



ROAD SAFETY ENFORCEMENT PRACTICES IN THE EASTERN PARTNERSHIP COUNTRIES

**World Bank support to
the Eastern Partnership
Transport Panel**



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DISCLAIMER

The information and data presented in this report were provided by the relevant Eastern Partnership counterparts. In particular, regarding road crashes and casualties' statistics, there may be discrepancies between the data provided in this report and the road safety statistics published by the World Health Organization (WHO) and other formal reports.

LIST OF ABBREVIATIONS

Abbreviation	Word
ASE	Automated Speed Enforcement
BAC	Blood Alcohol Concentration
BYN	Belarusian Rouble
COVID-19	Coronavirus disease of 2019
CRS	Child Restraint Systems
DSDS	Dynamic Speed Display Signs
DUI	Driving Under the Influence
EaP	Eastern Partnership
GEL	Georgian Lari
KPI	Key Performance Indicator
NGO	Non-Governmental Organization
UAH	Ukrainian Hryvnia
UNECE	United Nations Economic Commission for Europe
WHO	World Health Organization

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EXECUTIVE SUMMARY

The objective of this report is to provide an overview of the current status and country level recommendations for improvements related to speed limits enforcement, seat belt use and enforcement of other traffic laws in the six Eastern Partnership countries (EaP). The implementation of the respective recommendations would consequently contribute to sustainable reduction in the number of traffic fatalities in these countries.

Following a review of international good practice related to enforcement programs objectives, effectiveness conditions, and key Safety Performance Indicators (KPIs), a **framework for assessing and benchmarking traffic enforcement** has been introduced as part of this Activity. According to this framework, the road safety management ‘footprint’ of a country at a specific point in time can be described by a targeted hierarchy of 4 layers (“pyramid”), starting from the bottom, as follows:

- **Structural and cultural characteristics** (i.e., policy input) at the bottom layer, including the institutional structure, strategic objectives, operational processes, and overall results-oriented focus of road safety management, the socio-economic background, and the road safety attitudes and perceptions in the country.
- **Measures and programs** (i.e., policy output) at the next layer, resulting from these structural and cultural characteristics.
- **Key road safety performance indicators (KPIs)** at the intermediate layer, aiming to express the ‘operational level’ of road safety in the country; these may include road user behavior indicators (e.g., speeding, driving under the influence) as well as violation rates (e.g., number of drivers with blood-alcohol concentration over the legal limit per number of drivers controlled in roadside breath tests).
- **Final outcomes (road casualties)** per type at the next layer, aiming to reflect the outcomes resulting from the operational level of road safety.
- **Social costs of road crashes**, at the top layer.

In the context of 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 road user behavior and compliance with traffic law, and eventually the number of lives that were saved or will be saved as the result of the specific actions. Therefore, policy input, output and KPIs are all crucial elements to measuring the performance of traffic law enforcement.

To evaluate the level of enforcement in each EaP country and to identify further needs for improvement, a **dedicated survey** was launched aiming to update the related surveys

carried out in 2019. Data collected through this questionnaire survey can be categorized as follows:

- A. Institutional framework, strategic and operational aspects
- B. Legal framework, current enforcement measures and practices
- C. Key Performance Indicators of traffic enforcement
- D. Road safety outcomes (fatalities and injuries) related to traffic law violations
- E. Impact of COVID-19 on traffic safety and enforcement.

The information and data of this report were collected in 3 stages:

- The **1st stage** took place in March 2019 through an on-line survey.
- As there were several pieces of information and data missing from the initial survey, the **2nd stage** in the form of a follow-up survey in standard questionnaire format took place in April-May 2019.
- The **3rd survey** took place in March–April 2021 in order to update the previously collected information, to collect more recent data and to explore the preliminary impact of COVID-19 pandemic on traffic safety.

The data collected was used to draft the EaP Countries **Road Safety Profiles on traffic enforcement** and related road safety outcomes; these are structured according to the above-mentioned layers of road safety management systems:

- **Strategic and operational framework**, including the agencies responsible/accountable for traffic enforcement, cooperation and inter-sectoral coordination procedures, strategy and action plans of the country, related capacity both in terms of manpower and equipment.
- **Legislation and measures**, including the key rules and legal limits concerning speeding, alcohol and drug use, road restraint systems (seat belts, helmets and child restraint systems) as well as the relevant fines.
- **KPIs related to enforcement activity**, including the number of drivers controlled and the number of offenders identified per type of traffic violation, as well as the amount of fines collected per type of violation and in total.
- **Road safety outcomes related to traffic enforcement**, including the total number of fatalities, non-fatal casualties and crashes, as well as the specific number of fatalities related to basic traffic violations (speeding, driving under the influence, use of restraint systems).

At the end of each country profile, a **country ‘diagnosis’** is carried out, outlining the good practice elements regarding enforcement in the country, as well as the main elements needing improvement.

Furthermore, the survey data was used to benchmark EaP countries' performance with respect to traffic law enforcement. Due to data availability and quality limitations the purpose of this exercise is primarily to highlight the potential for benchmarking on the basis of existing data, the gaps in information and data, and the areas for further data collection efforts. Benchmarking of the EaP countries is attempted against the following indicators:

- Speed limits per road type
- Frequency of 30-zones per area type
- Frequency of traffic calming engineering treatments per treatment type
- Frequency of speed enforcement in the EaP countries per type of enforcement (mobile, fixed cameras, section control, etc.)
- Relative evolution of the number of speeding offences recorded in mobile controls 2012–2020
- Number of speeding offences per million inhabitants in the EaP countries per type of enforcement (mobile controls and Automated Speed Enforcement – ASE)
- Blood Alcohol Concentration (BAC) limits in the EaP countries
- Relative evolution of the number of drivers with BAC over the legal limit in roadside breath tests 2012–2020
- Number of driving under the influence (DUI) offences per million inhabitants

Given that comparisons are based on the minimum common data elements available in the countries, which may not always reflect the complete picture, it is strongly recommended to consult the individual country profiles for more detailed information.

From the above analyses (country profile, benchmarking and country 'diagnoses') a number of recommendations are made for each of the six EaP countries.

Armenia has an extensive ASE scheme in place, as well as an extensive level of implementation of traffic calming and 30-zones in urban areas. In the last 8 years extensive efforts for traffic enforcement were applied, as well as several legislative improvements happened. However, road safety coordination in the country is not systematic, and monitoring and evaluation procedures are vague. Especially the lack of inter-sectoral cooperation is an aspect that would warrant particular attention. Several key data elements that are not systematically collected, or not directly accessible are needed to support a more evidence-based enforcement activity. These are the number of controls performed, the amount of funding collected through traffic fines, and the seat belt and helmet wearing rates in the country. Despite the intensification of enforcement, the number of crashes and fatalities have increased in the last 3 years and no visible impact of COVID-19 pandemic was detected.

Azerbaijan has quite a robust institutional and legal framework for road safety management and enforcement in particular. ASE and other relevant equipment are largely available; however, other forms of speed management should be considered more widely in the country, namely the implementation of traffic engineering treatments (speed humps etc.) and 30-zones. There was an increase in the number of violations recorded in the last 8 years, possibly related to an increase in enforcement efforts, and at the same time road safety improved overall. There is indication that fines from traffic offenses may not be efficiently collected. The country should adopt the international 30-day definition of fatality.

Belarus has systematic inter-sectoral coordination for road safety with clear links to enforcement targets and actions within a formal road safety enforcement program. However, the extent to which coordination is achieved in practice is not confirmed. There is large increase in speeding violations recorded through ASE in the country. The number of alcohol violations is declining, possibly suggesting an improvement in drivers' behavior. Traffic fatalities in the country have nearly halved over the last 8 years. Data on the amount of funding collected through traffic fines should be made available to enable the assessment of enforcement activity. Also, there is no data on road user behavior in terms of the use of restraint systems. Unlike the case in other countries, COVID-19 did not seem to affect traffic safety in Belarus; on the contrary, an increase in the severity of crashes during the 2nd wave of the pandemic was observed.

Georgia has systematic inter-sectoral and vertical coordination for road safety in the country (also with NGOs), with clear links to enforcement targets and actions. However, the monitoring and evaluation of road safety is carried out based on a limited number of general indicators. In addition, a number of legislative improvements have been implemented. The use of ASE and other types of enforcement have significantly increased, as shown by the increased number of recorded violations, especially in the last 3 years. The country should adopt the international 30-day definition of fatality.

Moldova has systematic inter-sectoral coordination for road safety (also with NGOs) with clear links to enforcement targets and actions and a formal alcohol enforcement program. However, enforcement equipment appears to be insufficient, for both mobile and fixed controls with only limited number of operational ASE systems. Speed management treatments in urban areas, vulnerable road users, etc. should receive more attention, as the relevant legislation and the extent of relevant interventions is limited. Available data shows large fluctuations in enforcement activity in the country and should be validated. It is noted, however, that traffic fatalities nearly halved in the last 8 years. In 2020 crashes significantly decreased, but fatalities did not decrease proportionally but to a smaller extent; the degree of the actual impact of the COVID-19 pandemic should be further explored.

Ukraine has the strictest legislation regarding speeding and driving under the influence of alcohol in the EaP region, with lower legal limits that are also more in line with international good practice. There is also quite a robust strategic and operational framework with specific action plans and a dedicated working group for raising awareness on enforcement. Nevertheless, the level of enforcement activity is not satisfactory in the country. A Demerit Point System is in place but not in use, and the density of speed cameras is rather low. Most importantly, data on enforcement activity is largely incomplete, as several important data elements are not subject to any formal registration; and when it is available (i.e., alcohol violations) a decreasing trend is shown. No data was reported on the COVID-19 pandemic monthly developments.

The results of the EaP country assessment on traffic law enforcement revealed several **common challenges, limitations and data needs** for a targeted and evidence-based approach to traffic enforcement. These can be outlined as follows:

- **Formal enforcement programs are rarely in place**, and in most cases, enforcement is an activity integrated within an overall road safety strategy. Specific quantitative targets for enforcement activity were not reported.
- **Enforcement activity at the operational level is monitored to a limited extent**, mostly in relation to general road safety trends and the over-representation of particular crash or victim types in the national statistics. No formal evaluation procedures are in place for enforcement.
- **The equipment available for enforcement varies largely between countries**. While in some countries there is clear focus recently on installing ASE systems, in other countries mobile controls through standard police patrolling remains the main type of enforcement.
- It is recommended that EaP countries **strengthen their efforts on both mobile and fixed means of enforcement**, as these serve different purposes. On the one hand, mobile patrolling can address the need for more unpredictable and targeted enforcement, while on the other hand ASE allows controlling a very large number of road users.
- **Legislation in the EaP region is generally less rigid** compared to other European countries. For instance, speed limits in urban areas are mostly 60 km/h, while the general trend internationally is to reduce these beyond 50 km/h. It is recommended that EaP countries consider better **aligning with international speed limits**.
- **30-zones and traffic calming are implemented in EaP countries to a limited extent**; the concept should be adopted more formally and more extensively, especially in residential areas.
- Countries are encouraged to **further lower their legal BAC limits**, and to consider stricter limits for certain groups e.g., professional drivers, novice drivers, repeated offenders, etc. It is also recommended to strengthen seat belt use laws for rear seats, as well as Child Restraint Systems regulations.

- Several KPI data elements (number of violations and amount of funding collected through traffic fines) are available in the examined countries. However, there is lack of data on the number of controls performed. This is a key piece of information that allows to assess the effectiveness of enforcement and interpret the trends in road safety violations, as it allows to **calculate violation rates**, i.e., number of offenses recorded per number of drivers controlled, which is a far more appropriate and insightful indicator of enforcement effectiveness.
- The **rate of seat belt and helmet wearing** is also a high priority KPI reflecting very accurately the overall level of traffic compliance and road safety behavior in a country, and their collection on a systematic basis (i.e., every 3 or 5 years) should be a priority for all countries.
- One of the most important steps for reliable country comparisons is the need for all countries to **adopt the 30-day definition of traffic fatality**.
- In addition, there are large differences in the share of crashes attributable to speeding or driving under the influence of alcohol in the EaP countries, and this indicates an inconsistent way of assigning this cause in crash records.

Overall, although a lot of useful information was collected, there are some issues that warrant clarification, especially regarding the **accuracy and overall quality of the data**. The general trends of enforcement activity on the one hand (e.g., number of violations recorded) with the amount of fines collected on the other hand, and eventually the changes in the number of casualties are not always in accordance with one another, and there is not sufficient information to interpret the discrepancies. This suggests that there may be data completeness or accuracy issues (e.g., incomplete recording of violations) which should be identified by the countries in order to improve their reporting system.

Therefore, **information and data should be interpreted with caution** especially when benchmarking country performance. Data quality may be less problematic when examining individual country trends, as any reporting biases involved in crash data elements are not expected to significantly affect general trends over time e.g., relative annual developments.

A dedicated analysis per country was carried out regarding **the impact of COVID-19 pandemic on traffic safety and enforcement**. Data on the development of the pandemic from February 2020 to December 2020 was compared to the (monthly) developments of traffic crashes, fatalities and traffic violations recorded during that period. The impact of COVID-19 pandemic largely varied between countries. For some countries a significant road safety improvement occurred from 2019 to 2020, while in others traffic safety appears not to be affected by the pandemic. It should be kept in mind that safety improvements in 2020 could be an artefact due to the traffic conditions during the pandemic, and there is a risk of increase in fatalities and crashes in those countries after the end of the pandemic.

1. INTRODUCTION

The objective of this report is to provide an overview of current enforcement practices in the six EaP countries, with the view to identify and recommend improvements related to speed enforcement, seat belts use and other traffic laws, that could eventually contribute to sustainable reduction in number of traffic fatalities and casualties in these countries.

The report includes the following analysis:

- compares EaP countries performance in traffic enforcement
- identifies most likely challenges in speed limits and other traffic laws enforcements in EaP based on international good practice
- provides good practices in improving enforcement.

This study was conducted in **April–May 2021**, and it serves as a follow-up of a similar study carried out in **March–May 2019**. It aims to support a process of data collection and analysis for purposes of benchmarking against the indicators of traffic laws enforcement, specifically those on speed limits, seat belts/helmets use and driving under the influence. Since COVID-19 pandemic has affected traffic/mobility and safety in all countries, this study also tackles the immediate impact of the pandemic on traffic enforcement and safety in the EaP countries.

This report **redefines the methodological framework for benchmarking country performance on traffic law enforcement and provides updated data on key indicators for monitoring in EaP countries**. It uses a survey questionnaire filled by EaP country representatives in April 2021. The newly collected data in conjunction with data from 2019 serves as inputs for updating EaP Countries Road Safety Profiles on traffic law enforcement on the one hand, and on the other hand, for updating countries benchmarking on enforcement.

Chapter 2 presents a brief review of the state of the art in traffic enforcement in Europe. A framework for assessing and benchmarking enforcement is presented, adjusted from the general framework for benchmarking road safety management systems. Furthermore, the objectives and effectiveness conditions of enforcement are outlined, aiming to serve as a good practice basis.

Chapter 3 explains the data collection process conducted as part of this activity through a three-stage survey using both on-line and conventional questionnaire tools. It introduces the data elements requested, covering (a) institutional framework, strategic and operational aspects, (b) legal framework, current enforcement measures and practices, (c) Key Performance Indicators on traffic enforcement, (d) road safety outcomes

(fatalities and injuries) related to traffic law violations, and (e) impact of COVID-19 on traffic enforcement and safety. The full questionnaire and instructions provided to the participants are presented in Appendix 1.

Chapter 4 presents updated country profiles on traffic law enforcement in the six EaP countries. For each set of data elements collected detailed information is presented on speeding, driving under the influence, and use of restraint systems, including qualitative and quantitative indicators. Based on this information, a country ‘diagnosis’ is carried out, outlining the good practice elements regarding enforcement in the country, as well as the main elements needing improvement.

Chapter 5 attempts to benchmark EaP countries against the traffic law enforcement characteristics, based on the most recent data, in order to highlight the potential for benchmarking on the basis of existing data, the gaps in information and data, and the areas where further data collection efforts are needed.

Chapter 6 is dedicated to the impact of COVID-19 on traffic enforcement and safety. For each country the development of the pandemic during February 2020–December 2020 is compared to monthly traffic enforcement activity, recorded crashes and the related fatalities. A descriptive/qualitative data analysis is carried out to reveal possible patterns in which the pandemic may have affected traffic safety.

Finally, **Chapter 7** presents the conclusions of this analysis, including the overall main challenges identified at the country level.

2. STATE OF THE ART

2.1. Enforcement Benchmarking Framework

The **road safety management ‘footprint’** of a country at a specific point in time can be described using a “**pyramid**” comprised of **five levels of road safety components**^{1,2} forming a target hierarchy. Starting from the bottom, these are as follows (see *Figure 2.1*):

- The **road safety performance** of a country is related to **structural and cultural characteristics** (i.e., policy input) at the bottom level such as the structure and results-oriented focus of the road safety management system, the socio-economic background and the resulting road safety attitudes and perceptions.
- Next level consequently is related to **policy practice** (i.e., safety measures and programs – policy output) resulting from these structural and cultural characteristics.
- To link the first two layers to the actual road crash outcomes an intermediate layer specifies the ‘**operational level**’ of **road safety** in the country that contains key road safety performance indicators (KPIs) on issues regarding road user behavior (e.g., speeding, driving under the influence), as well as a concise depiction of the state of the road infrastructure and the vehicle fleet.
- **Final outcomes** expressed in terms of **road casualties** are then necessary to understand the scale of the problem resulting from the above-mentioned ‘operational level’ of road safety. This type of information is found at level 4, and it consists of different types of road risk indicators.
- The top of the pyramid includes an **estimate of the total social costs of road crashes**.

¹ Wegman, F., Eksler, V., Hayes, S., Lynam, D., Morsink, P. and Oppe, S. (2005). *SUNflower: A comparative study of the development of road safety in the SUNflower+6 countries: Final Report*. SWOV Institute for Road Safety Research, Leidschendam, the Netherlands.

² Bliss T. and Breen J. (2009). *Implementing the Recommendations of the World Report on Road Traffic Injury Prevention. Country Guidelines for the Conduct of Road Safety Capacity Reviews and the Related Specification of Lead Agency Reforms, Investment Strategies and Safety Projects*. World Bank Global Road Safety Facility, Washington, DC.

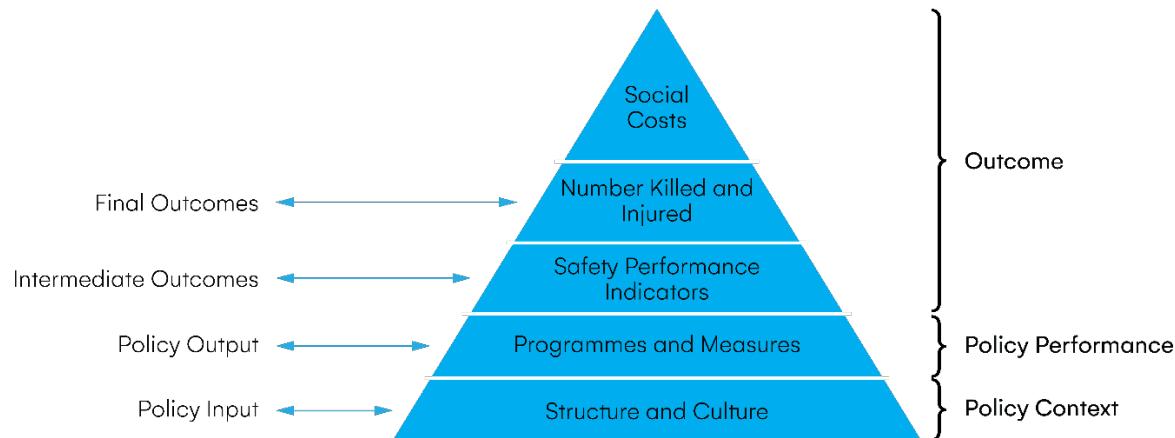


Figure 2.1. A target hierarchy for road safety management systems

This **pyramid** implies an **indirect impact of road safety policies, and specific programs and measures on road safety performance**, in terms of either **‘intermediate’ outcomes (KPIs)** or **final outcomes (fatalities and injuries)**. KPIs are by definition representative of the operational level of road safety, which in turn is also affected by structural and cultural characteristics and road safety policies.

The purpose of using KPIs is to **fill the gap in the lack of knowledge on causal relationships between interventions and final outcomes**³. The framework is used widely for international benchmarking ^{4,5} of both the overall country performance and the specific road safety aspects.

³ Holló P., Eksler V., Zukowska J. (2011). Road safety performance indicators and their explanatory value: A critical view based on the experience of Central European countries. *Safety Science* 48 (9), pp. 1142–1150

⁴ https://ec.europa.eu/transport/road_safety/specialist/erso/country-overviews_en

⁵ https://www.oecd-ilibrary.org/transport/road-safety-annual-report-2017_irtad-2017-en

2.2. Objectives and Effectiveness Conditions of Enforcement Programs

In the context of **traffic law enforcement**, success should **not be measured by the number of violations** recorded or the **amount of fines** collected, but by the **impact of specific enforcement actions** on **road user behavior** and **compliance with traffic law**, and eventually the **number of lives saved** or to be saved with the help of specific actions. **KPIs are crucial for measuring the performance of traffic law enforcement** with respect to specific targets, as the results are first visible and measurable at the operational level (behavior and compliance) (see *Figure 2.2*). Moreover, the **monitoring of KPIs** allows **linking the implemented enforcement effort** with both their **targeted results** and their **actual impact** on outcomes.

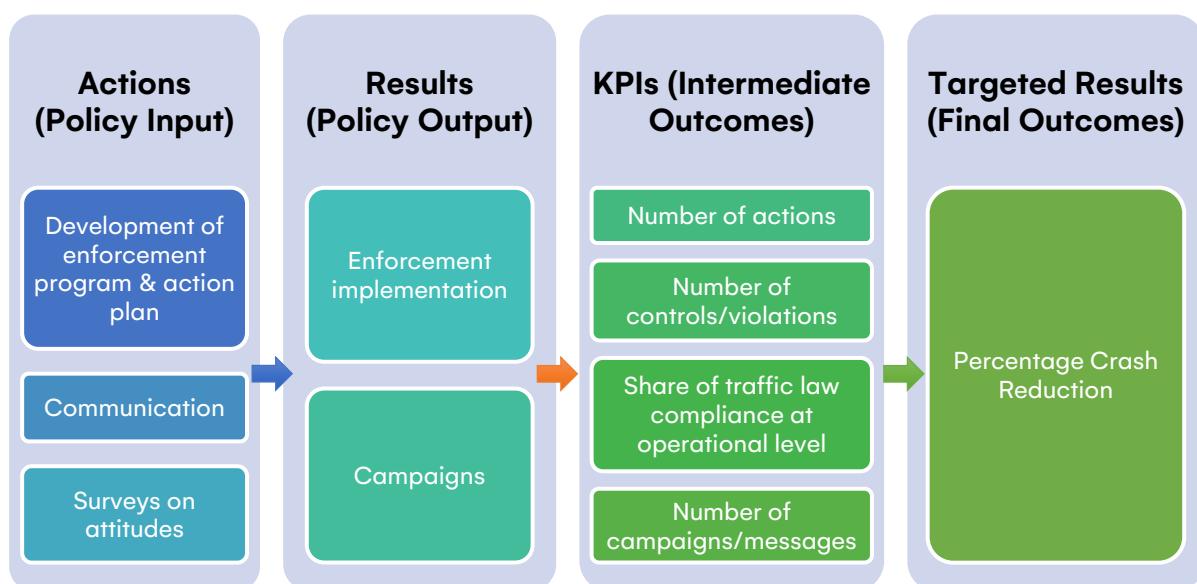


Figure 2.2. The role of KPIs for benchmarking enforcement performance

International experience suggests a number of **general effectiveness conditions** of **enforcement programs** for **all types** of traffic violations. These can be **outlined** as follows:

- Enforcement programs should be accompanied by **sufficient publicity** through information and awareness campaigns.
- At the same time, enforcement should be **mild and continuous**, following in time the messages of the awareness campaign.
- Enforcement programs and specific enforcement activities should **take place regularly over a long time period**.

- Enforcement should be **unpredictable and difficult to avoid**; this is achieved through scheduling and conducting a combination of highly visible and less visible activities.
- The long duration and unpredictable nature of enforcement programs should aim at **increasing the perceived level of enforcement**, and consequently the perceived risk of apprehension for potential offenders; this is expected to initiate a change in road safety behavior in the short- to medium-term, and eventually a change in road safety culture of road users.
- Enforcement should **take place in locations and at times** where and when the violations are expected to have the **most effect on safety**.
- Enforcement programs should **focus on traffic offences that have a direct, proven relationship with collisions or their severity** (e.g., speeding, driving under the influence, failure to wear a seat belt, red-light running, close following, cell phone use, etc.); the systematic and combined monitoring of crash data in relation to road user attitudes and behaviors as well as different types of enforcement is needed for that purpose.
- Enforcement programs should be **expanded to further prioritize and address some often-overlooked violations**, such as the failure to use seat belts in rear seats, Child Restraint Systems (CRS), driving under the influence of drugs etc.
- Enforcement activity and identification of offenders should be **followed by a sanction that is effective, proportionate, and dissuasive** (e.g., financial penalty, penalty points, re-training course, drunk driver rehabilitation programs, etc.).
- Enforcement activity should be **supported by vehicle standards** promoting technologies aimed to prevent violations (e.g., seat belt reminders, alcohol interlock).

3. EAP SURVEY ON TRAFFIC LAW ENFORCEMENT

In order to **assess traffic enforcement** in the EaP countries, a set of **questionnaire surveys** was launched within **EaP Cooperation for Road Safety Working Group 2 on Speed Management and Traffic Enforcement**.

The data collected is intended to be used as inputs to **EaP Countries Road Safety Profiles** regarding traffic law enforcement and will be further analyzed for **benchmarking purposes** to identify challenges most likely to occur. It should help **diagnose the level and impact of enforcement** in EaP countries and **identify further needs** for improving enforcement and related data. Eventually it should also contribute to achieving sustainable reduction in number of traffic fatalities in these countries.

The **data addressed** through these questionnaire surveys is **categorized** into the following groups:

- A. Institutional framework, strategic and operational aspects
- B. Legal framework, current enforcement measures and practices
- C. Key Performance Indicators on traffic enforcement
- D. Road safety outcomes (fatalities and injuries) related to traffic law violations
- E. Impact of COVID-19 on traffic safety and enforcement

The **survey** was launched in **three stages**:

- The **1st stage** took place in **March 2019**, and it was implemented through an on-line survey focusing on data groups B, C and D for the period 2012–2017. More than one respondent from each country participated in the survey (the names of participants can be found in Annex 2).
- There were several pieces of information and data missing from the initial survey. Therefore, the **2nd stage** in the form of a follow-up survey in standard questionnaire format took place in **April–May 2019** aiming to complement the 1st collection with more extensive information on all data groups (A, B, C, D).
- The most recent, **3rd stage** took place in **March–April 2021** using the updated questionnaire that was used in the 2nd survey and complemented with section E on COVID-19 impact. The dispatched questionnaire was pre-filled with the previously available data for the 2012–2017 period; respondents were asked to check and validate that data, and to provide additional data for the period 2018–2020.

The most recent (**3rd stage**) survey questionnaire is available in **Annex 1**.

4. EAP COUNTRY PROFILES ON TRAFFIC LAW ENFORCEMENT

This Chapter presents EaP country profiles on **traffic law enforcement** and **related road safety outcomes** for the period **2012–2020**. The profiles are structured according to the layers of road safety management systems, adjusted for the case of traffic enforcement, i.e., *similarly to the structure of the data collection tools*. Each profile includes the following sections:

- **Strategic and operational framework**, including the agencies responsible/accountable for traffic enforcement, cooperation and inter-sectoral coordination procedures, strategy and action plans of the country — including targets and monitoring/evaluation practices, the related capacity both in terms of manpower and equipment.
- **Legislation and measures**, including key rules and legal limits on speeding, alcohol and drug use, road restraint systems (seat belts, helmets, and child restraint systems) as well as the relevant fines. The presence and features of Demerit Point Systems are also discussed
- **KPIs related to enforcement activity**, including the number of drivers verified and the number of offenders identified per type of traffic violation, as well as the amount of fines collected per type of violation and in total
- **Road safety outcomes related to traffic violations**, including the total number of fatalities, non-fatal casualties and crashes, as well as the specific number of fatalities related to basic traffic violations (speeding, driving under the influence, use of restraint systems).

A ‘diagnosis’ concludes each country profile, outlining the **good practice elements** in road safety enforcement in the country, as well as the **elements needing improvement**.

The impact of **COVID-19 pandemic on traffic law enforcement and safety** is analyzed separately (see Chapter 6).

4.1. Armenia

4.1.1. Strategic and operational framework

According to the Republic of Armenia **Law on Road Traffic Regulation**, **Traffic Police** is responsible for **traffic law enforcement** in the country. There is **no coordination with other agencies** as Traffic Police is the only authority responsible for that, but they are in regular cooperation with **National Road Safety Council** Non-Governmental Organization (NGO), Driver's Friend NGO as well as some active social media influencers and users.

Enforcement takes a **non-systematic character**, and it is not always in line with the **National Strategy or Action Plan for road safety**, since the National Strategy has not been updated since 2013, and there is no Action Plan. There are currently **no active specific formal enforcement programs**. Speed limits, child restraints systems, waffle markings and other activities required by law are the main traffic law enforcement measures.

Capacity and training

From the human resources perspective, the capacity is considered satisfactory, but from the technical equipment perspective a “huge gap” is reported, which is noticeable even in terms of daily operations. Available equipment dedicated to traffic enforcement can be summarized as follows:

- **Radar mobile controls** — N/A (300 reported in 2019; exact data on the current quantity is not available)
- **Speed cameras** — 178 (Yerevan — 91, regions –87)
- **Section control systems** —N/A (631 in Yerevan reported in 2019; exact data on the current quantity is not available)
- **Alcometer** — (110 “Yupiter” alcometers reported in 2019; exact data on the current quantity is not available)
- **Glass transmittance test devices**

There has been some progress on training programs for police officers since 2019, when they were reported as ‘scarce’. Sufficient, regular trainings are held to ensure at least low but steady progress.

Monitoring and evaluation

There is **no systematic framework for selecting enforcement targets**. Specific enforcement measure is implemented if there is an increase in specific crash type based

on the crash data collected by the Traffic Police. Existing crash data form provides for a very basic analysis of accidents/casualties and does not cover all the necessary data for full spectrum evaluation and proper data analysis. **No surveys on road user attitudes and behavior are conducted in the country**, therefore, these indicators are not considered when planning enforcement activity.

4.1.2. Legislation and measures

Speed

Speed limits on motorways/top standard roads and rural roads are as follows:

- 1) **90 km/h** for **light passenger cars** and **trucks** with a maximum permissible mass not exceeding 3.5 tons
- 2) **90 km/h** for **buses, minibuses and motorcycles** carrying out suburban, interregional, and intercity transportation on all roads
- 3) **70 km/h** for **all other buses, trucks and for light passenger cars** with trailers

Enforcement with the use of **mobile speed cameras** is less common in the country, but **ASE** through speed cameras is reported to be implemented extensively.

In urban areas **30-zones** are reported to be occasionally implemented together with **traffic calming schemes** – mostly through **speed humps** (widely), **road narrowings** (occasionally) and **raised pedestrian crossings** (rarely).

Alcohol and drugs

The **legal BAC limit** was **0.3g/l** in **2019**, but it has been lowered to **0.2 g/l** for blood test and **0.1 g/l** for breath tests. It is reported that driving under the influence of drugs is systematically enforced.

Restraint systems

Seat belt wearing is **compulsory** in both the **front and rear seats**. **Helmet wearing** is **compulsory** for **drivers** and **passengers of motorcycles**. Though **bicyclists** were **not required** to wear a helmet in 2019, wearing one has **become mandatory** since. **No specific legislation and standards** were reported for **CRS**.

No Demerit Point System for traffic offences was reported in 2019, but the most recent survey mentions such a system in place. **License suspension** is established for traffic violators, but no information is available about specific conditions and thresholds.

4.1.3. Enforcement activity KPIs

Table 4.1 shows that the number of violations recorded for speeding (through both mobile/patrolling controls and ASE/speed cameras) has considerably increased over the last 8 years. More specifically, speeding offenses recorded in mobile controls tripled between 2014–2017, and the respective number recorded by ASE systems doubled between 2012–2017. At the same time the number of recorded DUI violations increased 4 times.

The most recent data for the period 2018–2020 indicates a continuation of systematic enforcement activity, and registered speeding and alcohol violations. The number of speeding offenders detected through ASE has further increased, indicating a focus of enforcement efforts on this type of road safety measure. The number of violations recorded through mobile speed and alcohol controls has slightly decreased, possibly indicating an improvement of drivers' behavior. A decrease of all types of violations during 2020 may be related to the COVID-19 impact, namely because of reduced traffic due to public health restrictions.

Table 4.1. Number of recorded traffic violations in Armenia 2012–2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of speeding offenders recorded in mobile controls (10³)	1.5	3.9	28.8	83.4	80.4	76	71.4	73.4	68.4
Number of speeding offenders recorded in ASE controls (10³)	240.4	324.5	474.7	542.8	571	588	771.6	726.8	597
Number of drivers with BAC exceeding the legal limit (10³)	1.5	2.7	3.5	3.4	6.1	6.3	4.7	4.8	4.6

No data on the amount of funding collected from traffic enforcement is available for Armenia.

4.1.4. Road safety outcomes related to traffic violations

Despite the robust traffic safety legislation and the increase in enforcement crashes and injuries in the country increased by more than 35% over the period 2012–2017. Traffic fatalities showed a stagnation in numbers in the country with a 9% decrease over the examined period. Speeding-related casualties are estimated at approximately 27%–30% of all crashes/casualties (this estimation however is subject to the known difficulty — and it's valid for all the countries — the difficulty of accurately assigning the cause of the crash by the Traffic Police).

The most recent data for the period **2018–2020** indicates an **increase** in fatalities of ~23%, from 279 in 2017 to 348 in 2020. The numbers of **injury crashes** and **injuries** (severe or *mild*) **increased** by 13%; it is noticed that a **sharper increase** took place in **2018–2019**, with a drop in 2020. However, a similar drop was not observed for fatalities. It is indicated that the **severity of crashes significantly increased** over the last **3 years** despite the reduction in crashes in 2020 (possibly due to reduced mobility because of COVID-19 restrictions).

The number of **crashes** due to **speeding** or **alcohol** **increased significantly** in **2018**, and then **decreased**. Since the number of recorded violations showed the same trend, it is suggested that the decrease in violations may be due to a **decrease of number of controls**. It is not possible to conclude on the cause of the increased total number of fatalities and injuries during that period.

Table 4.2. Road safety outcomes per crash type in Armenia 2012–2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total number of traffic fatalities	311	316	297	346	267	279	343	341	348
Total number of fatal crashes	266	264	257	285	233	241	295	288	300
Total number of injuries (severe or mild)	3,739	3,994	4,479	4,738	4,451	5,179	5,950	6,801	5,846
Total number of injury crashes	2,602	2,824	3,156	3,399	3,203	3,535	4,111	4,799	4,016
Number of speeding-related fatal crashes	-	964	962	1,093	754	944	-	-	-
Number of fatal crashes with at least one driver with BAC over the legal limit	-	6	17	11	5	15	23	7	11
Number of drivers/passengers not wearing seat belt in fatal crashes	-	-	-	-	-	-	-	-	-
Number of drivers/passengers not wearing helmet in fatal crashes	-	-	-	-	-	-	-	-	-
Number of speeding-related injury crashes	-	964	962	1,093	754	944	1,172	542	355
Number of injury crashes with at least one driver with BAC over the legal limit	-	90	154	166	156	217	326	141	169

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of drivers/passengers not wearing seat belt in injury crashes	-	-	-	-	-	-	-	-	-
Number of drivers/passengers not wearing helmet in injury crashes	-	-	-	-	-	-	-	-	-

4.1.5. Armenia – Diagnosis

Table 4.3 below summarizes the country ‘**diagnosis**’ of traffic enforcement.

Table 4.3. Diagnosis of traffic enforcement – Armenia

Good practice elements

- ✓ Enforcement activity based on the road crash trends and statistics (although in a non-systematic manner)
- ✓ Extensive ASE scheme in place, including fixed cameras and section control
- ✓ Traffic calming and 30-zones in use in urban areas
- ✓ Some training programs in place for police officers
- ✓ Demerit Point System for traffic offenses introduced since 2019
- ✓ Continuation of systematic traffic enforcement, as reflected in steady number of traffic violations recorded for key offenses (speeding and alcohol)
- ✓ Use of the 30-day definition of traffic fatality

Elements needing improvement

- ? National Strategy for Road Safety needs to be updated, and a new Action Plan created
- ? No systematic coordination on traffic enforcement
- ? No formal enforcement programs, and therefore no specific targets and monitoring/evaluation procedures
- ? Lack of data on the number of drivers controlled per type of violation does not allow concluding on the effectiveness of enforcement intensification.
- ? Lack of data on the amount collected from traffic fines
- ? An increase in the number of fatalities over the last 3 years despite indications of decrease in traffic violations

4.2. Azerbaijan

4.2.1. Strategic and operational framework

No significant changes are reported since 2019.

The following agencies are involved in traffic law enforcement in the country:

- The Road Traffic Safety Board in the Azerbaijani Cabinet of Ministers
- The Chief Administration of State Road Police in the Azerbaijani Ministry of Internal Affairs
- The Baku Transport Agency

The Board's Executive Secretary is in charge of inter-agency coordination.

Activities aiming to ensure compliance with road traffic rules take place according to an approved six-month action plan. A formal enforcement program "State Program to Ensure Road Traffic Safety" is currently active. Information events and awareness campaigns are held periodically.

Capacity and training

Police officers receive several forms of training through the Police Academy of the Azerbaijani Ministry of Internal Affairs:

- Instructions and guidance during daily face-to-face meetings
- A centralized online training course on a weekly basis
- Specialized training
- A 15-day training course

In terms of available equipment Police uses the following fixed-site and portable radar beacons and devices to automatically capture speeding or DUIs throughout Azerbaijan:

- EKİN BOX SPOTTER fixed site radars
- EKİN PATROL G 2 portable radars
- Getac tablets
- ACE-Z Series breathalyzers (German-made)

Monitoring and evaluation

An above-the-average number of road accidents and detected violations are taken into account for planning and implementing targeted enforcement activities. The effectiveness of the enforcement activities is then accordingly measured based on the achieved reduction in the basic indicators mentioned above.

4.2.2. Legislation and measures

No significant change in legislation is reported since 2019.

Speed

Speed limits for motorways/top standard roads, rural, and urban roads are **110 km/h, 90 km/h, and 60 km/h** respectively.

ASE is implemented extensively through **419 mobile radars**, systems "E-patrol" in the capital Baku, in big cities, as well as on the roads of republican significance. In total **430 stationary cameras** are in place. Moreover, **Dynamic Speed Display Signs (DSDS)** are widely in use throughout the country.

30-zones are implemented to some extent around **schools** and in **residential areas**. **Traffic calming** through engineering treatments is implemented to some extent only.

Alcohol and drugs

The **legal BAC limit** is **0.3 gr/ml**. Alcohol and drug tests are widely conducted using **breathalyzers** or **spitalyzers**, or **medical examination** in case of driver's disagreement with spitalizer results.

Restraint systems

Seat belt wearing is compulsory in both the **front and rear seats**. **Helmet wearing** is compulsory for both **drivers and passengers** of motorcycles, as well as for **bicyclists**. **CRS** are compulsory for **children <12 years old**. It is also forbidden to transport children in the rear seat of a motorcycle or in the front seat of a passenger car.

Fines and demerit point system

Indicative fines for traffic violations are as follows:

- Speeding: 20–250 manats (10–125 Euro)
- Driving under the influence of alcohol: 400 manats (200 Euro) or 6–12 months of driver's license suspension
- Driving under the influence of drugs: 400 manats (200 Euro) or 6–12 months of driver's license suspension
- Seat belt violation: for drivers 40 manats (20 Euro), for passengers 30 manats (15 Euro)
- Helmet violation: 40 manats (20 Euro)
- CRS violation: 60 manats (30 Euro)

A **Demerit Point System** is in place; stipulated points for traffic violations are as follows:

- Speeding: exceeding speed limit by 21–40 km/h – 2 points, by 41–60 km/h – 3 points, by 60 km/h or more – 4 points.
- Driving under the influence of alcohol: 5 points.
- CRS violation: 3 points

License suspension is established for drivers who collected more than 20 points for violations throughout one year. In this case the right to drive a transport vehicle is suspended for a period of six months.

4.2.3. Enforcement activity KPIs

Table 4.4 shows that the **number of violations recorded for speeding** (through both mobile/patrolling controls and ASE/speed cameras) considerably **increased** over the period **2012–2017**. More specifically, **speeding offenses** recorded in **mobile controls doubled** between **2014–2017**, and the respective number recorded by **ASE systems increased** more than **10 times** between **2012–2017**. These are indicative of increased controls and rapid deployment of ASE. The trend of recorded DUI violations is interesting as the number of violations is fluctuating over the examined period with a decreasing trend, however. The lack of information on the number of drivers verified for BAC does not allow concluding on this aspect.

The most recent data indicates a **stabilization** of the number of recorded speeding violations in ASE during **2018–2020** compared to 2017; a small increase was noticed in 2018, followed by a reduction in cases. No recent data is available on the number of speeding violations recorded in mobile controls.

On the other hand, the number of **alcohol violations** has shown a further **slight decrease**; overall, the number of alcohol violations decreased by **62%** between **2012–2019**. However, in **2020** the alcohol violations **increased by 18%** compared to the previous year. It is difficult to interpret these trends without knowing the number of alcohol controls performed; it is likely that the general reduction of 2012–2019 resulted from a change of behavior. This can be cross-referenced with the road traffic crashes and casualties' data. The increase in 2020 could be interpreted in line with traffic and safety trends related to COVID-19 impact.

Table 4.4. Number of recorded traffic violations in Azerbaijan 2012–2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of speeding offenders recorded in mobile controls (10³)	–	–	21.6	23.2	42.9	53	–	–	–
Number of speeding offenders recorded in ASE controls (10³)	133.2	299.3	720.3	775.6	1,429.8	1,765.9	1,690	1,595	1,450.1
Number of drivers with BAC exceeding the legal limit (10³)	17.9	10.4	16.6	17.1	12.9	9.4	8.1	6.9	8

In **2017** the **seat belt wearing rate** in **Azerbaijan** was **90%** for the **front seats** and only **10%** for the **rear seats**. For **helmet wearing** a rate of **80%** of motorcycle drivers was recorded for the same year. There is **no information** available on the use of **child restraint systems** in the country.

Table 4.5 shows the amount of **funding collected** through traffic fines in the period **2012–2020**. There is a lot of **fluctuation** in the amount of funding collected for speeding violations; this is not reflective of the impressive (more than 14 times) increase in the number of speeding violations recorded. This may be due to **data inaccuracy**, e.g., *incomplete recording of the amount of funding collected*, but it may be also due to ineffectiveness in collecting the recorded fines.

On the other hand, the **total amount of funding** collected through **traffic fines** shows a **steadily increasing** trend.

The **discordance is less striking** in the case of **DUI fines**, where the **fluctuation in the amount of funding** is in line with the **fluctuation in alcohol violations** recorded. On the other hand, the amount collected through helmet fines shows very large fluctuation, and this warrants further investigation.

In any case, there is **need for cross-checking** the **completeness** and **accuracy** of this **data**.

Table 4.5. Amount of funding collected through traffic fines in Azerbaijan 2013–2020

	2013	2014	2015	2016	2017	2018	2019	2020
Amount of funding collected for speeding fines (K€)	6,512	10,224	13,158	10,845	8,078	9,869	15,089	12,733
Amount of funding collected for DUI fines (K€)	540	2,136	2,260	2,123	1,803	1,486	1,287	1,382
Amount of funding collected for seat belt fines (K€)	5,920	5,374	4,429	3,106	2,558	1,921	2,658	4,530
Amount of funding collected helmet fines for (K€)	0.631	0.258	42	1.5	2.7	0.840	0.570	1,390
Total amount of funding collected through fines (all traffic violations) (K€)	12,973	17,735	19,890	16,076	12,443	42,817	52,295	54,314

4.2.4. Road safety outcomes related to traffic violations

Road safety has **improved significantly** in the country over the last **8 years**, with a **reduction of 60% in fatalities** and a **reduction of 52%** in the number of **injuries**. Although there is a clear correlation between this trend and the increase in ASE activity, as reflected in the number of offenses recorded during the same period, there is not sufficient evidence to claim a causal relationship between enforcement and road safety outcomes. Partly that is due to the non-systematic collection of fines for speeding.

Speeding is reported to be the cause of ~40–45% of all **fatal crashes**, whereas **alcohol** is rather surprisingly reported to be the cause in **less than 2%** of **fatal crashes**. However, the number of alcohol-related fatal and injury crashes has decreased considerably. It is interesting to note that ~45% **fatal crashes** are reported to have **involved a driver/passenger not wearing seat belt**.

Table 4.6. Road safety outcomes per crash type in Azerbaijan 2012–2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total number of traffic fatalities	1,168	1,164	1,124	894	759	750	722	821	696
Total number of fatal crashes	994	977	946	755	658	650	628	711	629
Total number of injuries (severe or mild)	2,997	2,948	2,676	2,265	2,003	1,719	711	1,702	1,410
Total number of injury crashes	1,898	1,872	1,689	1,465	1,348	1,183	1,186	1,159	958
Number of speeding-related fatal crashes	360	362	336	255	203	298	301	357	308
Number of fatal crashes with at least one driver with BAC over the legal limit	37	28	23	21	13	12	15	9	11
Number of drivers/passengers not wearing seat belt in fatal crashes	-	520	416	335	295	257	254	326	277
Number of drivers/passengers not wearing helmet in fatal crashes	-	-	-	-	-	-	-	-	-
Number of speeding-related injury crashes	59	50	32	32	21	13	22	13	6
Number of injury crashes with at least one driver with BAC over the legal limit	-	1,381	1,086	915	861	653	426	428	348
Number of drivers/passengers not wearing seat belt in injury crashes	-	652	770	563	353	347	771	751	674
Number of drivers/passengers not wearing helmet in injury crashes	-	-	-	-	-	-	-	-	-

4.2.5. Azerbaijan – Diagnosis

Table 4.7 below summarizes the country ‘diagnosis’ of traffic enforcement.

Table 4.7. Diagnosis of traffic enforcement – Azerbaijan

Good practice elements

- ✓ A shared responsibility for enforcement between national and municipal authorities with a clearly assigned coordinator
- ✓ A formal enforcement program in place with six-month action plan
- ✓ Systematic coordination of enforcement with road safety and other awareness campaigns
- ✓ Systematic training programs for police officers
- ✓ Planning of enforcement activity based on road crashes monitoring and recorded traffic violations
- ✓ Extensive ASE in place, both on interurban and urban roads; DSDS also in place
- ✓ Demerit Point System in use
- ✓ Relatively recent survey data available on seat belt and helmet wearing rates in the country
- ✓ Data on road safety outcomes (fatalities and injuries) due to specific violations is available — although the accuracy of this data is unknown
- ✓ An impressive overall reduction in the number of traffic fatalities between 2012–2020

Elements needing improvement

- ? Limited implementation of 30-zones and engineering traffic calming schemes
- ? Unknown whether the Demerit Point System is systematically recorded and updated
- ? Lack of data on the number of drivers controlled per type of traffic violation
- ? The amount of funding collected from speeding fines is not reflective of the large increase in violations recorded, and this should be investigated by the authorities
- ? Data on the amount of funding collected through traffic fines needs cross-checking and confirmation
- ? The 30-day definition of fatality is not adopted in the country

4.3. Belarus

4.3.1. Strategic and operational framework

No significant changes were reported between 2019–2021.

The following **Agencies are involved in traffic law enforcement** in the country:

- Ministry of Interior,
- Ministry of Transportation and Communications,
- Ministry of Agriculture and Food,
- Ministry for Emergency Situations,
- Ministry of Education,
- local executive and administrative bodies,
- other republican state administration authorities, state bodies and organizations.

Activities are **coordinated by the Standing Committee on Road Safety** within the Council of Ministers of the Republic of Belarus, as well as by **road safety committees** within the local executive and administrative bodies. Ministry of Interior takes measures to coordinate the actions of state bodies and other organizations on eliminating the causes and conditions that contribute to the road traffic offences and/or committing road traffic accidents.

The Republic of Belarus has adopted and is **implementing the state policy, strategy and tactics of actions in the field of road safety**, including activities aimed to ensure compliance with the road traffic rules^{6 7}; dedicated enforcement programs are included there in^{8 9}.

There is **regular on-going cooperation and coordination of efforts with NGOs and other organizations** (e.g., UNICEF, motorcycle clubs) involved in road safety awareness

⁶ Decree of the President of the Republic of Belarus of 28 November 2005 No 551 ‘On Measures to Increase the Road Safety’;

⁷ Law of the Republic of Belarus of 5 January 2008 No 313-3 ‘On Road Traffic’;

⁸ The Concept for Ensuring Road Safety in the Republic of Belarus, approved by Decree of the Council of Ministers of the Republic of Belarus of 14 June 2006 No 757;

⁹ ‘Dobraya doroga’ [Good Road] set of measures to increase the road safety in the Republic of Belarus for 2019–2025, approved by the minutes of the Standing Committee on Road Safety with the Council of Ministers of the Republic of Belarus of 19 December 2018 No 33/25pr;

campaigns). Recent campaigns focused on raising awareness among adolescents, and on topics such as *child protection, reflective clothing for vulnerable road users, restraint, and protective systems in general, etc.*

Capacity and training

The **overall training** level of **police officers** for traffic enforcement – *trained at the educational institutions of the Ministry of Interior, as well as in the territorial internal affairs bodies as professional training, including education, re-training, capacity building* – is **reported as very satisfactory**, although specific procedures are not reported in detail. The available patrolling equipment includes portable speed cameras with photo and video recording, fixed and mobile radars for ASE, devices for automatic recording of violations of the standing and parking rules, portable alcohol screening devices, car and personal video recorders, tablets etc.

Monitoring and evaluation

The planned and implemented activities of the “Dobraya doroga” road safety program for **2019–2025** are subject to **formal road safety assessment ('audit')** and are ranked based on the following criteria:

- impact on road safety in reducing the number of deaths, or potential for reducing the number of deaths,
- impact on key road traffic risks,
- economic effectiveness of measures considering the financial and material costs and economic, environmental, accidental, social losses,
- impact on road safety in reducing the number of injured persons, or potential for reducing the number of injured persons,
- chance of shaping positive public opinion

When evaluating the measures to ensure the compliance with road traffic rules, several aspects characterizing the traffic conditions and relevant risk factors are taken into account, including:

- the number of accidents, dead and injured people by categories, types of accidents, their causes and conditions
- nighttime traffic
- vulnerability of unprotected traffic participants (pedestrians, cyclists)
- mistakes and underestimation of risks by traffic participants (young drivers, traffic mode offenders, motorcyclists, etc.)

- lack of consideration for the needs of certain groups of traffic participants (children, the elderly, people with disabilities and so on)
- unfavorable road conditions and the state of road surface
- antisocial behavior (participation in the traffic under the influence of alcohol, driving without driver's license etc.)
- non-resident drivers
- pedestrians' access to places that are not intended for traffic
- truck traffic
- speed of vehicles
- motorcyclists, etc.

4.2.2. Legislation and measures

Speed

Speed limits for motorways/top standard roads, rural and urban roads are **120–110 km/h, 90 km/h, and 60 km/h respectively**.

Fixed speed cameras and **ASE** are reported to be **widely in use**; however, **section control systems are rarely in place**.

Traffic calming engineering treatments (e.g., speed humps, etc.) were implemented to some extent in the country until 2019, but the most recent information indicated wide implementation. **30-zones** are reported to be quite common, especially around schools.

Alcohol and drugs

The **legal BAC limit** is **0.3 gr/ml**. There are no dedicated limits for specific driver categories. Drug tests are reported to be widely implemented for a number of legal and illegal drugs; however, no details are provided.

Restraint systems

Seat belt wearing is **compulsory** in both the **front and rear seats**. **Helmet wearing** is compulsory for both **drivers and passengers of motorcycles**; however, it is **not compulsory for bicyclists**. **CRS** are **compulsory for children aged <12 years old or with height <150 cm**.

Fines and demerit point system

Fines for traffic violations have **significantly increased** over the period **2018–2020**:

- Speeding: from 25.5–382.5 Belarusian rubles (BYN) in 2019 to 435 BYN in 2021
- Driving under the influence of alcohol or drugs: from 1275–2550 BYN in 2019 to 2900–5800 BYN in 2021
- Seat belt, helmet: from up to 25.5 BYN in 2019 to 29 BYN in 2021
- CRS violation: from 25.5 BYN in 2019 to 116 BYN in 2021

There is **no Demerit Point System** in place, although it is reported that **license suspension is established** in cases of severe violations of traffic rules.

4.2.3. Enforcement activity KPIs

Table 4.8 shows that the **number of violations recorded** for speeding in mobile/patrolling controls was approximately halved during the period **2012–2017**, while at the same time the **number of speeding violations** recorded through **ASE** **highly increased – by more than 10 times**. This probably suggests a **shift of enforcement efforts** from mobile/patrolling to ASE/fixed cameras; however, there is no specific information available about the number of speed cameras and other ASE systems used during that period.

The number of **alcohol violations** recorded was also approximately **halved** during the period **2012–2017**. This trend may be due to either a loosening of alcohol enforcement, or an actual improvement of drivers' behavior and lower rates of driving under the influence. The lack of information on the number of drivers controlled for BAC does not allow concluding on this aspect.

The most recent data for the period **2018–2019** shows that the **decreasing trend of speeding and alcohol violations** in mobile controls continued, while the increasing trend of speeding violations through ASE also continued. A sharp decrease of all types of violations was noted in 2020, possibly due to COVID-19 and reduced traffic.

Table 4.8. Number of recorded traffic violations in Belarus 2012–2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of speeding offenders recorded in mobile controls (10 ³)	491.9	473.6	500.5	423.3	308.7	253.3	224.9	212.5	45.2
Number of speeding offenders recorded in ASE controls (10 ³)	116.5	471.9	1,313.5	886.4	1,059.6	1,539.5	1,698	1,766.1	1,273.6
Number of drivers with BAC exceeding the legal limit (10 ³)	43	36.6	31	28.3	25	22.5	20	18.6	18.5

4.2.4. Road safety outcomes related to traffic violations

Road safety has improved significantly in the country over the period 2012–2017 with a 43% reduction in number of fatalities and a 35% reduction in the number of injuries. Although there could be a correlation between this trend and the increase in ASE enforcement activity, and the assumed reduction of DUI offenses during the same period, there is no sufficient evidence to claim a causal relationship between enforcement and road safety outcomes.

During that period speeding was reported to be the cause of 17% of all fatal crashes, whereas alcohol was reported to be the cause of 14% of fatal crashes (11% and 10% respectively for injury crashes). These figures should be interpreted with some caution, as there may be a degree of inaccuracy due to incomplete recording of this information (as is the case with many countries' crash databases).

The most recent data indicates that the decreasing trend of traffic fatalities and injuries continued until 2019, with a further decrease of 14% compared to 2017. Numbers of crashes and injuries remained practically stable over that period. However, the number of injuries significantly increased in 2020 – by 14% – although the number of crashes and injuries did not increase. There was no significant decrease in speeding-related crashes, and only a slight increase in DUI-related crashes that year. Table 4.8 above indicates a drop in violations.

While no conclusion can be drawn, it is indicated that COVID-19 conditions may have resulted in increased severity of crashes, possibly due to less traffic and consequently higher speeds. It is also likely that mobile enforcement activity was reduced that year. It is noted however that in the recent survey it was reported that COVID-19 did not affect the level of traffic safety. The question is further analyzed in Chapter 6.

Table 4.9. Road safety outcomes per crash type in Belarus 2012–2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total number of traffic fatalities	1,039	894	757	664	587	589	549	505	575
Total number of fatal crashes	934	792	689	616	536	535	491	469	518
Total number of injuries (severe or mild)	5,569	5,033	4,854	4,424	3,924	3,620	3,680	3,818	3,732
Total number of injury crashes	4,476	4,109	4,027	3,672	3,258	3,002	2,908	3,098	3,081
Number of speeding-related fatal crashes	181	121	111	87	64	91	72	57	59
Number of fatal crashes with at least one driver with BAC over the legal limit	160	114	99	112	81	79	87	92	110
Number of drivers/passengers not wearing seat belt in fatal crashes	57 / 66	55 / 44	39 / 47	48 / 47	41 / 54	36 / 54	36 / 53	41 / 36	38 / 48
Number of drivers/passengers not wearing helmet in fatal crashes	22 / 3	14 / 3	14 / 3	10 / 3	5 / 1	9 / 3	6 / 1	6 / 2	4 / 1
Number of speeding-related injury crashes	719	534	470	458	382	340	356	357	339
Number of injury crashes with at least one driver with BAC over the legal limit	604	528	491	449	336	321	285	329	341
Number of drivers/passengers not wearing seat belt in injury crashes	114 / 361	78 / 250	61 / 266	105 / 303	98 / 390	98 / 330	105 / 372	86 / 342	117 / 283
Number of drivers/passengers not wearing helmet in injury crashes	64 / 34	47 / 27	69 / 23	58 / 22	41 / 10	39 / 8	41 / 7	39 / 13	31 / 11

4.3.5. Belarus – Diagnosis

Table 4.10 below summarizes the country ‘diagnosis’ of traffic enforcement.

Table 4.10. Diagnosis of traffic enforcement — Belarus

Good practice elements

- ✓ Road safety programs dedicated to traffic law enforcement within the country’s road safety strategy and plans
- ✓ Systematic cooperation with NGOs and user associations on awareness campaigns.
- ✓ A rigorous evaluation framework of road safety and programs with specific indicators
- ✓ A tendency to shift from mobile controls/patrolling to ASE systems for speeding
- ✓ Traffic calming and 30-zones implemented to a fair extent
- ✓ Increase in traffic fines for road safety violations, but no information on the amounts collected (effectiveness of fines collection)
- ✓ The country adopts the 30-day definition of traffic fatality

Elements needing improvement

- ? Unclear what data and to what extent is used for the evaluation of road safety and enforcement programs at the operational level
- ? No Demerit Point System in place
- ? Lack of data on the share of seat belt/helmet wearing in the country
- ? Lack of data on the amount of funding collected through traffic fines
- ? Lack of data on the number of drivers controlled in traffic enforcement per type of violation
- ? Road fatalities increased in 2020 breaking a decreasing trend of 8 years

4.4. Georgia

4.4.1. Strategic and operational framework

Traffic enforcement is executed by the **Ministry of Internal Affairs of Georgia** through **police patrolling** and **video surveillance system**. Enforcement activities are in line with the **Road Safety Strategy of Georgia**, and they are coordinated through the **Interagency Council on Road Safety**. Periodic meetings with other stakeholders (including NGOs) are organized by the Ministry of Internal Affairs.

No formal enforcement programs are in place, however main existing mechanisms of enforcement/administration used by the Ministry of Internal Affairs include, but are not limited to, **video surveillance system**, **speed control sections**, **manual speed detecting equipment**, **covert patrolling**, **automated number plate recognition systems**, **application of the demerit point system**; **patrolling** (in general).

In April 2019 the Ministry of Internal Affairs of Georgia started an **integrated road safety campaign** “**For More Life**”. The presentation thereof was attended by the representatives of diplomatic corps and the NGOs working in the field of road safety. The campaign serves two main goals:

- To raise public awareness regarding the individual responsibility for road safety in the society
- To inform the public regarding the activities carried out by the Ministry of Internal Affairs in the direction of road safety, and to reduce road accidents.

Within the framework of the campaign creative videos were produced and placed on the most popular TV channels (*those watched by more than 2 million people*). Additionally, creative videos, graphic videos, banners, and posts on road safety issues were placed on social media (Facebook page and website of the campaign). Besides, representatives of the Ministry of Internal Affairs systematically participated in TV shows and interviews on road safety issues and held informational meetings with the public in Tbilisi and the regions. Moreover, within the scope of the campaign **specially trained officers** of the Patrol Police Department and Community Police Officers conducted road safety classes in public schools in Tbilisi and in the regions.

Capacity and training

Officers of the Ministry of Internal Affairs of Georgia undergo a **special 3-month vocational training program** at the Academy of the Ministry of Internal Affairs of Georgia; ad-hoc trainings are organized regularly.

Every crew of the patrol police is equipped with:

- Breathalyzers
- Tint meters
- Scales
- Drug tests
- Portable laser gun cameras

Equipment for traffic enforcement includes:

- 2794 cameras were already installed and functioning on the motorways in 2019; now there are 5262 of them. Out of those 1762 are number plate recognition cameras and 3500 are general vision cameras.
- 138 ASE cameras were installed on the roads of international and state importance in Georgia in 2019; now there are 289 of them in place. The length of road covered increased from 466 km to 1238 km.
- 27 speed dimensional radars have been activated throughout the territory of Georgia.

Monitoring and evaluation

Data on road accidents as well as traffic rule violations are collected and provided to the Roads Department of the Ministry of Economy and Sustainable Development of Georgia to provide roads engineering analysis and solutions, as well as to respective municipalities (responsible for installation of road signs etc.).

There is a framework for monitoring road safety through bi-annual reports on implementation of Action Plans under the Strategy on Road Safety of Georgia. The Action Plan 2020 of the Road Safety Strategy includes General Road Safety Performance Indicators:

- Number of crashes
- Number of fatalities
- Number of injuries

However, the enforcement activity itself is not formally evaluated.

4.4.2. Legislation and measures

Speed

Speed limits for motorways/top standard roads, rural and urban roads are **110 km/h, 90 km/h, and 60 km/h respectively**.

Mobile controls are widely implemented, through the use of **18 mobile radars**. On the other hand, there are **>5000 fixed cameras**, mainly on the highway of international importance and urban roads. **Section control** is reported to be used in **289 zones** (compared to 164 in 2019). **Dynamic Speed Display Signs** are rarely in use on the main international highway.

30-zones are widely implemented around **schools** and in **residential areas** (20-zones). The law does not prescribe specific regulations for school zones. According to the Law of Georgia on Traffic, local self-government bodies, in accordance with the legislation of Georgia and within their scopes of authority, shall render decisions independently with regard to matters related to ensuring traffic safety. **Traffic calming through engineering treatments** is implemented to a relatively small extent; **speed humps** are widely in use.

Alcohol and drugs

The legal BAC limit is 0.3 gr/ml. Alcohol tests are widely conducted as every police vehicle is equipped with breathalyzers.

Drug tests are currently done through **saliva, blood or urine tests in medical facilities**. The forensics facilities under the Ministry of Internal Affairs of Georgia use only urine and saliva drug tests. **Patrol/traffic police** is using **drug swipes on the spot**. There are no specific limits, driving under the influence of drugs already carries criminal responsibility. Drug tests are widely used for identification of cannabis, amphetamines, cocaine, and opioids; these types of drugs are first identified through drug swipes performed on the spot and are further confirmed by forensics. Types of drugs that are identified only through specialized tests conducted by forensics are Buprenorphine, Methadone, Tramadol, psychotropic substances (such as benzodiazepines), and synthetic cannabinoids (JWH-018/JWH-073, JWH-200/JWH-398).

Restraint systems

Seat belt wearing is **compulsory** only in the **front seat**. **Helmet** wearing is compulsory for **drivers and passengers of motorcycles** but not for **bicyclists**.

Child restraint is **obligatory** for the **rear seat** for children **under the age of 3**, unless accompanied by an **adult**. Height/weight criteria are not regulated.

Fines and demerit point system

Established **fines** for traffic violations are as follows:

- Speeding: 50 Georgian Lari (GEL)
- Driving under the influence of alcohol: suspension of driving license for 6 months (administrative offense)
- Driving under the influence of drugs: fine or imprisonment for up to one year (criminal offense)
- Seat belt violation: 40 GEL
- Helmet violation: 100 GEL
- CRS violation: 40 GEL

A **Demerit Point System** is in place with points assigned for traffic offenses ranging between 5–40 points. Points for traffic violations are established as follows:

- Seat belt or helmet violation: 5 points
- Road traffic accident violation: 20 points

License suspension is established for **driving under the influence**, for the accumulation of **100 demerit points**, for repeated offence (3 or more throughout one year), for driving a vehicle with tinted windows or with percentage of tint beyond the limit determined by the law, for not paying the fine and accrued penalty.

4.4.3. Enforcement activity KPIs

Table 4.11 indicates that the recording of speeding violations with mobile radars started in **December 2018**. According to the most recent data received (2021) the number of violations recorded by ASE systems has been steadily increasing since 2012.

The number of recorded **DUI/alcohol** violations **fluctuates** between **2014–2020** with two peaks in 2015 and 2019. The number of DUI/drug violations shows a sharp increase in 2019 and 2020, probably due to the intensification of efforts and availability of equipment for performing drug tests on the spot.

Table 4.11. Number of recorded traffic violations in Georgia 2012–2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of speeding offenders recorded in mobile controls (10³)	–	–	–	–	–	–	0.196 *	36.2	13.2
Number of speeding offenders recorded in ASE controls* (10³)	11.6	68.9	76.1	69.4	66	53.7	166.5	220.2	277.3
Number of drivers with BAC over the legal limit (10³)	–	–	23.6	35.1	30.1	29	29.7	34.7	22
Number of drivers under the influence of drugs	18	61	48	36	14	10	26	417	213

* Use of mobile radars was introduced in December 2018

Accordingly, **Table 4.12**, the amount of **funding collected** through traffic fines for speeding is shown for the period **2018–2020**, indicating an **increasing trend**. It is noted that the data reported in the previous 2019 survey for the period 2015–2017 was declared as invalid in the current survey. There is fluctuation in the amount collected through alcohol fines. Figures are not fully in line with the corresponding trends in recorded violations presented in **Table 4.11**, therefore further inquiry into that is needed.

Table 4.12. Amount of funding collected through traffic fines in Georgia 2015–2020

	2015	2016	2017	2018	2019	2020
Amount of funding collected through fines for speeding (K€)	–	–	–	7,945	10,240	12,522
Amount of funding collected through fines for DUI/alcohol (K€)	–	–	–	879	969	541
Amount of funding collected through fines for seat belt (K€)	–	–	–	1,477	2,096	689
Amount of funding collected through fines for helmet (K€)	–	–	–	38.5	37	17.3
Total amount of funding collected through fines (all traffic violations) (K€)	–	–	–	10,340	13,343	13,770

4.4.4. Road safety outcomes related to traffic violations

Road safety has improved in the country over the period **2012–2017** with a **reduction of 15%** in **fatalities**. However, **non-fatal injuries increased** by **9%** over the same period.

The most recent data indicates a further **reduction in fatalities by 13%** between **2017–2020**. It is interesting to note that, unlike in other EaP countries, fatalities in Georgia did not increase in 2020.

Speeding is reported to be the cause of **24%** of all **fatal crashes** and **12%** of all **injury crashes**, whereas **alcohol** is reported to be the cause in approximately **4%** of both **fatal and injury crashes**.

Table 4.13. Road safety outcomes per crash type in Georgia 2012–2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total number of traffic fatalities	605	514	511	602	581	517	459	481	450
Total number of fatal crashes	358	301	317	339	325	281	290	279	239
Total number of injuries (severe or mild)	7,734	8,045	8,536	9,187	9,951	8,461	9,047	7,921	6,640
Total number of injury crashes	4,016	4,363	4,997	5,333	5,878	5,107	5,411	4,842	3,968
Number of speeding-related fatal crashes	159	121	119	102	102	68	41	36	44
Number of fatal crashes with at least one driver with BAC over the legal limit	22	27	16	50	40	13	16	12	8
Number of drivers/passengers not wearing seat belt in fatal crashes	–								
Number of drivers/passengers not wearing helmet in fatal crashes	–								
Number of speeding-related injury crashes	2,094	1,991	1,922	2,009	2,025	620	280	248	234
Number of injury crashes with at least one driver with BAC over the legal limit	398	327	394	353	375	230	154	140	129

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of drivers/passengers not wearing seat belt in injury crashes	-	-	-	-	-	-	-	-	-
Number of drivers/passengers not wearing helmet in injury crashes	-	-	-	-	-	-	-	-	-

4.4.5. Georgia – Diagnosis

Table 4.14 below summarizes the country ‘diagnosis’ of traffic enforcement.

Table 4.14. Diagnosis of traffic enforcement – Georgia

Good practice elements

- ✓ Inter-sectoral coordination for road safety in general (including vertical coordination i.e., from national to local authorities) and enforcement in particular
- ✓ Road Safety Action plan with specific monitoring indicators used for implementing engineering interventions to improve road safety
- ✓ Dedicated training of police officers and periodic re-training
- ✓ Complete equipment of patrolling units for enforcing all key violations
- ✓ Extensive ASE scheme including section control
- ✓ 30-zones extensively implemented around schools and in residential areas
- ✓ Regular enforcement of key drugs and recording of violations.
- ✓ Demerit Point System in place
- ✓ There is indication of effective collection of traffic fines
- ✓ A steadily decreasing trend in traffic fatalities with 25% reduction between 2012 and 2020

Elements needing improvement

- ? Lack of targets and monitoring/evaluation procedures dedicated to traffic law enforcement activity
- ? Seat belt use not compulsory for rear seats
- ? Lack of data on the number of drivers controlled for key traffic offenses
- ? The 30-day definition of fatality is not implemented in Georgia

4.5. Moldova

4.5.1. Strategic and operational framework

Coordination and legal framework

The **agencies responsible and accountable** for traffic law enforcement are **Ministry of Economy and Infrastructure, Ministry of Internal Affairs, Ministry of Education, Culture and Research, and Ministry of Healthcare, Labor and Social Protection**. Activities are coordinated among **all agencies** through the **National Council on Road Traffic Safety** operating within the Moldovan Government.

All actions of the relevant competent authorities are based on **Moldovan Law “On Road Traffic Safety”** (no. 131 from June 7,2007). Currently active formal enforcement programs are outlined within the **National Strategy Paper for Road Traffic Safety for 2011–2020** and in the **National Alcohol Control Program for 2012–2020**.

The **current enforcement targets** concern:

- video surveillance of traffic;
- modernization of traffic light system;
- control over the movement of hazardous cargo as well as shipment of standardized and excessive weight cargo on the roads;
- systematic monitoring campaigns to verify entities offering public transportation services for compliance with rules of transporting passengers;
- prevention of DUI cases and speeding;
- failure to wear seat belts and child safety seats, as well as improper use of mobile phones.

Consultation, cooperation, and coordination of activities is conducted with **several key road safety institutions**, including **universities** and **NGOs** e.g., the Technical University of Moldova, Moldova State University of Agriculture, the Automobile Club of Moldova, and the Association of Motorcar Drivers.

No significant changes were reported since 2019.

Capacity and training

The training of professionals in terms of new conceptual platform and modernized requirements of the profession is considered insufficient. Training of professionals in the field of road traffic organization and safety, planning of transport flows, development of

intelligent transport systems and ensuring proper operation thereof would all be desirable but are currently lacking. There are no academic training programs that would satisfy international requirements and that would be integrated in research.

Available **traffic enforcement equipment** comprises the following:

- Iskra Video, TruCAM and Auto Uragan mobile radars
- Traffic Control Automated System to control road traffic
- DRAGER 6810, 6820, 7510 breathalyzers
- INFRACAR M gas analyzers
- LUX IS-2 light meters

No significant changes were reported since 2019.

Monitoring and evaluation

Official data from the **centralized database** on road accidents is considered and used to a certain extent for planning and implementing of enforcement activities. This contains the total number of violations of traffic rules, and their classification by types of violations (according to articles and their parts of the Code of Violations of the Republic of Moldova No. 218 from October 24, 2008), number of imposed and paid fines, their corresponding amounts, number of accrued penalty points, sanctions related to driver's license suspension, cases referred to courts and decisions under them. An **electronic database** of all **traffic rules offenders** and **applied fines** and **sanctions** is maintained.

Although no quantitative data was provided, it was reported that after **sanctions for traffic violations** had been made **more severe**, road users began to comply with the applicable laws. For instance, the number of **DUI cases decreased**, phone conversations while driving became less frequent, the number of driving on the wrong side of the road decreased multiple times, speed limits were respected, and the number of failures to use seat belts decreased several times.

In recent years no social surveys have been conducted at the state level to assess the change in attitude to traffic rules and to the provision of compliance with the rules. There have been separate on-line surveys conducted by NGOs though (on use of seat belts, child safety seats, etc.: <http://saferoads.md/>).

4.5.2. Legislation and measures

Speed

Speed limits for motorways/top standard roads, rural and urban roads are **110 km/h, 90 km/h, and 50 km/h respectively**.

Speed enforcement is largely conducted using **laser mobile devices** (7 pieces) or Doppler type radars (25 pieces). In the capital city Chisinau, there are 41 monitoring points (33 intersections and 8 sections of the road), which include **126 video cameras, 145 photo cameras** and **29 PTZ** (Pan-tilt-zoom) cameras. It is reported that **20 systems of section control** have been installed in the country, but they are not operational due to violations of the legal framework during the operation. Moreover, a few **Dynamic Speed Display Signs** are in place within Chisinau.

The Ministry of Internal Affairs is currently holding a competition for the implementation of public-private partnership that would develop an automated system for monitoring public safety and traffic throughout the country.

It is unclear to which extent **30-zones** are implemented in the country. There is however a specific rule for trucks to travel with **maximum 30 km/h on certain sections** with a large proportion of trucks, on section that have been repaired with the help of foreign financing (whose designs are subject to road safety audits according to the requirements of partners), and on specific sections with increased danger. Traffic calming through engineering treatments is implemented to a small extent.

Alcohol and drugs

The **legal BAC limit** is **0.3 gr/ml**. Alcohol and drug tests are widely conducted using **blood tests or Drager devices**. Only a qualified substance abuse professional determines the content of prohibited concentration of drugs in human body, in accordance with the applicable legislation. Law enforcement authorities virtually do not use express tests to identify drugs¹⁰.

¹⁰ 1) Resolution of the Government # 296 of 16 April 2009 "On Approval of the Regulation on the procedure for carrying out an alcohol test and medical examination to determine a degree of intoxication and its nature; <http://lex.justice.md/viewdoc.php?action=view&view=doc&id=331331&lang=2> 2) Order of the Ministry of Healthcare No. 80 of 20 March 2009 on intake and analysis of biological samples to determine an alcoholemia, consumption of drugs and other psychotropic substances, medications with similar effect. <http://lex.justice.md/viewdoc.php?action=view&view=doc&id=331571&lang=2>

Restraint systems

Seat belt wearing is compulsory in both the **front and rear seats**. **Helmet wearing is compulsory** for **drivers** and **passengers** of **motorcycles**, as well as for **bicyclists**.

CRS are **compulsory** for **children <12 years old**. It is also **forbidden** to transport children in the **front seat of a passenger car**. More specifically, **children up to 12 years old** may be transported only in a car equipped with **special child supporting system** (or with other devices: *special cushion, adjustable along the seat height, which allows to buckle up standard seat belts*), providing the compliance with the following requirements:

- a) child supporting system complies with safety standards;
- b) child supporting system complies with the child's weight and height;
- c) position of the child in the seat allows to correctly buckle up (in relation to shoulder and pelvis) the safety belt.

Fines and demerit point system

Established **fines for traffic violations** are as follows:

- Speeding: 50–65 Euros
- Driving under the influence of alcohol: 1200 Euros
- Driving under the influence of drugs: 1200 Euros and criminal prosecution
- Seat belt violation: 30 euros
- Helmet violation: 30 Euros
- CRS violation: 30 Euro

In some cases, **fines can be replaced by unpaid community service** (40 to 60 hours) and be combined with **license suspension** (6 months to 1 year).

It is noted that in case of a **criminal offense** (e.g., *heavy intoxication, conscious transfer of control of the vehicle to a person who is obviously intoxicated, refusal, resistance or evasion from conducting an alcohol test*) fines for DUI were **substituted for other sanctions**. The sanctions applicable currently are **200 to 240 of hours of unpaid community service**, and **cancellation of the driver's license**¹¹.

The system of **penalty points** is applied in accordance with the provisions of the **Code of Offenses**, e.g., Article 228. There are provisions on violation of rules of operation of transport vehicles that have malfunctions in the break or steering gear, lighting or alarm systems, violation of state registration rules or rules of motor vehicle state registration (3

¹¹ Criminal Code Article 2641

points) and vehicle inspection (3 points), but also on speeding, use of a seat belt, use of a helmet, BAC over the legal limit.

Overall points for traffic violations range **between 1–15 points**, and **license suspension** is established for drivers who have collected **15 points within 180 days**.

4.5.3. Enforcement activity KPIs

Table 4.15 shows that the number of **speeding violations** recorded in **mobile/patrolling controls** has increased dramatically over the last **8 years**. An impressive peak is reported for the year 2015; video monitoring system and detection of traffic offenses with photo and video cameras was introduced in 2015, and this caused a sharp increase in documenting this type of offense. There is no further information on the number of violations recorded by ASE systems. In 2018 another sharp increase in the number of speeding violations is observed.

The number of **DUI violations** recorded presents a **slight increase** between **2012–2017** followed by a slight decrease. A small increase is noted again in 2019 and 2020.

Table 4.15. Number of recorded traffic violations in Moldova 2012–2020

	2013	2014	2015	2016	2017	2018	2019	2020
Number of speeding offenders recorded in mobile controls (10³)	0.785	3.6	109	14.3	16.3	171.8	134.2	104.8
Number of drivers with BAC over the legal limit (10³)	5.9	6.9	6.9	7.6	6.4	5.1	5.3	5.9

No surveys or data gathering on the use of **restraint systems** were performed during the timeframe and for the parameters requested by the questionnaire because the **relevant competent authority was lacking**, and the primary focus was on other parameters during the time periods concerned.

Table 4.16 shows the amount of **funding collected through traffic fines**. The violations of driving a car without fastening the seat belt and riding a motorcycle without a helmet are regulated by the same article of the applicable law, and that is why their statistics are registered together in a single reporting item.

The amount of **fines for speeding** has **increased almost 10 times** between **2013–2017** (including again the impressive peak in 2015), and the amount for **seat belt/helmet fines**

has **increased 8 times** during the same period. The **total amount** of funding collected through traffic fines has **increased 2.7 times** during that timeframe.

As for the most recent period, data is available only for **speeding fines**. An impressive **increase of 5 times** is recorded in **2018–2020** compared to 2017. The trend is in line with that of the number of violations recorded (see Table 4.15), showing an effective collection of fines in the country.

It is noted that fines were cancelled for driving under the influence of alcohol in Moldova. The sanctions currently applicable are community service for a specific amount of hours and suspension of the driver's license.

Table 4.16. Amount of funding collected through traffic fines in Moldova – 2013–2020

	2013	2014	2015	2016	2017	2018	2019	2020
Amount of funding collected through fines for speeding (K€)	16.7	47.6	1,309	141.9	151.7	2,400	2,335	1,808
Amount of funding collected through fines for seat belt/helmet (K€)	0.2	0.3	0.8	1.6	1.6	–	–	–
Total amount of funding collected through fines (all traffic violations) (K€)	27	180.2	1,864	390	492.7	–	–	–

4.5.4. Road safety outcomes related to traffic violations

Road safety has **improved** substantially in the country over the last 8 years with a **reduction of 49%** in **fatalities** and **35%** in **injuries**.

The numbers of **speeding-related fatal crashes and injury crashes** fluctuate considerably (e.g., from 5% in 2017 to 46% in 2020) and so this should be further investigated. **Alcohol** is reported to be the cause of **approximately 10%** of fatal crashes and **approximately 5%** of injury crashes.

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Table 4.17. Road safety outcomes per crash type in Moldova 2012–2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total number of traffic fatalities	445	301	324	300	311	302	241	247	227
Total number of fatal crashes	409	283	276	270	276	274	274	277	245
Total number of injuries (severe or mild)	3,509	3,220	3,077	3,063	2,929	2,993	3,123	3,031	2,265
Total number of injury crashes	2,713	2,605	2,536	2,559	2,479	2,640	1,798	1,709	1,279
Number of speeding-related fatal crashes	73	49	33	34	28	14	102	83	113
Number of fatal crashes with at least one driver with BAC over the legal limit	54	40	31	24	32	12	18	30	20
Number of drivers/passengers not wearing seat belt in fatal crashes	133	55	75	68	59	37	43	43	54
Number of drivers/passengers not wearing helmet in fatal crashes	35	29	32	32	22	17	12	20	20
Number of speeding-related injury crashes	277	295	130	107	95	68	636	519	501
Number of injury crashes with at least one driver with BAC over the legal limit	94	103	128	143	131	89	110	138	130
Number of drivers/passengers not wearing seat belt in injury crashes	480	342	168	142	180	116	159	171	109
Number of drivers/passengers not wearing helmet in injury crashes	181	178	192	179	131	110	76	123	120

4.5.5. Moldova – Diagnosis

Table 4.18 below summarizes the country ‘diagnosis’ of traffic enforcement.

Table 4.18. Diagnosis of traffic enforcement – Moldova

Good practice elements

- ✓ Intersectoral coordination for road safety in general and enforcement in particular
- ✓ A formal DUI enforcement program is in place
- ✓ Some surveys on road user attitudes and behavior have been implemented by NGOs
- ✓ Specific indicators are monitored for evaluation of enforcement activity; trends of enforcement, violations and road safety outcomes have been correlated (although at a rough level)
- ✓ Some surveys on use of restraint systems have been conducted by some NGOs; however, the data is not reported
- ✓ A 30 km/h speed limit for trucks on specific road sections
- ✓ Demerit Point System in place
- ✓ There is indication of successful collection of traffic fines

Elements needing improvement

- ? Specific enforcement activities are clearly defined, however without any quantitative target
- ? Training of police officers is considered insufficient, especially when it comes to the use of new technologies
- ? Mobile speed enforcement equipment appears insufficient
- ? Section control systems are installed but remain non-operational
- ? 30-zones and traffic calming are rarely implemented
- ? Unknown whether Demerit Point System is operational and systematically updated with the points properly assigned
- ? The data on speeding and DUI-related crashes needs checking and validation

4.6. Ukraine

4.6.1. Strategic and operational framework

According to **Article 3** of Ukraine's Legal Act “**On Road Traffic**”, the authorities in charge of **road traffic administration and safety** are the **Cabinet of Ministers**, duly authorized centralized executive authorities, executive authorities of the Autonomous Republic of Crimea, local executive authorities and local public administrations.

The activities are **coordinated** through the **Cabinet of Ministers of Ukraine (CMU)** and the **Coordination Council for Road Traffic Safety**, a provisional advisory and consulting organ of the Cabinet of Ministers of Ukraine (according to CMU Resolution no. 153 from February 28, 2018).

National Police of Ukraine and **Ministry of Infrastructure** of Ukraine perform **organizational** and **practical actions** to fulfill the tasks and actions covered by the Strategy for Improving the Level of Road Safety in Ukraine until 2024 (Decree of the Cabinet of Ministers of Ukraine No. 1360-p from October 21, 2020). It provides the introduction of **modern requirements and technologies** that systematically cover all key aspects of **road safety**, in particular **human behavior** (human factor), **road infrastructure**, **structural safety of vehicles** to prevent severe crash outcomes.

The active road safety programs with relevance to enforcement is the National Transport Strategy of Ukraine until 2030 (Decree of the Cabinet of Ministers of Ukraine No. 430-p from May 30, 2018).

Moreover, the State Agency for Infrastructure Projects of Ukraine developed draft Decree of the Cabinet of Ministers of Ukraine “**On Approval of the Action Plan for the Implementation of the Strategy for Improving the Level of Road Safety in Ukraine until 2024**” in coordination with the Ministry of Education, Ministry of Healthcare, Ministry of Infrastructure of Ukraine, Ministry of Internal Affairs, State Emergency Service of Ukraine, and National Police.

Capacity and training

Professional training of police officers consists of¹²:

- initial vocational training
- training in higher education establishments (universities) with specific training conditions

¹² Article 72 of Ukraine's Legal Act: On National Police

- post-graduation training
- on-job training as a system of measures aiming to consolidate and modernize the expertise, skills and practices required for a police officer based on the officer's operating environment and official job profile specifics.

The procedures, organization and duration of professional training are established by Ukraine's Ministry of Internal Affairs.

Traffic enforcement equipment available for police patrols includes **1,535 breathalyzers** and **100 TruCAM LTI 20/20 laser radars**. Units of the Police Patrol Department started using TruCAM laser radars to register speed of vehicles on October 8, 2018, as part of a pilot project¹³. Since October 16, 2018, TruCAM laser radars have been used in combination with remote issuance of administrative fine tickets.

Monitoring and evaluation

Crash data used for **planning and implementing enforcement activities** is typically data on '**black spots**', i.e., areas where more than 4 accidents with injuries or deaths occurred within 3 years, as well as certain areas where resonant road accidents occurred.

The Police Patrol Department performs **monthly accident analysis** and **compares** the figures with the data for the **previous year's similar period** in order to **identify direct and indirect accident causes**, to decrease the accident rates and the numbers of persons killed and injured in accidents, and to ensure road traffic safety in general. The analysis covers the following **criteria**: accident type, cause, time of the day, day of the week and place. Analysis findings are used to draft recommendations for Senior Management of Ukraine's National Police on measures and approaches intended to decrease accident rates.

4.6.2. Legislation and measures

Speed

Speed limit for motorways is **30 km/h**, whereas for other top standard roads (dual carriageway) it is **110 km/h**; for rural and urban roads speed limits are **90 km/h**, and **50 km/h** respectively.

¹³Order no. 936 of 08.10.2018 issued by V.V. Abroskin, Acting Head of Ukraine's National Police, Rank II Police General

Speed enforcement is rarely implemented with **mobile devices**. It is reported that **9 stationary cameras** have already been installed in Kyiv on public roads¹⁴. Only a few roads in the country are equipped with **Dynamic Speed Display Signs**; there are several displays showing the speed on the routes Kyiv–Boryspil and Kyiv–Odesa.

30-zones are the provision of the item 12.5 of Traffic Rules of Ukraine, which prescribes that in residential and pedestrian areas the speed of moving vehicles **must not exceed 20 km/h**. Such areas are **marked** with the **corresponding signs**.

Engineering traffic calming schemes were approved by the State Standard DSTU 4123:2020 “Road safety”. Measures of traffic calming. General technical requirements”. **Speed humps** remain on many streets of Ukrainian cities, but new ones are no longer being installed. Almost all cities in Ukraine have one or more streets with shared space. **Enlargement of sidewalks/curb extensions** have started in the cities. **Narrowings** are created in some areas, as well as in change-in-reverse lanes. The practice of arranging **raised pedestrian crossings** is actively spreading in Lviv, Vinnytsia, Ivano-Frankivsk, Kyiv, and other cities. **Safety islands** and **small radius rings** are being built in cities and on the roads of general importance.

Alcohol and drugs

The **legal BAC limit** for drivers is **0.2 gr/ml**. Drug tests are performed only in hospitals.

Restraint systems

Seat belt wearing is **compulsory** in both the **front and rear seats**. **Helmet** wearing is **compulsory** for **both drivers and passengers of motorcycles**, but not for bicyclists.

Regarding **CRS**, Item 21.11 of Traffic Rules of Ukraine suggests that it is **forbidden to transport children**, whose height is **less than 145 cm** or who have not turned **12 years old** yet in transport vehicles equipped with seat belts without the use of special means which would allow to buckle up the child with the seat belts. It is also not allowed to transport children in the front seat of a car without the use of the above-mentioned special means, as well as in the rear seat of a motorcycle and moped.

¹⁴

www.google.com/maps/d/viewer?mid=1O7xBjt2_mINjy9KY11cYR_u4loHsneo5&hl=ru&ll=50.25622569900003%2C30.306940113999985&z=8

Fines and demerit point system

No significant changes were reported since 2019. Established **fines for traffic violations** are as follows:

- Speeding: by more than 20 km/h up to 50 km/h – 255 Ukrainian Hryvnia (UAH), by more than 50 km/h – 510 UAH
- Driving under the influence of alcohol:
 - first offence – 10200 UAH and license suspension for 1 year
 - second offence during a year – 20400 UAH and license suspension for 3 years
 - third offence during a year – 40800 UAH and license suspension for 10 years
- Driving under the influence of drugs: same as for alcohol
- Seat belt violation: 51 UAH
- Helmet violation: 51 UAH
- CRS violation: 51 UAH

A system of **penalty points** has been announced but is **not in use yet**. However, there are no provisions for points application for failure to use seat belts/failure to use helmet or excess of the alcohol level.

Average points for traffic violations are **approximately 50 points**, and **license suspension is established** for drivers with the second within a year violation of the following: driving a vehicle with broken main systems, transportation of passengers in vehicle not fit for this, driving a vehicle with expired inspection certificate, speeding/dangerous driving, passing closed railway crossing, driving under the influence of alcohol/drugs.

4.6.3. Enforcement activity KPIs

Table 4.19 shows that the number of drivers controlled for alcohol by police patrolling has decreased considerably over the period 2012–2016; this information warrants further clarification.

There is **no information** on the number of **violations recorded by mobile speed controls or ASE systems**.

According to Information Portal of Ukraine's National Police the only violation types subject to registration are seat belt and motorcycle helmet violations, and these are registered as a total number of violations and not separately. Violations of the rules on use of safety belts are not subject to separate registration. Data available for 2016 and 2017 indicate an increase of more than 4 times in the number of violations of seat belt and

helmet use; this is likely to reflect indeed an intensification of enforcement activity for these violations.

No data is available for the period 2018–2020.

Table 4.19. Number of recorded traffic violations in Ukraine 2012–2017

	2012	2013	2014	2015	2016	2017
Number of drivers controlled in roadside breath tests	152,620	143,818	99,251	46,540	14,147	–
Number of seat belt or helmet law offenders recorded in roadside tests	–	–	–	–	22,936	92,037

The amount of **funding collected** through fines for **seat belt or helmet offences** has **increased** accordingly from 1,183 million UAH to 4,701 million UAH, suggesting indeed an intensification of seat belt and helmet enforcement.

4.6.4. Road safety outcomes related to traffic violations

Road safety has improved substantially in the country over the period **2012–2017** with a **reduction of 33% in fatalities** and approximately **8% in injuries**. The most recent data shows that in the period 2018–2020 there has been a ‘plateau’ in the number of fatalities, injuries and crashes

Detailed breakdown of data per different crash types is only partially available for the year 2017. That year **speeding** is reported to be the **cause of 24% of all fatal crashes and 21% of all injury crashes**, whereas **alcohol** is rather reported to be the cause of approximately **3.5% of fatal crashes and 4.5% of injury crashes**.

Table 4.20. Road safety outcomes per crash type in Ukraine 2012–2020

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total number of traffic fatalities	5,131	4,833	4,483	3,970	3,410	3,432	3,350	3,454	3,541
Total number of fatal crashes	-	-	-	-	-	3,137	-	-	-
Total number of injuries (severe or mild)	37,519	37,521	32,395	31,467	33,613	34,677	30,884	32,736	31,974
Total number of injury crashes	-	-	-	-	-	25,542	24,294	26,052	26,140
Number of speeding-related fatal crashes	-	-	-	-	-	753	-	-	-
Number of fatal crashes with at least one driver with BAC over the legal limit	-	-	-	-	-	111	-	-	-
Number of speeding-related injury crashes	-	-	-	-	-	5,497	-	-	-
Number of injury crashes with at least one driver with BAC over the legal limit	-	-	-	-	-	1,135	-	-	-

4.6.5. Ukraine – Diagnosis

Table 4.21 below summarizes the country ‘diagnosis’ of traffic enforcement.

Table 4.21. Diagnosis of traffic enforcement – Ukraine

Good practice elements

- ✓ Two formal programs are the backbone of the enforcement activities: Transport Strategy-2020 and Road Safety Strategy-2024
- ✓ Multi-sectoral coordination
- ✓ Dedicated and on-going training for police officers
- ✓ Road safety is monitored by the police based on specific indicators, and the results are used for strategic and operational decisions within the planning of enforcement activities
- ✓ 30-zones (20-zones) are established by law for residential and pedestrian areas
- ✓ Low BAC limit
- ✓ Efforts for accurate recording of seat belt/helmet violations and relevant amount of funding collected through fines

Elements needing improvement

- ? The density of ASE systems (speed cameras) is rather low
- ? Traffic calming engineering measures are occasionally implemented
- ? Demerit Point System exists but is not operational
- ? Lack of accurate and complete data on the number of drivers controlled and the violations recorded for basic violations (speeding, DUI)
- ? Lack of sufficient data on the amount collected from traffic fines for basic violations (speeding, DUI)
- ? Lack of detailed time series data on crashes, injuries, and fatalities per type of violation as the reason for the crash
- ? Stagnation in road safety improvement over the last 3 years

5. BENCHMARKING EaP COUNTRIES ON TRAFFIC LAW ENFORCEMENT

This Chapter aims to benchmark EaP countries against the traffic law enforcement characteristics. It should be noted that the data received is not sufficiently complete and validated for a formal benchmarking; this was however not surprising, as the data requirements for benchmarking enforcement are quite challenging and a similar situation is to be expected as well for most other countries worldwide. Consequently, the purpose of this exercise is primarily to highlight the potential for benchmarking based on the existing data, the gaps in information and data, and the areas for further data collection efforts.

It is also noted that the comparisons are based on minimum common data elements available in the countries, and these may not always reflect the complete picture for the examined aspect. It is strongly recommended to consult the individual country profiles for more detailed and accurate information.

5.1. Speed

5.1.1. Legislation and measures

Figure 5.1 shows the currently established speed limits per road type in the EaP countries. Speed limits on **motorways/top standard rural roads** range between **90 km/h** in Armenia and **130 km/h** in Ukraine, while the speed limit is **110 km/h** in other countries. Obviously, the speed limits depend on the presence of standard motorways in the countries. Armenia uses stricter speed limits on top standard roads for trucks >3.5 tones (70 km/h).

In all EaP countries speed limits for other **interurban roads** are **90 km/h**. In **urban areas** speed limits are typically **60 km/h**, with the exceptions of **Moldova** and **Ukraine** that enforce **50 km/h** limit.

No changes in speed limits have been reported since 2019.

Figure 5.2 presents the results on the establishment of **30-zones**. Responses from the **2019 survey** were verified and adjusted by experts in the **2021 survey**, therefore current data is more accurate and complete. The responses for **Armenia** and **Belarus** were **adjusted upwards** (i.e., more frequent use), whereas for **Georgia** they were **adjusted downwards** (i.e., less frequent use than previously reported). It is observed that the area type in which speed limits are widely set at **30 km/h or lower** are **school areas**. **Azerbaijan** is the only country reporting scarce use of **30-zones**.

ROAD SAFETY ENFORCEMENT PRACTICES IN THE EaP COUNTRIES

Figure 5.1. Speed limits per road type in the EaP countries – 2021

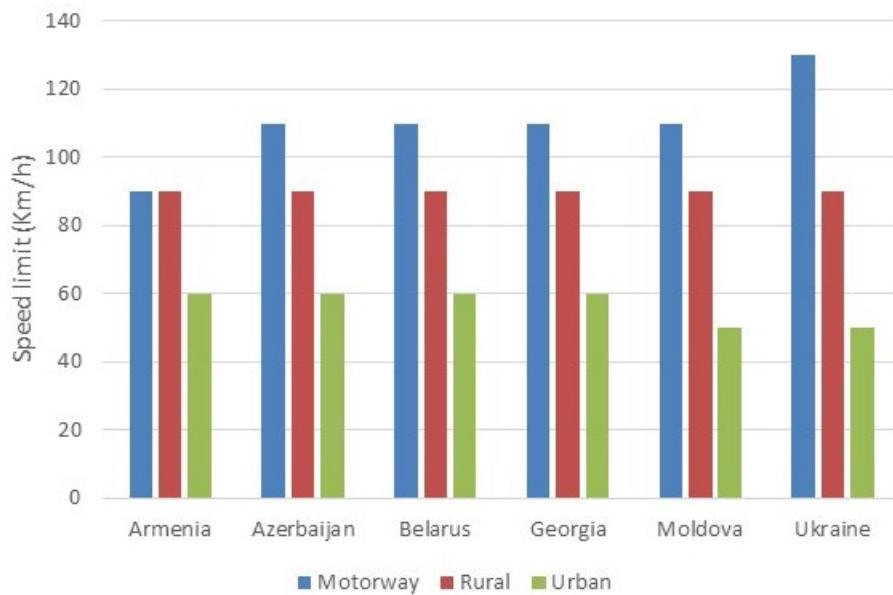
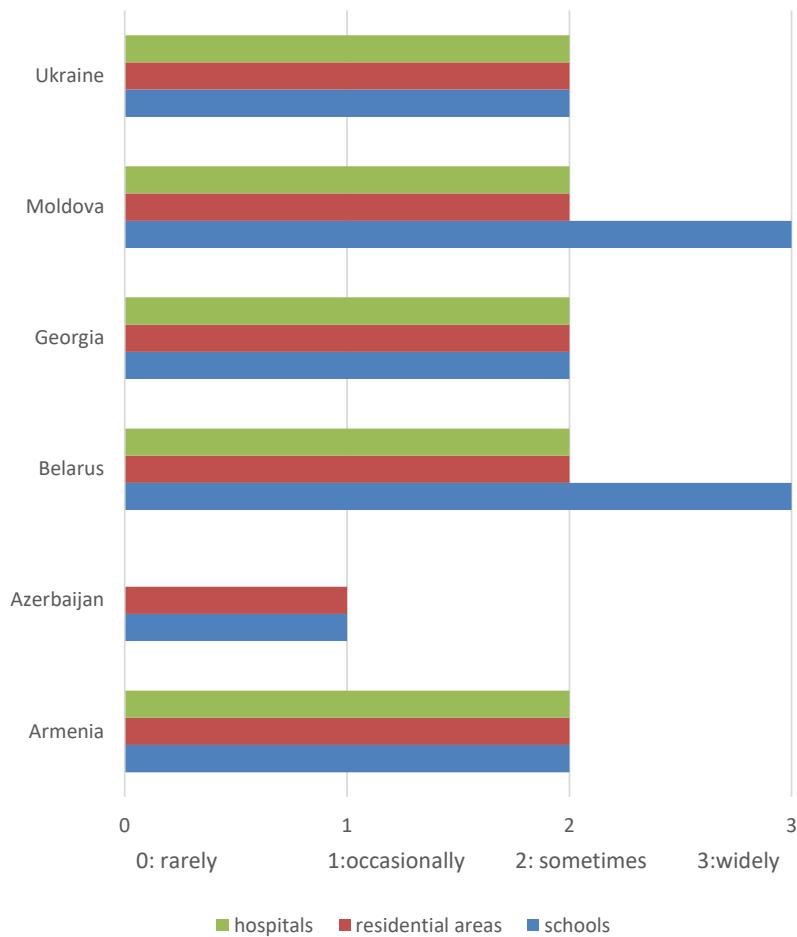


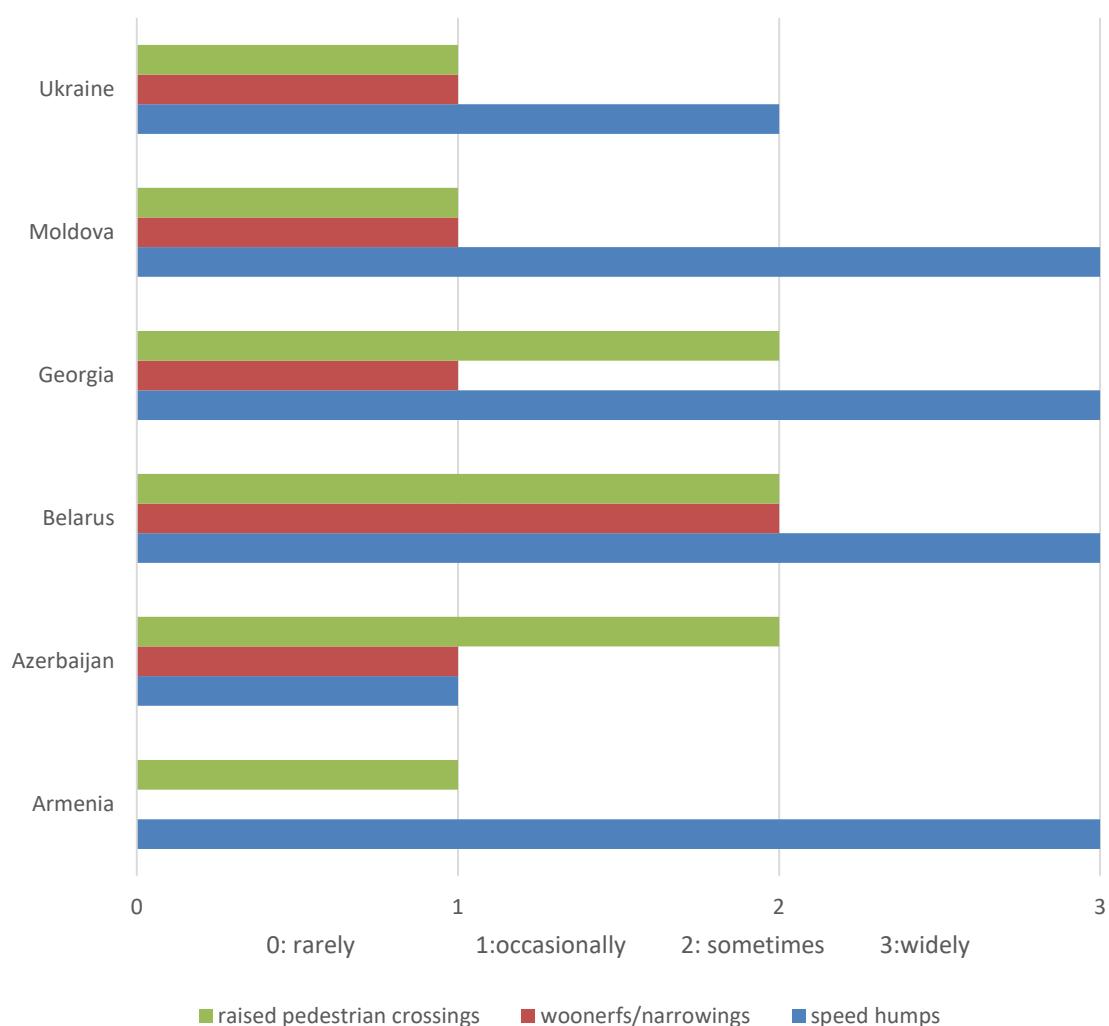
Figure 5.2. Frequency of 30-zones in the EaP countries per area type – 2021



Other speed management measures aiming to reduce speed, especially in residential/pedestrian areas are **traffic calming schemes** through **low-cost traffic engineering treatments** e.g., **speed humps**, **woonerfs**, **road narrowing** and **raised pedestrian crossings**. Updated information for the EaP countries is presented in **Figure 5.3**; country experts adjusted and updated the information previously reported in 2019.

Speed humps, probably the most common type of such treatment in most countries, are **widely used in Armenia, Belarus, Georgia, and Moldova**, and sometimes in **Ukraine**. On the other hand, **raised pedestrian crossings** are implemented to some extent in **Belarus, Georgia, and Azerbaijan**. Only in Belarus, and occasionally in **Georgia, woonerfs and road narrowings** are implemented to some extent. This is not surprising though, as this type of engineering treatment is known to be implemented only in a few countries in Europe and worldwide.

Figure 5.3. Frequency of traffic calming engineering treatments in the EaP countries per treatment type – 2021



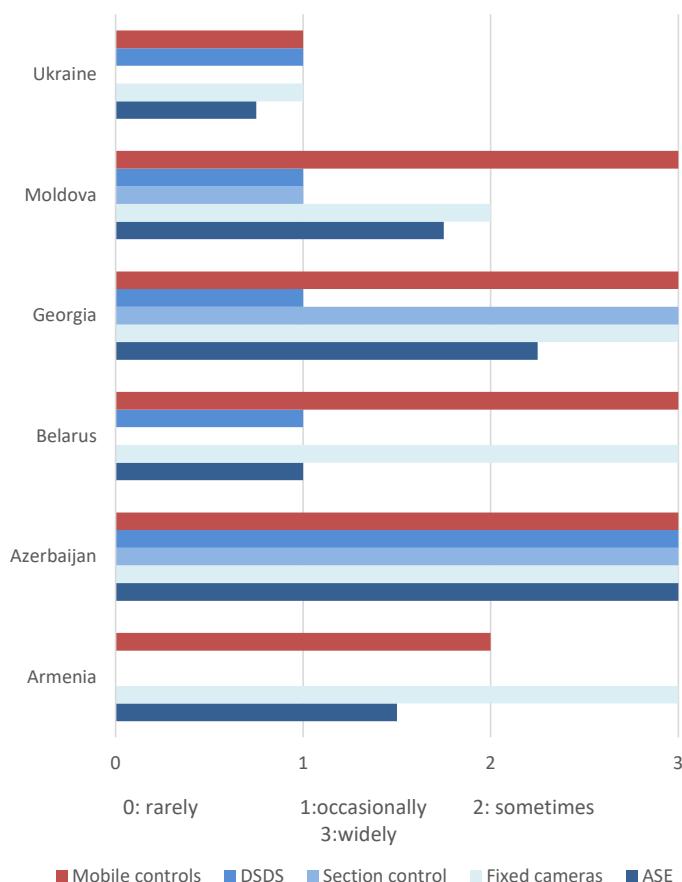
5.1.2. KPIs on speed enforcement

Figure 5.4 below shows a comparison of the extent to which **mobile and ASE systems** are in use in the EaP countries (**frequency and density**). These are divided into mobile controls (patrolling) and ASE, the latter further distinguished into fixed cameras, section control, and Dynamic Speed Display Signs (DSDS). It is noted that the **total ‘score’ on ASE** is calculated here as the average of the scores of the ASE sub-systems.

It is reported that **mobile controls** are widely implemented in **Azerbaijan, Moldova, and Georgia**. ASE systems are overall more **widespread** in **Armenia and Azerbaijan**, followed by **Georgia and Moldova**; Armenia reported significant progress in ASE implementation between 2017 and 2020. The most common ASE system in all countries is **fixed cameras**. **Section control** is reported to be widely used in **Azerbaijan** and occasionally in **Moldova and Georgia**. **DSDS** are only scarcely implemented in the EaP countries, except for **Azerbaijan** where they are used extensively.

Overall, **enforcement activity (mobile controls) and ASE systems** are reported to be **most widely implemented** in Azerbaijan, and the least used in Ukraine.

Figure 5.4. Frequency of speed enforcement in the EaP countries per type of enforcement



Although quantitative information on the number of recorded violations is quite incomplete, **Figure 5.5** below attempts a **comparison of enforcement trends** in the EaP countries over the last 8 years. The traffic violation selected for that is the number of **speeding offences** recorded in mobile controls and in ASE, however only the former data element had the most complete information over the years and for all the countries.

For comparability purposes the **value for the year 2012 is set equal to 100 for all countries**, and the **trend from 2012 onwards is expressed for each year as the ratio of the number of violations to that of year 2012**. It should be noted, however, that data for some of the countries shows **huge fluctuations** in the reported figures, and consequently some of the calculated values for mobile speed controls were **extremely high** (e.g., Moldova 2015, 2018 and Georgia 2019). For visibility purposes these values were reduced on the graph, with a note explaining that the value is much higher than the indicated one.

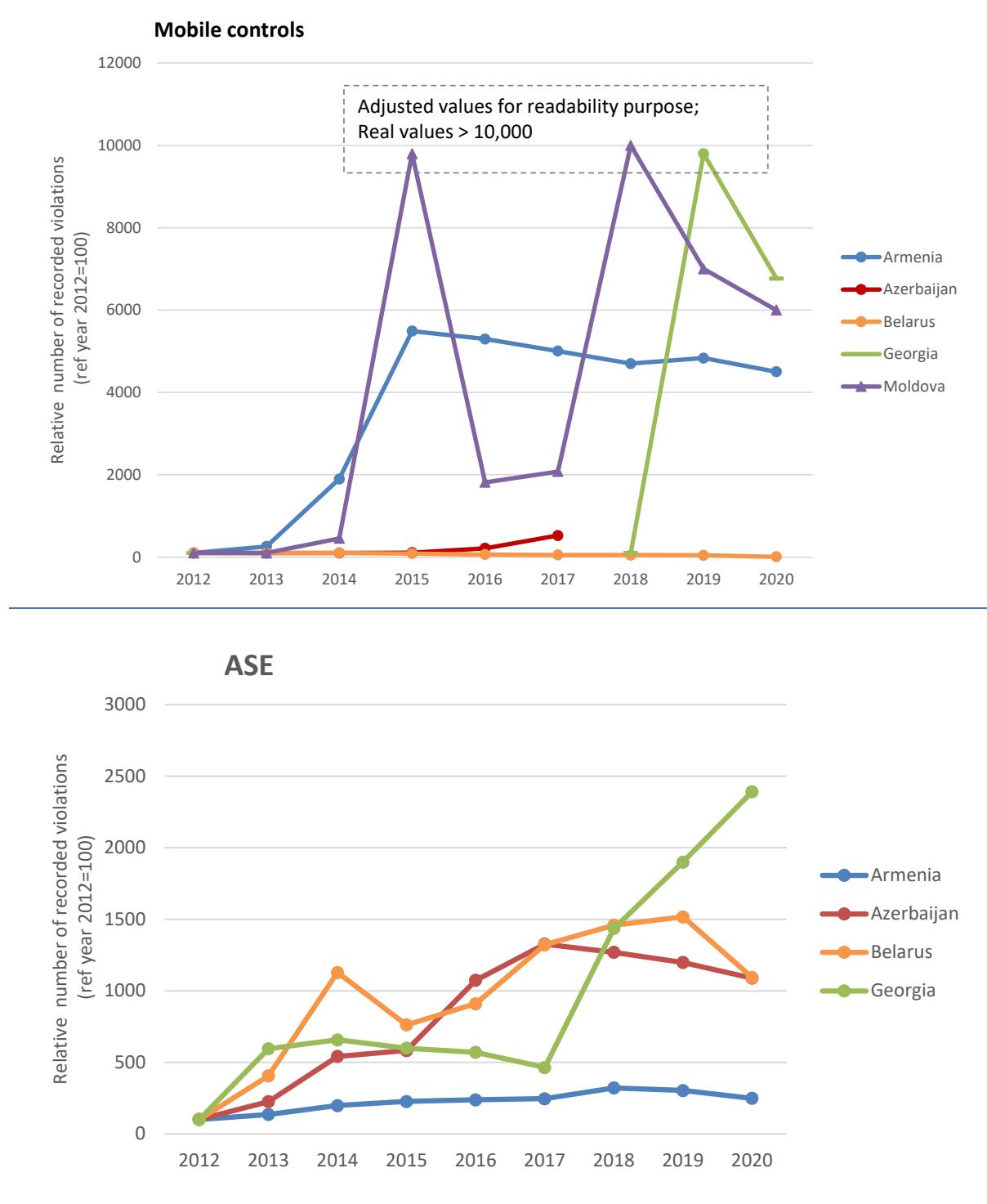
As for mobile speed controls, **different trends can be identified in different countries**. In **Armenia** and in **Moldova** there has been an impressive increase in recorded violations, suggesting an intensification of enforcement during that period. In **Georgia** data from mobile radars is available from late 2018, hence the impressive increase of recorded violations in 2019. In all three countries **the trend is inverted with a slight decline in the last couple of years**. This may suggest a loosening of enforcement controls, but it may also suggest a lower number of violations due to the greater enforcement in previous years resulting in change of drivers' behavior. It may also indicate a shift of enforcement efforts from standard patrolling towards ASE systems.

In **Azerbaijan** an increasing trend is also observed, although less impressive than in the other two countries. Recent data for the period **2018–2020** was not available in that country. In **Belarus** speeding violations recorded in mobile controls have been on the **decline** during the **whole examined period**.

However, in both **Belarus** and **Azerbaijan** significant **increases** in the number of speeding violations have been recorded through ASE; this indeed suggests that a shift from 'traditional' patrolling to ASE systems may have occurred in the examined period. On the other hand, the slightly increasing trend of violations recorded in **Armenia** is in accordance with the trend of mobile controls-recorded violations, this probably suggesting an intensification of all types of enforcement in the country.

The **slight decline of 2020 figures in all countries**, except for Georgia, should be further investigated. In Georgia speeding violations recorded through ASE presented an impressive increase between 2018–2020.

Figure 5.5. Relative evolution of the number of speeding offences recorded in mobile controls (top panel) and in ASE (bottom panel) in the EaP countries 2012–2020 (reference year 2012 is set equal to 100 for all countries)



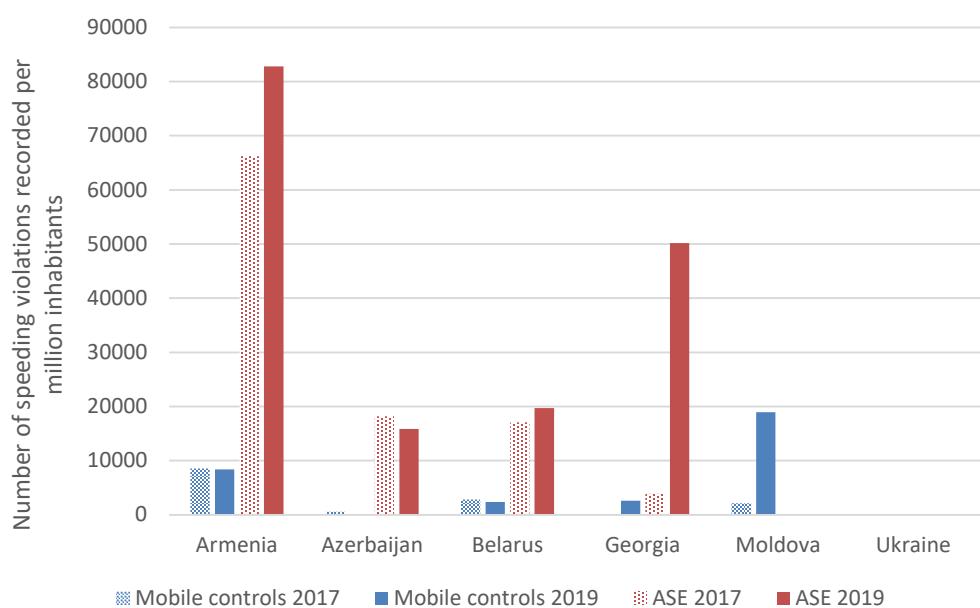
* Some values are reduced for visibility purposes; please see country profile for the actual figures

Figure 5.6 shows the number of recorded violations from mobile speed controls and from ASE systems for years 2017 and 2019. These are adjusted for the country size based on the population of 2017 and 2019 respectively (Source: *United Nations Economic Commission for Europe – UNECE*).

The **highest number of speed violations** recorded per population is observed in **Armenia** (both mobile controls and ASE) followed by **Georgia** (ASE controls). **Azerbaijan, Belarus** and **Moldova** have a **significantly lower number of violations** per population (mobile controls only in Moldova). However, it is not possible to conclude whether this is indeed due to lower violation rates – *i.e.*, *less speeding in these countries, or it may simply reflect the intensity of enforcement activity in different countries – *i.e.*, more controls result in more violations recorded*. Again, the lack of data on the number of drivers controlled complicates the interpretation of these results.

The **number of violations** recorded by **ASE** per population is **strikingly higher** than the respective number recorded in **mobile controls**. Obviously, this is due to the significantly higher number of drivers that can be controlled by ASE systems. A **general pattern** can be observed according to which **mobile controls-recorded** violations per population **decreased** between **2017 and 2019**, while at the same time the ASE-recorded violations increased. This indicates **a shift from the use of mobile controls to using ASE in most countries** in the recent years. It is noted that Moldova and Ukraine did not report any numbers for ASE violations.

Figure 5.6. Number of speeding offenders per million inhabitants in the EaP countries per type of enforcement (mobile controls and ASE), 2017 and 2019

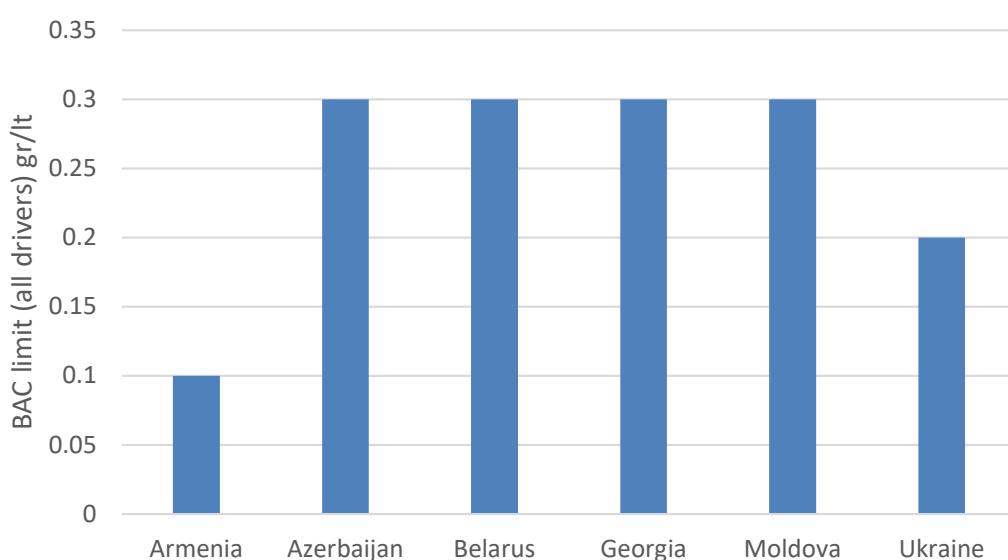


5.2. Alcohol and drugs

5.2.1. Legislation

Figure 5.7 shows the existing **BAC legal limits (g/l)**. In **2019** all countries had BAC legal limit set at **0.3 g/l** except for **Ukraine** that had it at **0.2 g/l**. **Armenia** has by now lowered the BAC legal limit to **0.1 g/l** for breath tests (**0.2 g/l** for blood tests). **None of the countries has special limits for professional drivers, novice drivers, etc.**

Figure 5.7. BAC limits in the EaP countries 2021



5.2.2. Enforcement activity KPIs

Figure 5.8 attempts a **comparison of DUI enforcement trends** in the **EaP countries** over the last **8 years**. The violation selected for that is the number of DUI/alcohol offences recorded in roadside breath tests, a data element reported in all EaP countries.

For comparability purposes the **value for the year 2012 is set equal to 100 for all countries**, and the trend from **2012 onwards is expressed for each year as the ratio of the number of violations to that for 2012**.

Considerably **different trends can be identified in different countries**. It is interesting to note that **none of the countries exhibits a constantly increasing trend**, and there is a lot of **fluctuation between consecutive years**. In **Armenia** there has been an **impressive increase** in recorded violations in the overall examined period suggesting an intensification of DUI enforcement. However, in the last **3 years** there was a **reduction**,

which could be attributed either to a **decrease of enforcement** or to an **improvement of drivers' behavior** (*less driving under the influence of alcohol*).

In **Azerbaijan**, **Georgia**, and **Moldova** after an **increase** during the **first few years** a **fluctuation** in the number of alcohol violations recorded is observed. In **Georgia** and **Moldova**, the number of recorded alcohol violations eventually returned to the “**starting point**” toward the end of the period, while in **Azerbaijan** and **Belarus** a **halving of the initial number** was noticed. This may suggest a **loosening of enforcement controls**, but also it may suggest a **lower number of violations** due to the intensification of enforcement during that initial period resulting in the change of drivers' behavior and actual lower rates of driving under the influence of alcohol. The **lack of data** on the number of drivers controlled over the examined period does not allow for a conclusion to be drawn from this graph alone.

Ukraine and **Belarus** show a **constantly decreasing trend** in the number of recorded DUI violations. It should be further investigated whether this is due to a loosening of enforcement efforts or is an actual constant improvement in law compliance in these countries. **No data is available beyond 2016 in Ukraine.**

Figure 5.8. Relative evolution of the number of drivers with BAC exceeding the legal limit in roadside breath tests in the EaP countries 2012–2020 (reference year 2012 is set equal to 100 for all countries)

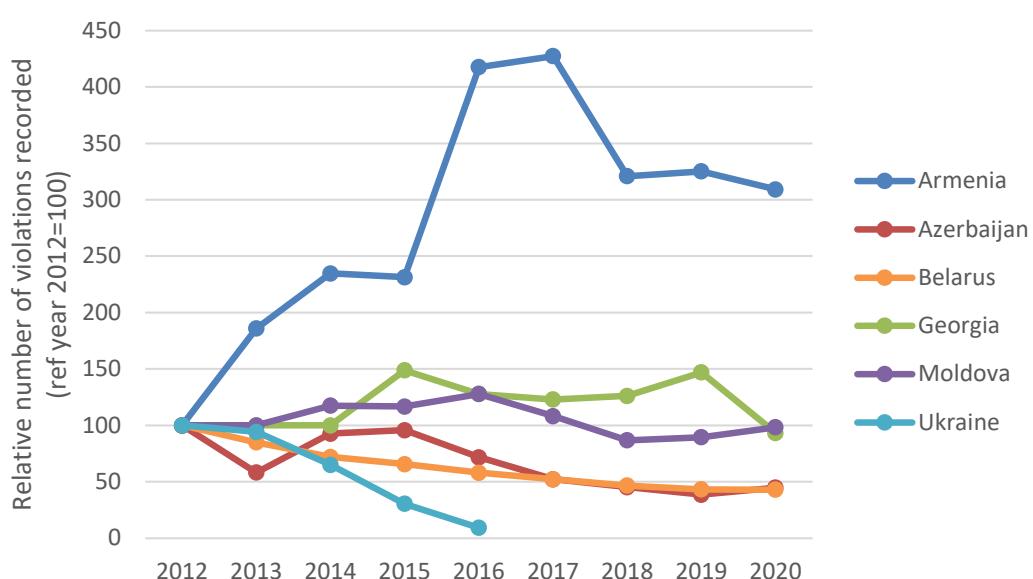
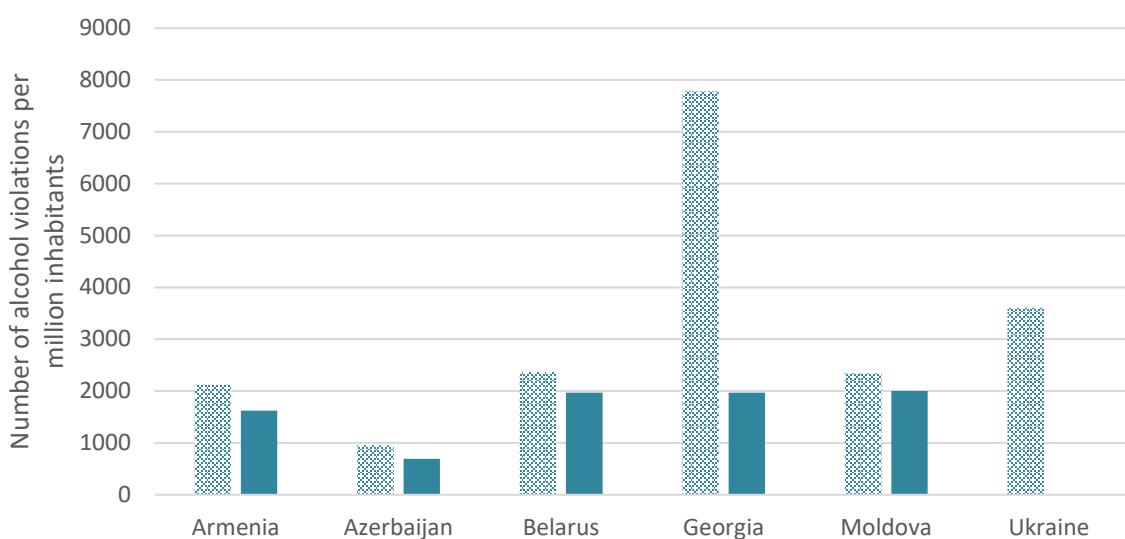


Figure 5.9 shows the number of recorded DUI violations (**drivers with BAC exceeding the limit**) in roadside breath tests for years **2017** and **2019**. These are adjusted to the country size based on the population number in 2017 and 2019 (Source: UNECE).

In 2017 by far the **highest rate of DUI offenders** per population was observed in **Georgia**, followed by **Ukraine**. However, the rate for **Georgia** was **impressively reduced** in **2019** to an order of magnitude **similar to that of other countries**. In **all countries** the number of DUI offenders per population **decreased between 2017 and 2019**; this is an indication of either **improved drivers' behavior** or **reduced enforcement effort** in all countries. No data was available for 2019 for Ukraine; the 2017 figure corresponds to the number of drivers controlled in roadside breath tests.

Figure 5.9. Number of DUI offences per million inhabitants in the EaP countries, 2017 and 2019



5.3. Restraint systems

Table 5.1 shows the **legislation regarding the use of restraint systems** in the EaP countries. As expected, **seat belt wearing for front seat passengers** and **helmet wearing for motorcycle drivers** are **compulsory** in all EaP countries. **Seat belt use for rear seat passengers** is **not compulsory** in **Belarus** (to be confirmed) and **Georgia**. In **Armenia**, **helmet wearing** was made **compulsory** for **bicyclists** in **2019**.

The same is the case for **Child Restraint Systems** except for **Armenia**. In **Georgia**, however, they are regulated to a smaller extent as they are **compulsory only for children <3 years old**, and **no specific height/weight criteria** are set. In general, it should be noted that the **specifications of CRS legislation** (age/height limits, type of CRS, permission to transport children in front seat, etc.) **differs from country to country**, therefore the detailed information in country profiles should be consulted.

Table 5.1. Legislation on the compulsory use of protective equipment and restraint systems in the EaP countries

	Seat Belt Front Seats	Seat Belt Rear Seats	Helmet Motorcycle Drivers	Helmet Bicyclists	Child Restraint Systems (CRS)
Armenia	✓	✓	✓	✓	✗
Azerbaijan	✓	✓	✓	✓	✓
Belarus	✓	?	✓	✗	✓
Georgia	✓	✗	✓	✗	✓
Moldova	✓	✓	✓	✓	✓
Ukraine	✓	✓	✓	✗	✓

✓: compulsory

✗: not compulsory

?: unclear

In terms of **existing seat belt and helmet wearing rates** in the EaP countries, only **Azerbaijan** validated the previously reported information in the most recent survey. The data comes from **roadside surveys** typically organized by **NGOs or universities** (please see **country profile** for details). Previously reported data for **Georgia** could not be validated and was therefore discarded in this report.

The **lack of such data** is a known problem in **monitoring road safety performance** in general, and **enforcement performance** in particular in many countries in **Europe and worldwide**. However, it is very important that countries pursue the **collection of data** on this **key indicator** that **accurately reflects the road safety behavior and culture of road users**.

6. IMPACT OF COVID-19 PANDEMIC ON TRAFFIC SAFETY AND ENFORCEMENT

6.1. Armenia

In the last **8 years** fatalities in Armenia have showed only **minor fluctuations** with an average of **316 fatalities per year**, while in the last **3 years** there has been an increase to **~340 fatalities per year**. No significant change was noticed between **2019 and 2020**, indicating that the COVID-19 pandemic did not “improve” road safety.

As in most countries restrictions were imposed during the period of **March–June 2020** following the registration of the first COVID-19 cases in the country. The operation of some institutions was suspended at that time, and it is reported that the volume of traffic was somewhat reduced due to the cessation of public transport traffic.

During the same period the number of accidents **decreased by 783**, the number of victims **increased by 7**, and the number of injured **decreased by 955** (see Table 6.1).

Table 6.1. Number of fatalities, injury accidents and traffic offences (per type of violation) per month in Armenia — 2020

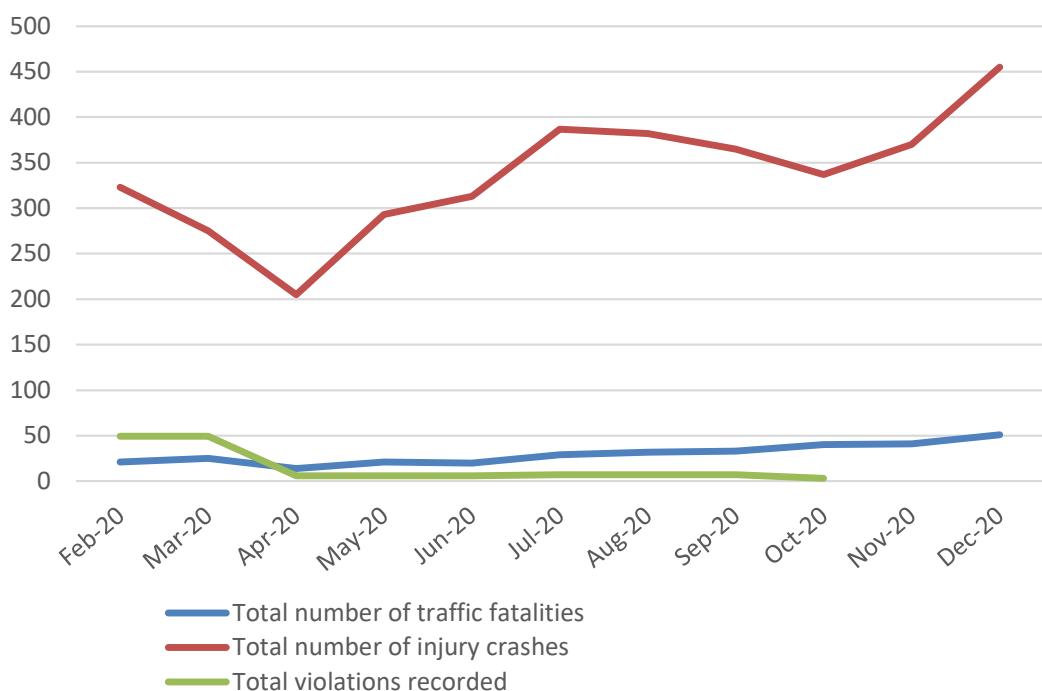
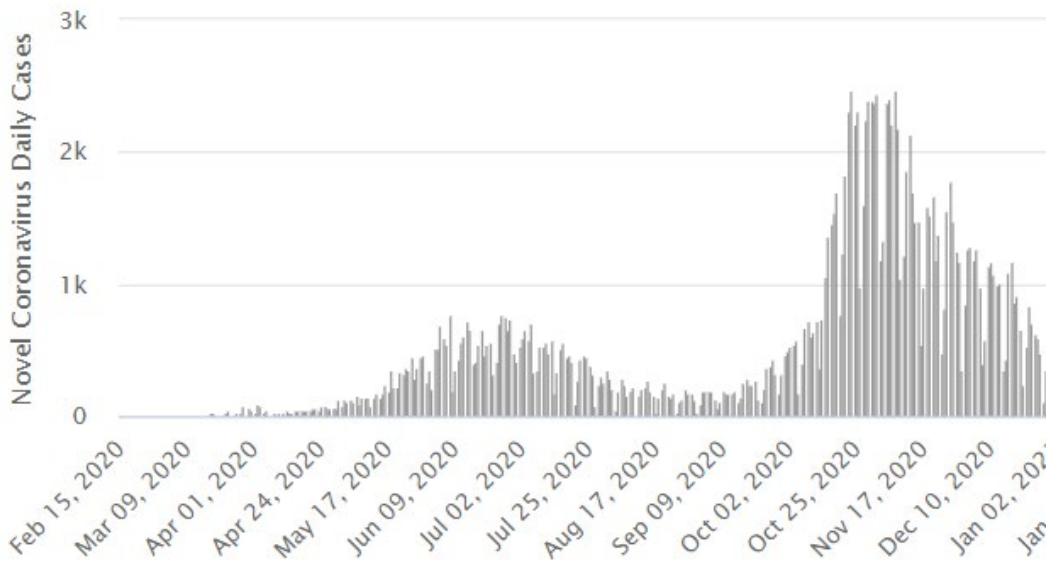
	Jan 2020	Feb 2020	March 2020	April 2020	May 2020	June 2020	July 2020	Aug 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020
Total number of traffic fatalities	21	21	25	14	21	20	29	32	33	40	41	51
Total number of fatal crashes	18	16	22	12	18	16	26	24	28	35	33	40
Total number of injury crashes	311	323	275	205	293	313	387	382	365	337	370	455
Number of speeding-related fatal crashes	33	41	26	20	20	26	36	31	29	34	29	30
Number of speeding offenders recorded in mobile controls	22,218			16,475			21,204			8,474	–	–
Number of speeding offenders recorded in ASE controls	250,043					167,867			179,125	–	–	
Number of drivers with BAC over the legal limit	1,387			1,020			1,772			387	–	–

Figure 6.1 shows the development of the COVID-19 pandemic in the country (number of new cases per day – top panel) and the development of traffic fatalities, accidents, and traffic violations (bottom panel) for the period **February 2020–December 2020**. A clearly visible drop in the number of crashes can be noticed during **March–June 2020**, the time when stricter “lockdowns” were imposed in most countries. This is the result of reduced traffic. A clear drop in the number of recorded violations is observed during the same period, which is due to either reduced traffic or reduced enforcement during that time. It is interesting to note that no significant reduction in fatalities was observed, possibly indicating that the crashes that occurred during that timeframe were more severe (*i.e.*, due to higher speeds in low traffic conditions).

During the 2nd wave of the pandemic in the country there is an increase in crashes and fatalities. It is possible that traffic restrictions at the time were somewhat relaxed, and therefore traffic safety patterns and behaviors may have resumed “as usual”. No traffic enforcement data is available for the end of 2020.

As noted by the country experts, although it can be presumed that COVID-19 would play a role in traffic safety, no concrete relationship has been established. There is indication, however, that the 1st wave of the pandemic had a considerable short-term positive impact on traffic safety, while on the contrary, the 2nd one led to an increase in crashes and fatalities.

Figure 6.1. Development of COVID-19 pandemic (new cases — top panel) and traffic fatalities, injury crashes and traffic offences (10^3) (bottom panel) per month in Armenia — 2020



6.2. Azerbaijan

In **March 2020** the pandemic situation was officially announced in the country, following the 1st COVID-19 case registered on **28 February 2020**.

A lockdown and the 1st set of restrictions were imposed for the period of **March 20–28, 2020**, followed by a tightening of restrictions on **April 2, 2020**. Traffic impacts were significant since Metro was closed, public transportation did not operate at all, and only a limited number of taxis were allowed with maximum 2 passengers in the rear seats. In general, a special permission via text-message was needed for citizens to go outside for 2 hours.

Subsequent lockdown periods were from **July 2 to early August 2020**, as well as **December 2020 to mid-January 2021**. As of **May 2021**, restrictions currently in place include the Metro operation (suspended), public transportation (limited regime), and text message-permission still in place for 2–3 hours.

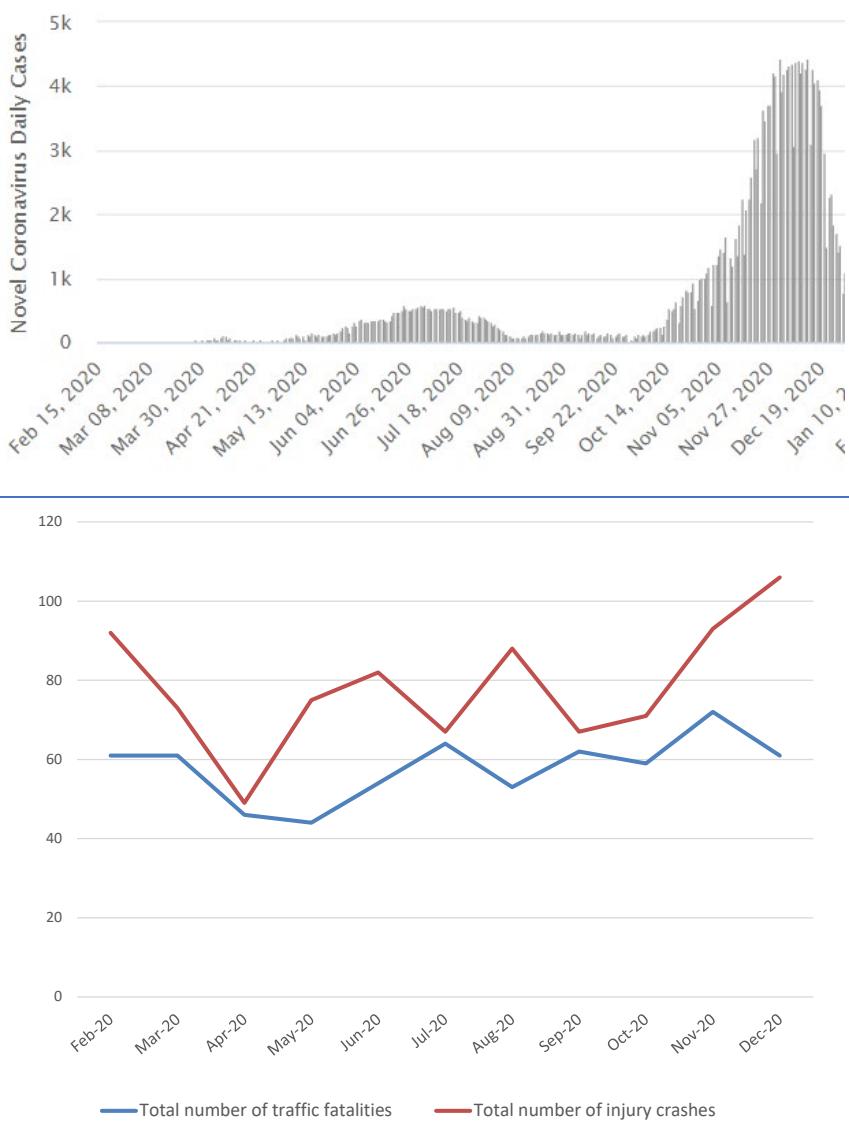
Table 6.2 shows the monthly development of basic traffic safety figures in Azerbaijan for 2020. It was reported that there has been a **15.2% decrease** in the number of fatalities, a **15.1% decrease** in the number of road crashes and a **17.2% decrease** in the number of injuries compared to the previous year. More specifically, fatalities were reduced from **821 in 2019 to 696 in 2020 (-15%)**. While in the previous years there had been a **decreasing trend** in the country, there was a slight increase in 2019. Nevertheless, the 2020 figure is the lowest number of traffic fatalities recorded in Azerbaijan between **2012–2020**.

Table 6.2. Number of fatalities, fatal crashes and injury crashes per month in Azerbaijan – 2020

	Jan 2020	Feb 2020	March 2020	April 2020	May 2020	June 2020	July 2020	Aug 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020
Total number of traffic fatalities	59	61	61	46	44	54	64	53	62	59	72	61
Total number of fatal crashes	55	53	53	41	37	53	59	133	61	55	62	58
Total number of injury crashes	95	92	73	49	75	82	67	88	67	71	93	106
Number of speeding-related fatal crashes	26	20	28	25	23	26	43	22	25	21	22	31

Figure 6.2 shows the development of the COVID-19 pandemic in the country (number of new cases per day – top panel) and the development of traffic fatalities and accidents (bottom panel) for the period **February 2020–December 2020**. A visible drop in the number of crashes can be noticed during **March–April 2020**, the time of stricter “lockdown” restrictions. A similar drop is observed in the number of recorded violations during the same time. During the subsequent lockdowns the numbers of traffic crashes and fatalities have been fluctuating; there is a drop in **July–August**, but this might be coincidental. It is interesting to note, however, that the **3rd wave of the pandemic in the country (November–December 2020)** coincides with an **increase in the numbers of fatalities and accidents**, taking them to pre-pandemic levels.

Figure 6.2. Development of COVID-19 pandemic (new cases — top panel) and traffic fatalities, injury crashes and traffic offences (bottom panel) per month in Azerbaijan — 2020



6.3. Belarus

The COVID-19 spread appears to have **started slightly later** in Belarus compared to other countries. No information was reported about **lockdown and travel restrictions** in the country, and it is believed that the **pandemic practically did not affect the level of traffic accidents and traffic fatalities**. Indeed, the number of injury crashes remained practically constant in Belarus between **2019 and 2020**, while the number of fatalities increased from **505 to 575 (14%)**.

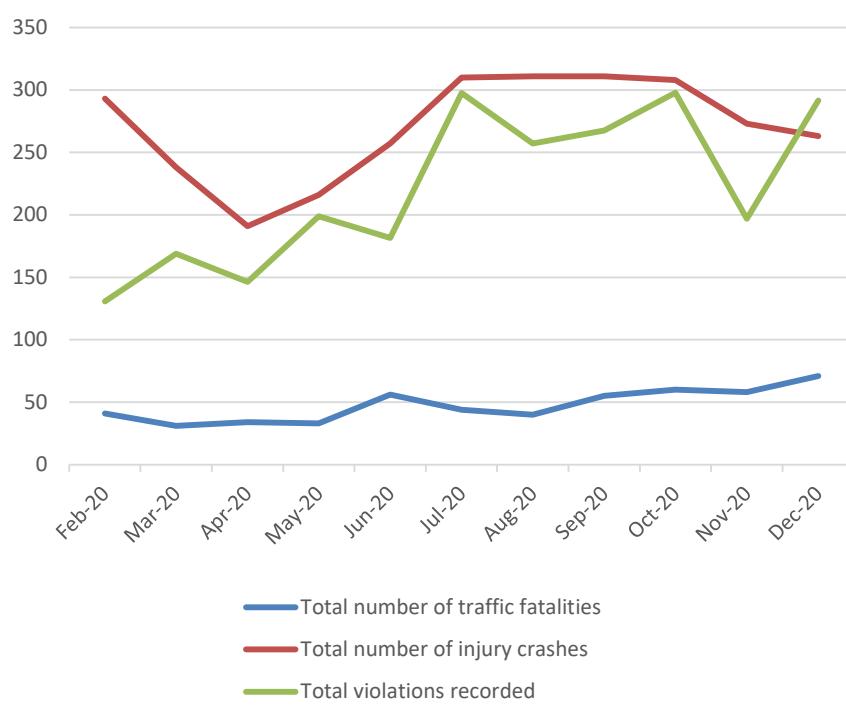
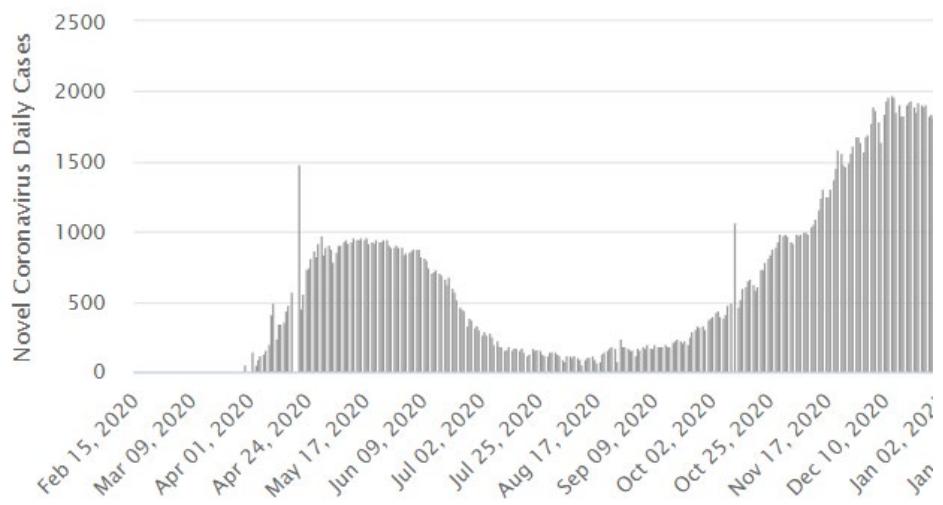
Table 6.3 show the monthly development of fatalities, injury crashes and traffic offenses per type (speeding, exceeding the BAC limit). Overall, there are some fluctuations, however **no significant changes are observed**.

Table 6.3. Number of fatalities, injury accidents and traffic offenders (per type of violation) per month in Belarus — 2020

	Jan 2020	Feb 2020	March 2020	April 2020	May 2020	June 2020	July 2020	Aug 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020
Total number of traffic fatalities	41	31	34	33	56	44	40	55	60	58	71	52
Total number of fatal crashes	40	29	36	28	40	39	36	52	51	53	69	51
Total number of injury crashes	284	293	238	191	216	257	310	311	311	308	273	263
Number of speeding-related fatal crashes	4	2	6	5	11	2	6	5	13	10	12	5
Number of speeding offenders recorded in mobile controls (10³)	87.8	65.4	85	74.1	101.1	92.5	150.3	129.9	135.1	150	995	148
Number of speeding offenders recorded in ASE controls (10³)	87.4	64	82.2	70.6	96.1	87.2	145.4	125.3	131.9	146	95.7	142
Number of drivers with BAC exceeding the legal limit (10³)	1.3	1.2	1.5	1.5	1.5	1.7	1.9	1.8	1.6	1.6	1.6	1.4

Figure 6.3 shows the development of COVID-19 pandemic in the country (number of new cases per day – top panel) and the development of traffic fatalities, accidents and traffic violations (bottom panel) for the period **February 2020–December 2020**.

Figure 6.3. Development of COVID-19 pandemic (new cases — top panel) and traffic fatalities, crashes and traffic offences (10^3) (bottom panel) per month in Belarus — 2020



A drop is visible in the number of crashes during **April 2020**, the time when the number of COVID-19 cases started to increase; it is not known whether this was the result of a lockdown in the country. A small drop in traffic offenses recorded is observed in the same time point, but this cannot be fully assessed since it could be just a random fluctuation. With the significant reduction of COVID-19 spread between **July and October 2020** a significant increase in crashes and traffic violations is observed, followed by a drop once the 2nd wave of the disease starts. Both can be attributed to traffic flows, with the tightening/loosening of mobility restrictions, however no specific information is available.

The number of fatalities presented **small fluctuations** during that time; however, an increasing trend is observed at the end of the year (**November–December 2020**) coinciding with the peak of the 2nd wave. It can be assumed that, while crashes decreased during that time, their severity increased, possibly due to **higher speeds (because of lower traffic)**. It is particularly interesting to note that the number of speeding violations showed a sharp increase at that time compared to the previous month, when there had been a temporary drop (see also *Table 6.3 above*). However, it is difficult to draw the conclusion on any of these observations.

6.4. Georgia

The first COVID-19 case in Georgia was confirmed on **February 26, 2020**. In-country transmission of the virus began in late **March 2020**. To decrease mobility, the following types of restrictions were introduced:

- **First wave:**

- State of Emergency: from March 21, 2020 to May 23, 5, 2020.
- Restriction of movement of pedestrians and vehicles:
 - Partial Curfew: from March 31, 2020 to May 23, 2020; 09:00 p.m. — 06:00 a.m. nationwide
 - Curfew: from April 17, 2020 to April 27, 2020; nationwide
- Moreover, in order to reduce the mobility of the population, the entering or leaving big cities (Tbilisi, Rustavi, Kutaisi, and Batumi) was prohibited from mid-April 2020 to mid-May 2020.

- **Second wave:**

- Restriction of movement of pedestrians and vehicles:
 - Partial Curfew: from November 9, 2020 to November 27, 2020; 10:00 p.m. — 05:00 a.m. only in big cities (Tbilisi, Batumi, Kutaisi, Rustavi, Gori, Poti and Zugdidi).
 - Curfew: from November 28, 2020 — ongoing; 09:00 p.m. — 05:00 a.m. nationwide.

Besides the above-mentioned cities, periodically entering or leaving of all cities/villages was prohibited as well, depending on the epidemiological situation.

No specific information is available about the reduction in traffic volumes, as the system allows only 30-day period for storage of the digital information after recording. No comparison within the data of the “normal traffic volumes for the same period” is therefore possible.

It was noted that there were **372 traffic accidents in March 2020** compared to **473 traffic accidents in March 2019** (-101; -21%); **206 traffic accidents in April 2020** compared to **458 traffic accidents in April 2019** (-252; -55%); and **380 traffic accidents in May 2020** compared to **480 traffic accidents in May 2019** (-100; -21%).

Moreover, there were **38 traffic fatalities in March 2020** compared to **34 traffic fatalities in March 2019** (+4; +12%); **13 traffic fatalities in April 2020** compared to **34 traffic fatalities in April 2019** (-21; -62%); and **21 traffic fatalities in May 2020** compared to **42 traffic fatalities in May 2019** (-21; -50%).

Similar trends were observed during the second wave: there were **398 traffic accidents in November 2020** compared to **505 traffic accidents in November 2019** (-107; -21%); and **443 traffic accidents in December 2020** compared to **509 traffic accidents in December 2019** (-66; -13%). Moreover, there were **35 traffic fatalities in November 2020** compared to **51 traffic fatalities in November 2019** (-16; -31%); and **39 traffic fatalities in December 2020** compared to **54 traffic fatalities in December 2019** (-15; -28%).

Table 6.4 show the monthly development of fatalities, injury crashes and traffic offenses per type (speeding, exceeding the BAC limit). Overall, there are some fluctuations that coincide with COVID-19 spread in the country.

Table 6.4. Number of fatalities, injury accidents and traffic offences (per type of violation) per month in Georgia – 2020

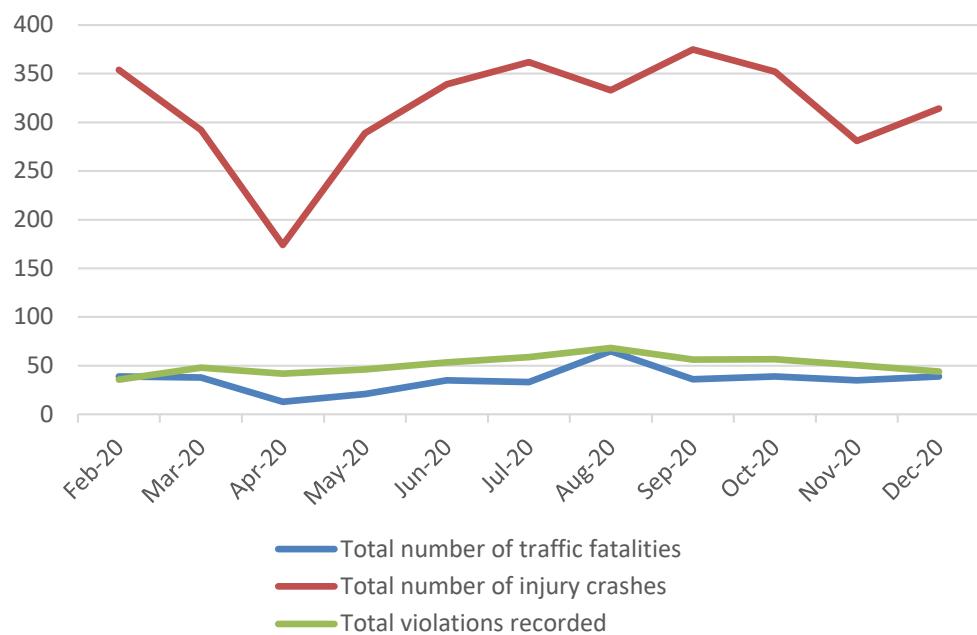
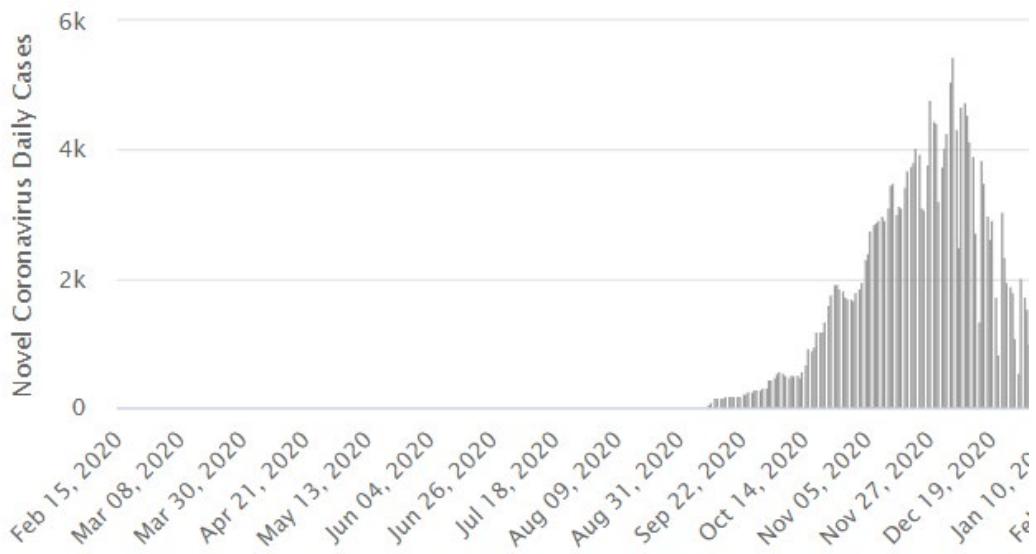
	Jan 2020	Feb 2020	March 2020	April 2020	May 2020	June 2020	July 2020	Aug 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020
Total number of traffic fatalities	57	39	38	13	21	35	33	65	36	39	35	39
Total number of fatal crashes	32	23	26	8	14	18	19	22	22	22	16	17
Total number of injury crashes	350	354	292	174	289	339	362	333	375	352	281	314
Number of speeding-related fatal crashes	2	2	5	1	5	5	4	7	1	5	3	4
Number of speeding offenders recorded in mobile controls (10³)	2.3	1.4	0.1	0.002	0.3	2.3	4	2.3	0.4	0.1	0.03	0.7
Number of speeding offenders recorded in ASE controls (10³)	36.8	32.1	46.2	41.4	44.3	47.3	51.4	62.9	54	55.2	50.1	43
Number of drivers with BAC exceeding the legal limit (10³)	1.9	2.1	1.5	0.6	1.5	3.6	3.4	3	2	1.3	0.5	0.7
Number of drivers with drugs identified in drug tests	24	15	10	4	15	31	35	30	21	17	2	9

More specifically, **Figure 6.4** shows the development of COVID-19 pandemic in the country (number of new cases per day – top panel) and the development of traffic fatalities, accidents, and traffic violations (bottom panel) for the period **February 2020–December 2020**. A significant reduction drop is visible in the number of crashes in **April 2020**, the time when the state of emergency during the 1st wave was in place. It is noted

that the numbers of daily COVID-19 cases were too low at the time and are not visible on the graph. It is interesting to note that a very small number of traffic offenses was recorded through mobile controls (regular patrolling) at that time; however, ASE systems remained active in detecting offenders. The numbers of fatalities in **April and May 2020** were also significantly lower, suggesting that in Georgia the reduction in traffic resulted in fewer crashes and proportionally fewer casualties. In the summer of that year, when restrictions were lifted the numbers of accidents and fatalities went back to the previous monthly averages (with a small peak in August, which is common in many countries due to summer holidays).

A similar but less striking reduction in crashes is noted during **November–December 2020**, the time when the 2nd wave COVID-19 restrictions were introduced. However, the number of fatalities has not proportionally decreased during that time. It is also noted that the number of recorded violations decreased in **December 2020**.

Figure 6.4. Evolution of the COVID-19 pandemic (new cases — top panel) and traffic fatalities, injury crashes and traffic offences (10^3) (bottom panel) per month in Georgia — 2020



6.5. Moldova

Traffic and mobility restrictions in Moldova were in place from **March 17, 2020 until May 15, 2020**. It was reported that there has been a reduction in traffic accidents and traffic fatalities during the COVID-19 mobility restrictions compared to normal conditions for the same period.

In **Chapter 4.5.4** of this report, it was shown that the number of crashes and injuries **decreased by ~25% between 2019 and 2020**, however fatalities decreased by only **8%** in the same period. This indicates that the severity of crashes increased. It is interesting to note that speeding-related fatal crashes increased from **83 to 113 (36%)** in 2020 reaching the highest number of the whole period **2012–2020**. It is possible that this is related to the pandemic, but no interpretation can be given based on the available information.

Table 6.5 shows the monthly number of fatal crashes and injury crashes in the country. No data is available for the number of traffic fatalities per month, but it is well known that this would be expected to show a similar trend as the number of fatal crashes.

Table 6.5. Number of fatalities, injury accidents and traffic offences (per type of violation) per month in Moldova – 2020

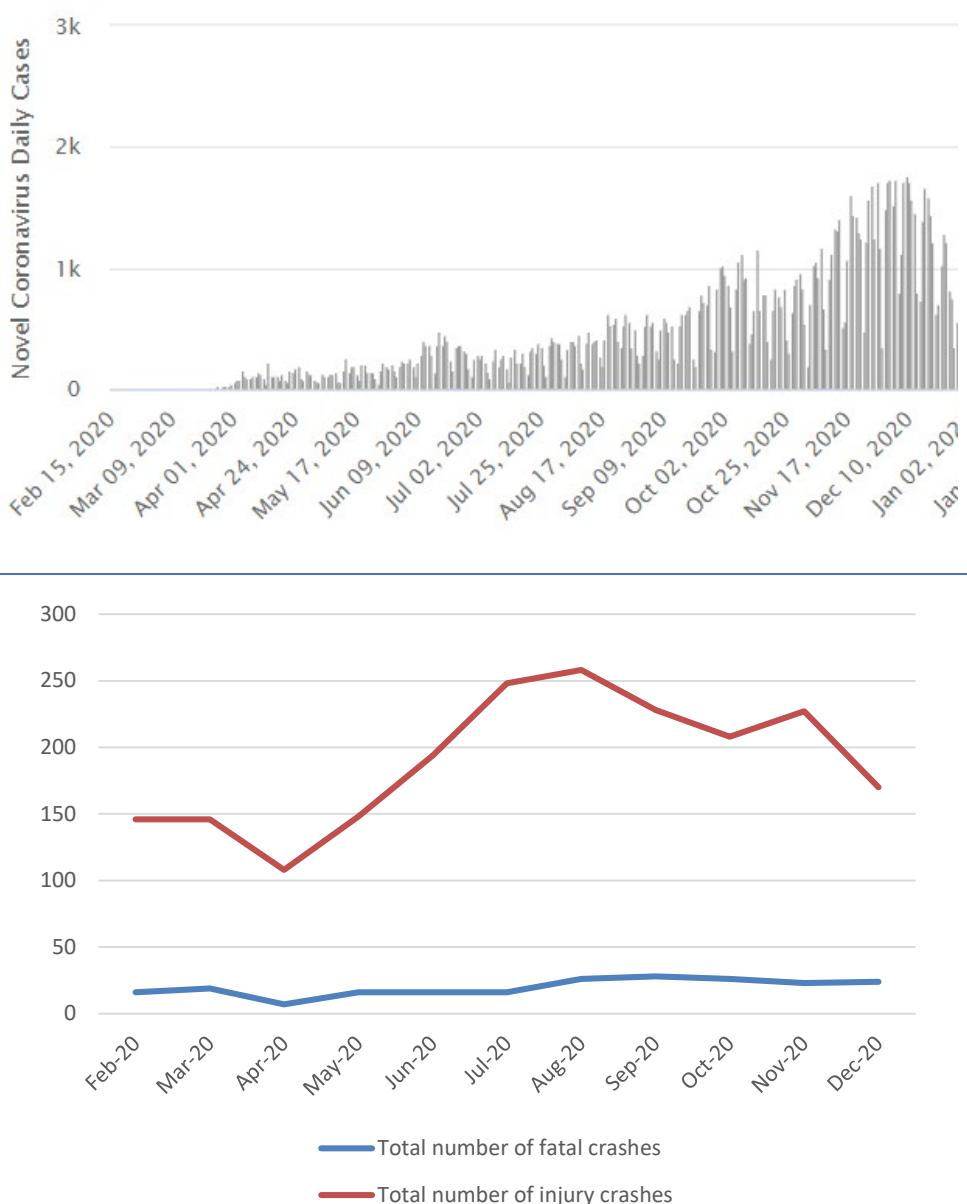
	Jan 2020	Feb 2020	March 2020	April 2020	May 2020	June 2020	July 2020	Aug 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020
Total number of traffic fatalities	-	-	-	-	-	-	-	-	-	-	-	-
Total number of fatal crashes	28	16	19	7	16	16	16	26	28	26	23	24
Total number of injury crashes	184	146	146	108	148	194	248	258	228	208	227	170

Figure 6.5 shows the development of COVID-19 pandemic in the country (number of new cases per day – top panel) and the development of fatal and injury crashes (bottom panel) between **February 2020–December 2020**. The data shows a different pattern occurring in Moldova than that in other EaP countries. While other countries exhibit a clear two-wave spread of the pandemic, in Moldova there has been a rather slow but continuous growth of daily cases leading to a peak in **November–December 2020**.

A reduction is visible in the number of crashes in **April–May 2020**, the time when traffic/mobility restrictions were in place. However, monthly figures “recovered” to what would be a “usual” monthly pattern, i.e., more crashes in the summer period. The monthly number of fatal crashes has also slowly increased during the same period. This suggests that there has been little or no impact of the pandemic on the road safety.

No data was available in Moldova regarding the number of traffic offenses recorded per month in 2020.

Figure 6.5. Evolution of COVID-19 pandemic (new cases — top panel) and fatal crashes, injury crashes (bottom panel) per month in Moldova – 2020



6.6. Ukraine

No data was reported.

7. CONCLUSIONS AND NEXT STEPS

7.1. Summary

This report aims to draft updated country profiles dedicated to traffic law enforcement in the EaP countries, and attempts benchmarking based on the most recent available data on traffic enforcement. For that purpose, the hierarchical structure of road safety management systems is adjusted to the framework of traffic enforcement, and a good practice methodology is presented for evaluating enforcement programs. This includes the identification of enforcement management ‘layers’ (*strategic and operational framework, legislation and measures, KPIs and related road safety outcomes*), and the establishment of causal links between these layers, enabling to assess the effectiveness of enforcement programs across the entire chain of activities and outcomes.

Based on this conceptual framework **a three-stage dedicated survey** was launched in the EaP countries using both on-line and conventional questionnaire survey tools. The first two surveys were launched in **March–May 2019**, while the third survey was launched in **March–April 2021**.

The information and data collected (**qualitative and quantitative**) were used for three purposes:

- i. To **draft updated country profiles** on road safety enforcement; these include qualitative information on the strategic and operational framework of enforcement and related legislation, as well as detailed data (KPIs) on enforcement activity between 2012–2020.
- ii. To **perform an updated country ‘diagnosis’** based on country profiles highlighting the good practice elements of traffic law enforcement in each country, and the elements needing improvement.
- iii. To attempt **benchmarking** using selected quantitative indicators that were available for a sufficient number of countries; these include graphical comparisons of countries on specific KPIs.

The three outcomes should be considered complementary, especially when benchmarking, since it is based mostly on aggregated or reduced information, adjusted to ensure a minimum level of comparability. For a complete picture it is recommended to refer to the country profiles.

In the third (current) survey, the opportunity was taken to collect more detailed information on the development of traffic enforcement and safety outcomes (crashes, fatalities) during 2020, in light of the **COVID-19 pandemic**. A separate analysis was carried out, in which

COVID-19 developments over time were compared to traffic enforcement and safety in each country. This analysis aimed to identify possible patterns in which the pandemic affected traffic safety in the EaP countries.

7.2. Data Needs and Other Recommendations

7.2.1. Updated Country Recommendations

Armenia

Armenia has an **extensive ASE scheme** in place, including **fixed cameras**, both in interurban and in urban areas, as well as a satisfactory level of implementation **of traffic calming and 30-zones** in urban areas. Over the last **8 years** traffic enforcement intensified considerably as reflected by the huge increase in the number of recorded traffic violations for key issues (**speeding and DUI**). This was done through ASE and standard patrolling, however more focus has been placed on ASE in the last 3 years. The country has recently **lowered BAC limits** for driving under the influence of alcohol, made **helmet-wearing compulsory** for bicyclists and introduced a **Demerit Point System**. The international definition of fatality (**30 days**) is in use.

However, road safety coordination in the country is **not systematic**, and **monitoring and evaluation procedures are vague**. Especially the **lack of inter-sectoral cooperation** is an aspect that would warrant particular attention. In addition, an update of the Road Safety Strategy and Action Plan are pending since 2013.

There are several key data elements that are **not systematically collected** or **not directly accessible**, and which could support a **more targeted and evidence-based enforcement** activity,. These are the number of checks performed, the amount of funding collected through traffic fines, the seat belt and helmet wearing rates in the country.

Despite the important progress in legislation and enforcement activity, the numbers of crashes and fatalities have **increased in the last 3 years**. Even during the COVID-19 restrictions only a temporary drop in crashes and fatalities was observed in March 2020, followed by an increasing trend over the rest of that year. The causes of this deterioration in road safety should be explored leading to a concrete and feasible plan for improvement.

Azerbaijan

The institutional and legal framework for **road safety management and enforcement in particular are quite satisfactory** in Azerbaijan. ASE and other relevant equipment are largely available and police officers receive dedicated training. No significant changes since 2019 have been reported. However, **other forms of speed management should be considered more widely** in the country, namely the implementation of **traffic engineering treatments** (speed humps etc.) and **30-zones**. Azerbaijan is the only EaP country reporting estimates of **seat belt and helmet wearing rates**.

While the available enforcement indicators reveal an **increase in the number of violations recorded between 2012–2017**, a stabilization was observed between **2018–2020**. It is possible that this is due to improvement of **drivers' behavior**, and this could be supported by a considerable overall **decrease in traffic fatalities** in the same period. On the other hand, there is indication that the relevant fines may not be successfully collected, as the amount of funding shows fluctuation over the years. Road crash data also requires improvement, primarily with the adoption of the international **30-day** definition of fatality.

In 2020, a **reduction of 15%** was observed in the number of fatalities, which can be attributed to COVID-19 restrictions and thus the reduction in traffic volumes. It was noted, however, that towards the end of the year the number of crashes tended to rise to the “pre-pandemic” monthly numbers, therefore caution is needed to keep the level of traffic safety at appropriate levels.

Belarus

There is **systematic inter-sectoral coordination** for road safety in the country with clear links to **enforcement targets** and actions within a **formal road safety/enforcement program**. However, the extent to which coordination is achieved in practice is not confirmed.

There is **large increase of speeding violations** recorded through ASE in Belarus, indicating a shift of enforcement practices from the more traditional patrolling (in which violations are declining) to ASE systems. The number of **DUI violations is declining**, and this warrants further investigation whether it reflects an improvement in driver behavior in line with the reduction in crashes and casualties over the period 2012–2019.

In addition to the **lack of data** on the number of drivers controlled, the lack of data on the amount of funding collected through traffic fines **does not allow to assess the entire “chain” of enforcement activity**. Also, there is no data on road user behavior when it comes to the use of restraint systems. It is also recommended that the country establishes a Demerit Point System for traffic law offenders.

Unlike in other countries COVID-19 did not appear to have a “**favorable**” road safety impact; the number of fatalities increased by 15%. An increase in the severity of crashes over the 2nd wave of the pandemic was observed. More efforts are needed to reduce the number of fatalities.

Georgia

There is **systematic inter-sectoral and vertical coordination** for road safety in the country with **clear links to enforcement targets and actions**. However, the monitoring and evaluation of road safety is carried out on the basis of a **limited number of general indicators**. Also, there is systematic coordination of efforts with NGOs. A number of legislative improvements should be considered in Georgia, namely the use of seat belts in rear seats and further specifics on CRS regulations, as well as lowering of speed limits in urban areas.

The registration of traffic offences and relevant fines collected shows a **large increase especially between 2017–2019**. Georgia is the only EaP country reporting data on drug tests and relevant fines collected. Judged by crashes and casualties reported road traffic safety has been constantly declining in the last 8 years. Missing data elements include the number of drivers controlled in roadside tests, the use of restraint systems and the detailed breakdown of traffic fatalities and crashes per cause/contributory factor. Georgia should adopt the 30-day definition of fatality.

Significant reductions in crashes and fatalities occurred during the months when travel/mobility restrictions due to COVID-19 were in place compared to the same months of the previous year. Traffic enforcement activity did not appear to be affected by the pandemic.

Moldova

There is **systematic inter-sectoral coordination** for road safety in the country with **clear links to enforcement targets and actions**, and a **formal DUI enforcement program**. Trends of enforcement, violations and road safety outcomes have been correlated to some extent in the country supporting a rough evidence-base. There is also quite **systematic coordination of efforts** with NGOs.

On the other hand, **enforcement equipment appears to be insufficient**, both for mobile and fixed controls, with only limited number of ASE systems; no significant progress was reported since 2017. Training is also considered insufficient, especially when it comes to the use of new technologies. Speed management for urban areas, vulnerable road users etc. should receive more attention, as the relevant legislation and the extent of speed management and engineering interventions are limited.

The enforcement activity in the country shows very **large fluctuations**, with a huge number of violations recorded in 2015, as well as from 2018 onwards; this data should be validated. The amount of funding collected through fines is in accordance with the reported trend in enforcement activity, with huge fluctuations that need to be cross-checked as well.

Traffic crashes and casualties have shown **significant reductions over the last 8 years**. During the COVID-19 pandemic there was a significant reduction in total number of crashes, but a much smaller reduction in fatalities compared to the previous year 2019, this requiring further investigation.

Ukraine

Ukraine has the **strictest legislation regarding speeding and alcohol** in the EaP region, with lower legal limits which are also more in line with **international good practice**. There is also a quite **robust strategic and operational framework**, with specific **action plans** and a **dedicated working group** for raising awareness on enforcement.

Despite these positive elements, however, the **level of enforcement activity is not satisfactory** in the country. A **limited deployment of ASE** is reported. A Demerit Point System exists but is **not in use**. Most importantly, data on enforcement activity is largely incomplete, as several important data elements (e.g., speeding offenders) are not subject to any formal registration; and when it is available (i.e., alcohol violations) a clearly decreasing trend is shown, while no data is available after 2016.

Road crash and fatality data is also not available to a sufficient level of detail, i.e., breakdown per different crash types. The number of crashes and fatalities shows a stagnation between 2016–2020, while there is no reduction between 2019 and 2020, as is the case in most countries due to the COVID-19 pandemic. Ukraine did not report specific figures about the pandemic period.

7.2.2. General Recommendations

From the results of the survey, it can be concluded that **structure and culture indicators**, *i.e., information pertaining to the institutional framework as well as to the strategic and operational aspects of enforcement*, is largely available and was collected in all countries. Although there are differences in the way road safety in general and enforcement in particular are managed in the countries, there are several common elements. First, formal enforcement programs are rarely in place, and in most cases, enforcement is an activity integrated within an overall road safety strategy. Specific quantitative targets for enforcement activity were not reported. Activity is monitored to some extent, and it is planned mostly based on the general road safety trends and the over-representation of particular crash or victim types in the national statistics. No formal evaluation procedures are in place for enforcement, as is also the case for several road safety aspects in most countries in Europe.

In most countries there are training procedures for police officers, including several follow-up life-long-training activities. The equipment available for enforcement varies largely among countries. While in some countries (e.g., Armenia, Azerbaijan, Georgia) there is recently clear focus on installing ASE systems, in other countries (e.g., Moldova) mobile controls through standard police patrolling remains the main type of enforcement. It is recommended that EaP countries strengthen their efforts on both types of enforcement as these serve different purposes. On the one hand, mobile patrolling can address the need for more unpredictable and targeted enforcement, while on the other hand ASE allows controlling a very large number of road users.

Legislation on the main road safety risks (speeding, DUI and use of restraint systems) is clear in most countries. But as a general remark, it is less rigid in comparison to legislation in other European countries. For instance, speed limits in urban areas are mostly 60 km/h, while the general trend internationally is to reduce them below 50 km/h. It is recommended that EaP countries consider such reductions as there may be substantial benefits for the safety of vulnerable road users (pedestrians, cyclists) which usually constitute most of the road casualties in urban areas.

While 30-zones are implemented to some extent in the EaP countries, these are created primarily around school zones. It is recommended that the concept is adopted more formally and more extensively, especially in residential areas in order to lower vehicle speed to a level tolerable for vulnerable road users. In this context traffic calming engineering measures should be more extensively considered for residential areas.

Armenia and Ukraine are the only countries that have lowered their legal BAC limits to <0.3 g/l; countries should consider stricter limits for certain groups e.g., professional drivers, novice drivers, repeated offenders etc. It is also recommended that countries strengthen

seat belt use laws for rear seats (e.g., Belarus and Georgia), as well as laws on Child Restraint Systems (e.g., Armenia and Georgia).

Several KPI data elements (number of violations and amount of funding collected through traffic fines) are available in the examined countries. However, this routine enforcement activity registration is not always published or shared in most countries. In particular, there is lack of data on the number of controls performed. This is a key piece of information that allows assessing the effectiveness of enforcement and interpreting the trends in road safety violations. For instance, an increase in the number of violations may either imply a real deterioration of road user behavior (if the number of controls did not substantially change), or simply an increase in the number of controls (i.e., more drivers controlled, more offenders caught). The violation rate, i.e., number of offenses recorded per number of drivers controlled is a far more appropriate and insightful indicator of enforcement effectiveness.

It is acknowledged, however, that this missing data is not surprising, as the most useful KPI data elements are the least available in many countries. Another relevant example is the rate of seat belt and helmet wearing rates, which is only reported in Azerbaijan. This is also a known problem in many countries, as very few countries systematically implement the survey-type roadside observations required, which in most cases are performed by NGOs or universities. These indicators reflect very accurately the overall level of traffic compliance and road safety behavior in a country, and the data collection on this on a systematic basis (i.e., every 3 or 5 years) should be a priority for all countries.

On the other hand, it is very positive that all countries reported the number of DUI/alcohol recorded violations for the requested time period 2012–2020; Georgia also reported the number of DUI/drugs violations. In that case as well, however, the missing information regarding the number of drivers controlled in roadside breath tests does not allow assessing the violation rate and eventually the effectiveness of this activity.

The countries with the highest intensification of ASE are Azerbaijan, Belarus, and Georgia, while Armenia exhibits a significant increase in speeding violations, as well as in DUI/alcohol violations. The reported data for Ukraine suggests a loosening of DUI enforcement activity. It is underlined, however, that in any case the intensification of enforcement should optimally be based on a concrete plan with specific quantitative targets.

Overall, although the information collected was quite complete, there are several issues that warrant clarification, especially regarding the accuracy and overall quality of the data. Some unusual fluctuations are observed in certain countries. Moreover, the general trends of enforcement activity on the one hand (e.g., number of violations recorded) and the amount of fines collected on the other hand, and eventually the changes in the number

of casualties, are not always in accordance with one another, and there is no sufficient information to interpret the discrepancies. This suggests that there may be data completeness or accuracy issues (e.g., inaccurate recording of violations) which should be identified by the countries in order to improve their reporting system.

There are also relevant issues with the road crash and casualty data; the most important element is the need for all countries to adopt the 30-day definition of traffic fatality. At this stage, benchmarking countries based on traffic fatalities is not meaningful due to the different definitions used. There are several other issues as well, for example, it is well known that speeding is often over-represented as a crash causation factor in national crash data. In the EaP countries, there are large differences in the share of crashes attributable to speeding, and this indicates an inconsistent way of assigning this cause in crash records. Moreover, seat belt/helmet wearing and BAC test results of crash victims are known to be very incompletely registered in crash data in all countries, and the same was observed in EaP countries.

Therefore, information and data on these indicators should be interpreted with caution when benchmarking country performance. It is noted, however, that it may be less problematic when examining individual country trends. In this case, when reporting biases are involved in crash data elements, it is possible that the relative annual development is not significantly affected, since the bias can be assumed to be equally present in the data of each year – hence the importance of systematically collecting the data.

Overall, several countries made significant progress in reducing road crashes and fatalities over the last 8 years. In Belarus and Moldova fatalities nearly halved, while significant reductions were observed in Azerbaijan and Georgia. On the other hand, there has been little or no progress in road safety trends in Armenia and in Ukraine. It is interesting to note that countries with good enforcement programs and activity are not always those that demonstrate the biggest road safety improvement. It is therefore important to note that enforcement is only one of the pillars of effective road safety programs.

The impact of COVID-19 pandemic largely varied between countries. In most countries the tighter restrictions of the 1st wave of the pandemic resulted in a visible drop in fatalities and crashes; however, in many cases road safety figures went back to the usual trends once the restrictions were relaxed. For some countries there was significant road safety improvement between 2019 and 2020; it should be kept in mind that this could be an artefact due to the traffic conditions of the pandemic (e.g., lower traffic volumes, or more conservative driving due to low morale of drivers) and there is a risk of increase of fatalities and crashes when the pandemic ends.

APPENDIX 1: SURVEY QUESTIONNAIRE

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Eastern Partnership Cooperation in Road Safety WG2 Speed and Traffic Law Enforcement

UPDATE QUESTIONNAIRE ON ROAD SAFETY ENFORCEMENT — MARCH 2021

Introduction

This questionnaire is related to road safety cooperation between EaP countries in Working Group 2 on Speed Management and Traffic Enforcement. It aims to **update the survey carried out in March — May 2019**, in order to further support the process of data and information collection related to traffic law enforcement with emphasis on speeding, seat belts use and driving under the influence. The data collected will be used to update the EaP Countries Road Safety Profiles on traffic law enforcement developed in June 2019¹⁵, as well as to perform the related country benchmarking analysis.

The analysis should help **diagnose the level and impact of enforcement in EaP countries and identify further needs** for improving enforcement and related data. Eventually it should also contribute to achieve sustainable reduction in number of traffic fatalities in these countries.

In this questionnaire we also take the opportunity to explore traffic safety trends and basic figures during the COVID-19 pandemic; this should help identify the impact of the pandemic on traffic safety in different countries.

The data groups addressed through this questionnaire can be outlined as follows:

- A. Strategic and operational aspects
- B. Current enforcement measures and practices
- C. Key Performance Indicators on traffic enforcement
- D. Road safety outcomes (fatalities and injuries) related to traffic law violations
- E. Impact of COVID-19 pandemic on road traffic safety

Thank you for your participation and contribution!

¹⁵ WB Report on “Road safety enforcement in the EaP countries: country profiles and benchmarking”

A. Strategic and Operational Aspects

In the questions below information collected in May 2019 is highlighted in yellow. Please verify the responses and update if needed.

Coordination and Management

Which agency/agencies is/are responsible/accountable for traffic law enforcement?

Country response from 2019 to be shown here

How are the activities coordinated between agencies involved in traffic law enforcement?

Country response from 2019 to be shown here

What are the current enforcement tactics, activities, focus and rationale? Are enforcement activities linked to a National Road Safety Strategy or relevant Action Plan?

Country response from 2019 to be shown here

Are there any formal enforcement programs currently active?

Country response from 2019 to be shown here

Is there cooperation and coordination of activities with other key enforcement/road safety institutions, including NGOs (e.g., public awareness campaigns)?

Country response from 2019 to be shown here

Capacity and Training

How would you describe the overall capacity of road policing/traffic enforcement agencies?

Country response from 2019 to be shown here

What is the available traffic enforcement equipment? Please describe the type of devices (e.g., portable laser gun cameras, fixed or mobile radars for ASE¹⁶, breathalyzer etc.) and the corresponding numbers/locations (where relevant).

Country response from 2019 to be shown here

What is the level of professional knowledge and skills of enforcement agency staff? Are there any relevant dedicated training programs for police officers involved in traffic law enforcement?

Country response from 2019 to be shown here

¹⁶ Automated Speed Enforcement

Monitoring and Evaluation

What crash data and risk factors are taken into account when planning and implementing enforcement activities?

Country response from 2019 to be shown here

Is there systematic monitoring and evaluation of enforcement activities against specific targets? What data/indicators are considered?

Country response from 2019 to be shown here

B. Current Enforcement Measures and Practices

Speeding	widely	occasionally	rarely	no
Speed limits on motorways				
Speed limits on rural roads				
Speed limits on urban roads				
Are automated speed enforcement (ASE) systems in use?	widely	occasionally	rarely	no
Are there systematic mobile controls?	widely	occasionally	rarely	no
Are there fixed speed cameras?	widely	occasionally	rarely	no
Are there section control systems?	widely	occasionally	rarely	no
Are there Dynamic Speed Display Signs?	widely	occasionally	rarely	no
Are 30–40 km/h zones used?	widely	occasionally	rarely	no
In school zones	widely	occasionally	rarely	no
In residential area	widely	occasionally	rarely	no
Around hospitals	widely	occasionally	rarely	no
Are traffic calming/light engineering treatments implemented?	widely	occasionally	rarely	no
Speed humps	widely	occasionally	rarely	no
Woonerfs ¹⁷	widely	occasionally	rarely	no
Narrowings	widely	occasionally	rarely	no
Raised pedestrian crossings	widely	occasionally	rarely	no
Other solutions	widely	occasionally	rarely	no

¹⁷ Woonerfs are a concept originated in the Netherlands representing areas designed to meet the needs of pedestrians and cyclists, and to encourage motorised vehicles to slow down. They are meant to be used as a social space for people to meet and for children to play safely. They are also known as home zones (UK), living streets (general) and complete streets (USA).

Alcohol & Drugs

What is the current BAC limit?					
Is there a different BAC limit for young/novice drivers?	Yes	No	Please describe		
Professional drivers?	Yes	No	Please describe		
Recidivist drivers?	Yes	No	Please describe		
How are BAC limits enforced?					
Is driving under the influence of drugs enforced?	widely	occasionally	rarely	no	
What types of tests are used for drugs?					
Which drug tests are enforced?					
Legal drugs (e.g., benzodiazepine, medicinal opioids)	widely	occasionally	rarely	no	What is the legal limit?
Cannabis?	widely	occasionally	rarely	no	What is the legal limit?
Amphetamines?	widely	occasionally	rarely	no	What is the legal limit?
Cocaine?	widely	occasionally	rarely	no	What is the legal limit?
Opioids?	widely	occasionally	rarely	no	What is the legal limit?
Other?	widely	occasionally	rarely	no	Please describe

Use of Restraint Systems

Is seat belt wearing compulsory in the front seat?	Yes	No	
Is seat belt wearing compulsory in the rear seat?	Yes	No	
Is helmet wearing compulsory for motorcycle drivers?	Yes	No	
Is helmet wearing compulsory for motorcycle passengers?	Yes	No	
Is helmet wearing compulsory for bicycle riders?	Yes	No	
Are child restraint systems compulsory?	Yes	No	
For which age groups?			Please describe
What is the height/weight criteria?			Please describe

Fines and Penalties (All Violations)

Average fine for traffic law violation			
Exceeding speed limit			
Driving under the influence of alcohol			
Driving under the influence of drugs			
Seat belt violation			
Helmet violation			
Child restraint violation			
Is there a demerit (penalty) point system for traffic law offenders (speeding, seat belt/helmet or DUI)?	Yes	No	
Average number of points for traffic law violation			
Is there a provision on license suspension, and in what circumstances/at what demerit point system threshold?	Yes	No	
Are there any rehabilitation programs for offenders?	Yes	No	

Campaigns

Are there any targeted campaigns on traffic law compliance?	widely	occasionally	rarely	no	Please describe
Are campaigns coordinated with enforcement activities?	widely	occasionally	rarely	no	Please describe

C. Key Performance Indicators on Traffic Enforcement

Number of Controls Performed, and Violations Recorded

In most countries this data can be collected through the **Ministry of Interior/Traffic Police Directorate**. Please kindly forward the request to the relevant agency if necessary.

The data collected in May 2019 is highlighted in yellow. Please verify the previous data and add the most recent data.

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Speeding									
Number of vehicles/drivers controlled in mobile speed enforcement controls									
Number of vehicles/drivers controlled in ASE controls									
Number of speed offenders recorded in mobile controls									
Number of speed offenders recorded in ASE controls									
Alcohol & Drugs									
Number of drivers controlled in roadside breath tests									
Number of drivers controlled in roadside blood tests									
Number of drivers with BAC exceeding the legal limit in alcohol tests									
Number of drivers exceeding the drugs limit in drug tests									

Use Of Restraint Systems

In most countries, this data is collected through **roadside observations** within dedicated surveys. Often these are organized or supported by NGOs, research institutes. Please kindly forward the request to the relevant agency or organization handling this information.

The data collected in May 2019 is highlighted in yellow. Please verify the previous data and add the most recent data.

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Use of Restraint Systems									
Share of seat belt wearing from roadside observations (%)									
Front seats									
Rear seats									
Top standard national roads									
Standard national roads									
Rural roads									
Urban roads									
Share of helmet wearing for motorcyclists from roadside observations (%)									
Driver									
Passenger									
Top standard national roads									
Standard national roads									
Rural roads									
Urban roads									
Share of helmet wearing for bicyclists from roadside observations (%)									
Rural roads									
Urban roads									
Share of child restraint use for children <12 years old (%)									

Amount of Funding Collected Through Fines

In most countries this data can be collected through the **Ministry of Interior/Traffic Police Directorate or the Ministry of Finance**. Please kindly forward the request to the relevant agency.

The data collected in May 2019 is highlighted in yellow. Please check the previous data and add the most recent data.

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Speeding									
Amount of funding collected through fines for speeding (€)									
Amount of funding collected through fines for speeding (local currency – please define)									
Alcohol & Drugs									
Amount of funding collected through fines for DUI (€)									
Use of Restraint Systems									
Amount of funding collected through fines for seat belt (€)									
Amount of funding collected through fines for helmet (€)									
Amount of funding collected through fines for seat belt (local currency – please define)									
Amount of funding collected through fines for helmet (local currency – please define)									
Total amount of funding collected through fines (all traffic violations) (€)									
Total amount of funding collected through fines (all traffic violations) (local currency – please define)									

D. Road Safety Outcomes Related to Traffic Law Violations

In most countries this data can be collected through the national road crash database typically hosted by the Ministry of Interior/Traffic Police Directorate or the National Statistical Services. Please kindly forward the request to the relevant agency, if necessary.

The data collected in May 2019 are highlighted in yellow. Please verify the previous data and add the most recent data.

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total number of traffic fatalities									
Total number of fatal crashes									
Total number of injuries (severe or mild)									
Total number of injury crashes									
Number of speeding-related fatal crashes									
Number of fatal crashes with at least one driver with BAC over the legal limit									
Number of drivers/passengers not wearing seat belt in fatal crashes									
Number of drivers/passengers not wearing helmet in fatal crashes									
Number of speeding-related injury crashes									
Number of injury crashes with at least one driver with BAC over the legal limit									
Number of drivers/passengers not wearing seat belt in injury crashes									
Number of drivers/passengers not wearing helmet in injury crashes									

E. Impact of Covid-19 on Traffic Law Violations and Road Safety Outcomes in 2020

In most countries the spread of COVID-19 and the related traffic restrictions had an impact on traffic, traffic law compliance and eventual road safety outcomes. In this section we are aiming to examine trends of traffic, traffic law compliance and road casualties in relation to the COVID-19 measures.

When did COVID-19 start spreading in your country (day/month/2020)? What type of restrictions were introduced? Please indicate approximate start and end dates of mobility restrictions (“lockdown” type measures).

Please enter free text response

Is there an estimation of the reduction in traffic volumes during and due to the COVID-19 mobility restrictions compared to normal traffic volumes for the same period? If this information is available only for a specific region, please indicate which region.

Please enter free text response

Is there an estimation of the reduction in traffic accidents and traffic fatalities during the COVID-19 mobility restrictions compared to normal conditions for the same period?

Please enter free text response

ROAD SAFETY ENFORCEMENT PRACTICES IN THE EAP COUNTRIES

Please provide below any specific data available for the COVID-19 period. Please indicate if this is provisional data. In case data are not available for the whole country, please provide data for any region available (e.g., the capital region).

If the complete time series is not available, please fill in only the available months.

	Jan 2020	Feb 2020	March 2020	April 2020	May 2020	June 2020	July 2020	Aug 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020
Total number of traffic fatalities												
Total number of fatal crashes												
Total number of injury crashes												
Number of speeding related fatal crashes												
Number of speeding offenders recorded in mobile controls												
Number of speeding offenders recorded in ASE controls												
Number of drivers with BAC over the legal limit												
Number of drivers with drugs identified and exceeding limit in drugs tests												
Average traffic — national roads (please indicate time unit i.e., daily or monthly)												
Average traffic — main urban roads (please indicate time unit i.e., daily or monthly)												

APPENDIX 2: LIST OF SURVEY RESPONDENTS

March–May 2019

Name	Position	Country
Poghos Shahinyan	Director National Road Safety Council	Armenia
Tarlan Safarov	Head of Traffic Flow Analysis and Management Department	Azerbaijan
Rustam Talishinskiy	Deputy Director for Science Issues of Orthopedics Institute	Azerbaijan
Anar Sadikhov	Specialist, Road Construction and Maintenance Administration, Department for Road Safety Organization, Azerbaijan State Road Agency	Azerbaijan
Kamran Aliyev	Head of the Department for the Traffic Patrol Service, Main Department of the State Road Police, Ministry of Internal Affairs of the Republic of Azerbaijan	Azerbaijan
Roustan Talyshynskyy		Azerbaijan
Brechko Pavel Ivanovich	Head of the Transport Safety Sector	Belarus
Dmitry	Head of the Department for Traffic Organization	Belarus
Banadyk Mikhail	Head of the State Traffic Police Patrol, Department of the Internal Affairs Administration, Brest Oblast Executive Committee	Belarus
Anatoly Osipchuk	Head of the Road and Bridge Diagnostics Department, Republican Unitary Enterprise "Beldorcentr"	Belarus
Alexander Nikolaevich Stolyarchuk	Engineer, Republican Unitary Enterprise "Beldorcentr"	Belarus
Mamuka Patashuri	Head of Traffic Safety Division, Department Road of Georgia	Georgia
Tinatin Papashvili	Inspector for High Profile Cases	Georgia
Mzevar Gogilava	Senior Specialist, Traffic Organization, Transport Department, Tbilisi Mayor's Office	Georgia
Ivan Kotruze	Chief Consultant, Executive Bureau of the National Road Safety Council	Moldova
Viorel Boulmaga	Secretary of the National Road Safety Council, Ministry of Internal Affairs	Moldova
Radu Rogovei	Head of the Transport Infrastructure Office	Moldova
Dumitru Lupascu	Main Specialist, Road Patrol Supervision Section, Road Transport and Traffic Surveillance Department, National Patrol Inspectorate SSPR a DSTCR a INP	Moldova
Pavlo Syrvatka	Head of Investment Projects Division, LCE "Lvivavtodor"	Ukraine
Bryantsev Vasiliy	Assistant to the Head of the National Police of Ukraine	Ukraine
Dmitriy	State expert	Ukraine
Pavlo Syrvitka	Lviv Community–Owned Enterprise "Lvivavtodor"	Ukraine

APPENDIX 2: LIST OF SURVEY RESPONDENTS

April–May 2021

Name and position	Position	Country
Poghos Shahinyan	Director of the National Road Safety Council	Armenia
Kamran Aliyev	Deputy Chief of the State Main Traffic Police Department, Ministry of Internal Affairs	Azerbaijan
Sergii Leonchik	Head of the Road Development Department, Main Directorate of Highways, Ministry of Transport and Communications	Belarus
Erekle Kezherashvili	Deputy Head of Transport and Logistics Development Policy Department, Ministry of Economy and Sustainable Development	Georgia
Vladislav Cojuhari	Head of anti-crime policy Department, Ministry of Internal Affairs	Moldova
Ihor Didenko	Adviser to the Minister, Ministry of Internal Affairs	Ukraine



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