ✓ Success should not be measured on the basis of the number of violations recorded or the amount of fines collected, but on the basis of the impact of specific enforcement actions on user behaviour and compliance, and eventually **the number of lives saved or will be saved on the basis of specific enforcement targets and relevant actions.**
- ✓ SPIs are crucial to measuring the performance of traffic law enforcement with respect to the specified targets, as **the results are first visible and measurable at the operational level** (behaviour and compliance)

# Results focus in traffic law enforcement

- ✓ Monitoring of indicators of all layers allows to link the implemented enforcement efforts both with their targeted results and their actual impact.



# Key indicators for traffic laws enforcement

# Key indicators for benchmarking

## ✓ Structure and culture

- Is enforcement of traffic law explicitly considered as a road safety management function?
- Which agency is responsible / accountable for traffic law enforcement?
- Is there systematic monitoring of enforcement activities against specific targets?
- What data / indicators are collected on enforcement?
- Are the attitudes towards traffic laws and enforcement measured?
- Are there formal enforcement programmes adopted?

# Enforcement measures and practice - Speeding

## ✓ Priority indicators

- Speed limits in urban roads / rural roads / motorways
- Automated speed enforcement (ASE) systems in place (mobile, fixed, section control, Dynamic Speed Display signs)

## ✓ Additional indicators

- Are 30-zones used (residential areas, schools, hospitals)?
- Are traffic calming / light engineering treatments used (speed humps, woonerfs, raised crossings)?

# Enforcement measures and practice - Alcohol

## ✓ Priority indicators

- Current BAC limit
- Different BAC limit for young / novice drivers, professional drivers, recidivist drivers?

## ✓ Additional indicators

- Is driving under the influence of drugs enforced?
- Which drugs are enforced (cannabis, others)? What are the legal limits?
- Type of devices used to enforce BAC limits
- Type of devices used to enforce drugs

# Enforcement measures and practice - Restraint systems

## ✓ Priority indicators

- Is seat-belt wearing compulsory in front seats?
- Is seat-belt wearing compulsory in rear seats?
- Is helmet wearing compulsory for motorcycle drivers?
- Is helmet wearing compulsory for motorcycle passengers?
- Is helmet wearing compulsory for bicycle riders?
- Are child restraint systems compulsory? For which age groups? What are the height/weight criteria?



# Enforcement measures and practice - Penalties

## ✓ Priority indicators

- Average fine per traffic law violation
- Is there a demerit point system for traffic law offenders?
- Is license suspension foreseen and at what threshold?
- Are there any rehabilitation programmes for offenders

## ✓ Additional indicators

- Average fine per traffic law violation
- Average number of points in demerit point system per traffic law violation

# Enforcement measures and practice - Campaigns

## ✓ Priority indicators

- Are there any targeted campaigns on traffic law compliance?
- Are campaigns coordinated with enforcement activities?

# SPIs - Intermediate outcomes - Speeding

## ✓ Priority indicators

	2012	2013	2014	2015	2016
Number of mobile speed enforcement controls					
Number of ASE controls					
Number of speed offenders recorded in mobile controls					
Number of speed offenders recorded in ASE controls					

## ✓ Additional indicators

	2012	2013	2014	2015	2016
Mean speed of traffic on motorways (Km/h)					
Mean speed of traffic on rural roads (Km/h)					
Mean speed of traffic on urban roads (Km/h)					
Amount of funding collected through fines for speeding					

# SPIs - Intermediate outcomes – Alcohol and driving

## ✓ Priority indicators

	2012	2013	2014	2015	2016
<b>Number of roadside breath tests</b>					
<b>Number of drivers exceeding the BAC limit in alcohol tests</b>					

## ✓ Additional indicators

	2012	2013	2014	2015	2016
<b>Number of drivers exceeding the drugs limit in drugs tests</b>					
<b>Amount of funding collected through fines for alcohol(Km/h)</b>					

# SPIs - Intermediate outcomes - Restraint systems

## ✓ Priority indicators

	2012	2013	2014	2015	2016
Share of front seat-belt wearing (roadside observations)					
Share of rear seat-belt wearing (roadside observations)					
Share of helmet wearing for motorcycle drivers (roadside observations)					
Share of child restraint use for children <12 years old (%)					

## ✓ Additional indicators

	2012	2013	2014	2015	2016
Share of seat belt / helmet use on motorways					
Share of seat belt / helmet use on rural roads					
Share of seat belt / helmet use on urban roads					
Amount of funding collected through fines for restraint systems					

# Fatalities and injuries

## ✓ Priority indicators

	2012	2013	2014	2015	2016
<b>Total number of traffic fatalities</b>					
<b>Total number of fatal crashes</b>					
<b>Number of speeding related fatal crashes</b>					
<b>Number of fatal crashes where at least one driver was above the BAC limit</b>					
<b>Number of driver / passengers not wearing seat-belt in fatal crashes</b>					
<b>Number of driver / passengers not wearing helmet in fatal crashes</b>					

## ✓ Additional indicators

- Same as above for non fatal (injury) crashes

# Proposed actions for enforcement data collection and analysis

# Data availability

- ✓ Structure and culture indicators are available and can be collected in all countries
- ✓ Policy, programmes and measures in place are also widely available
- ✓ Several SPI data elements (number of controls and violations) are available at national level, however this **routine enforcement activity registration data are seldom published or shared.**



# Data challenges

- ✓ **The most useful SPI data elements are the least available** (mean speeds, seat belt & helmet wearing rates), as very few countries systematically implement the **survey-type roadside observations required**.
- ✓ Speeding is often **over-represented** as a crash causation factor in national crash data
- ✓ Seat belt / helmet wearing and BAC test results of crash victims are known to be very **incompletely registered** in national crash data.
- ✓ When such biases are involved in crash data elements, it is possible that **the annual development** is not significantly affected - hence the importance of systematically collecting the data.

# Proposed actions

- ✓ Dispatch of a **questionnaire on traffic law enforcement** (Minsk, October 2018)
- ✓ Collection of data from EaP countries
- ✓ Collected data and information to be used for the enhancement of **Road Safety Country profiles**
- ✓ Analysis of collected data and information for **benchmarking & comparison of performance**
- ✓ Analysis results and conclusions to be used for **actions for improving enforcement** in the EaP countries

Thank you for your attention!