

Interrogating visual digital surveillance in road traffic control

Social and legal implications

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CUPP

Critical Understanding
of **Predictive** Policing



NordForsk

Death on the roads

Based on the WHO Global Status Report on Road Safety 2018



DEATHS



LAWS

Drink-driving

Speed

Helmets

Seat-belts

Child seats

STANDARDS

Vehicles

Year Month Day Hour Now

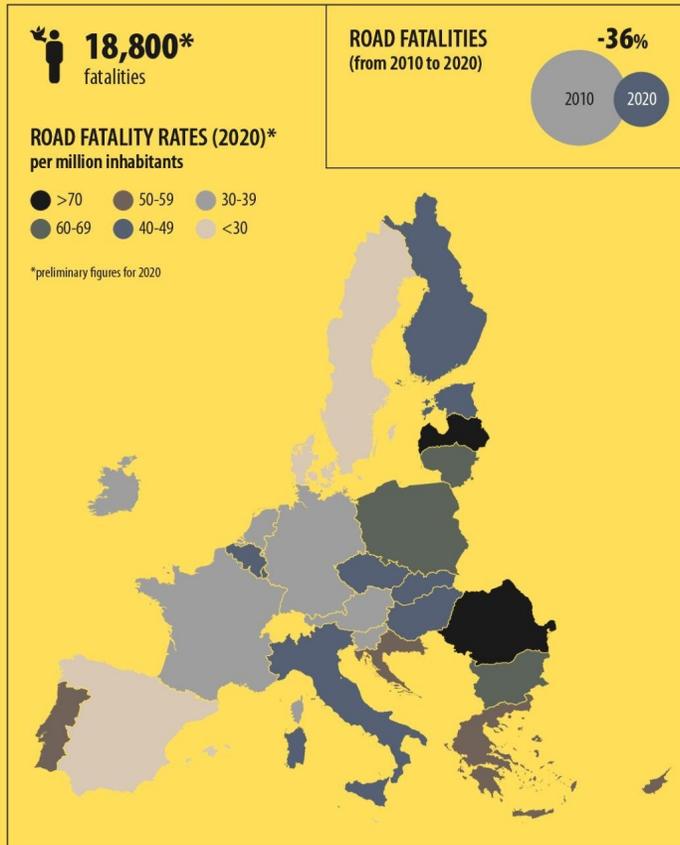
All road users Car users Cyclists Motorcyclists Pedestrians



In the last year
1,354,840
road users have died



ROAD SAFETY IN THE EU

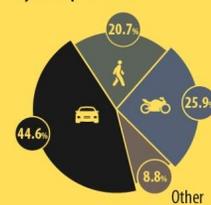


ROAD FATALITIES (2018)

by type of roads



by transport mode



by age

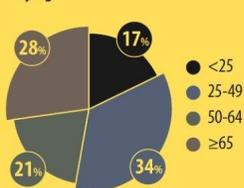
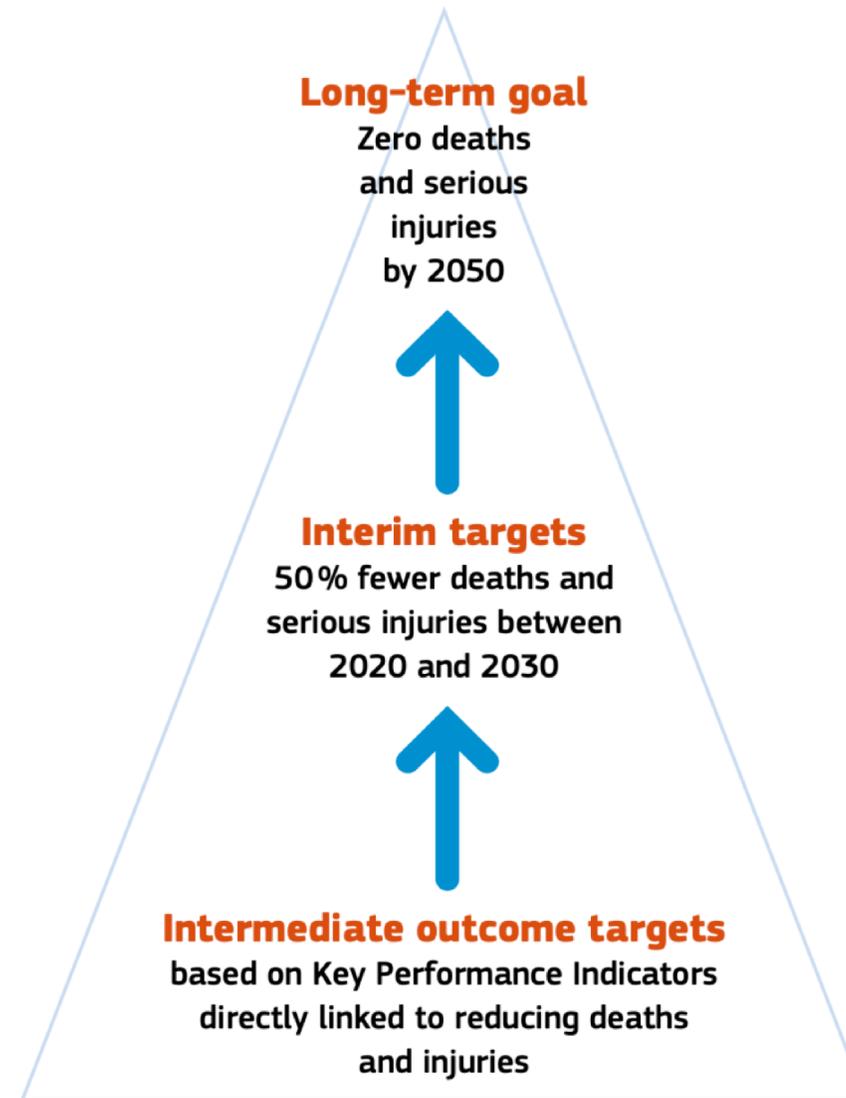
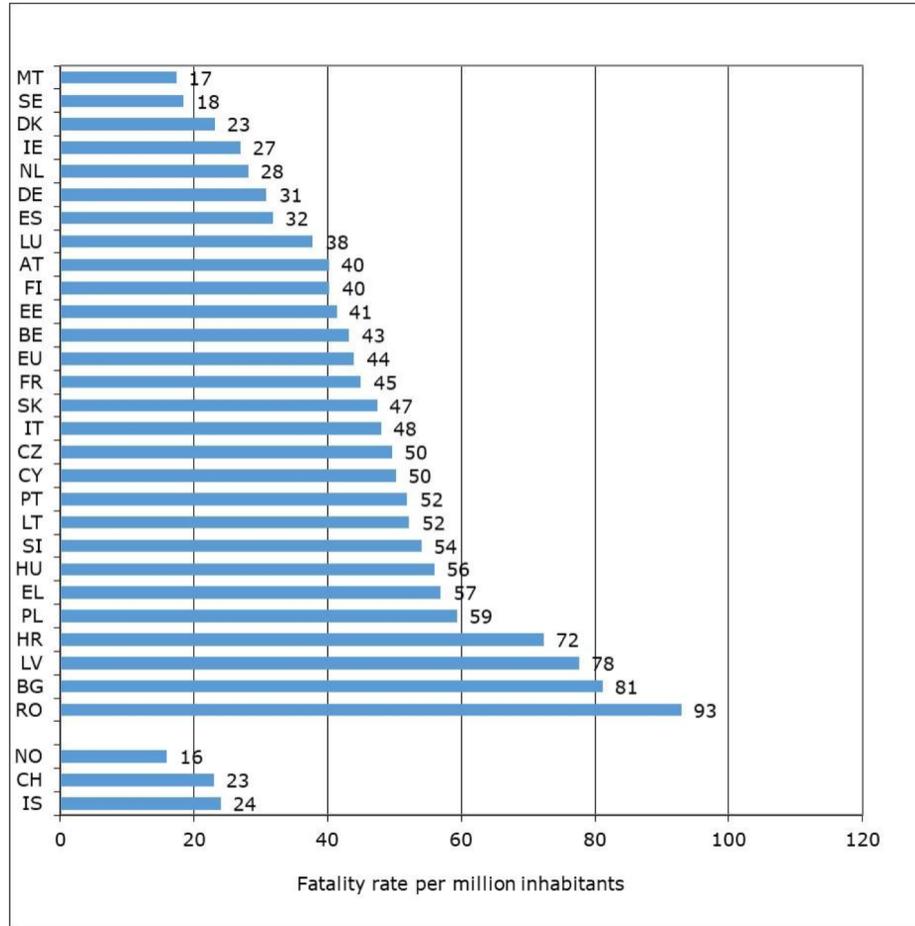


Figure 2: Safe System results hierarchy at EU level



14) The Connecting Europe Facility (CEF) Committee agreed to allocate Programme Support Action up to a total of EUR 5 million to this task.

Figure 2: Number of road fatalities per million inhabitants by country, 2021



Source: CARE (EU Road accidents database) and Commission estimates. Population data from Eurostat.

European Commission. 2021 road safety statistics: what is behind the figures?

https://transport.ec.europa.eu/2021-road-safety-statistics-what-behind-figures_en

Cases

- Speed cameras
- Unmarked police car with a 360-degree camera
- Drones
- Police mobile application allowing citizens to report crimes and incidents



Research questions

We examine:

- how **police powers** vis-à-vis citizens are being exercised through the use of these tools
- how these tools have changed the **relationship** between individuals, traffic and the police in public spaces
- how these forms of visual surveillance are framed by different stakeholders in terms of **prevention vs. punishment** and **encouraging participation**
- what are the existing and future **risks** raised by these technologies, in particular to fundamental rights
- to what extent their use by police is **regulated** or lacks regulation and their compliance with existing law

Methodology

Desk research – scientific publications, policy documents, legal framework, press articles etc.

Expert interviews

- Latvian State Police
- Riga Municipal Police
- Road Traffic Safety Directorate [CSDD]
- Technology company “WeAreDots”
- Association “City for People”
- Safe Driving School

Focus group – eight participants representing different age groups, genders, roles in road traffic, and places of residence.

Speed cameras on Latvian roads

- > 100 stationary speed cameras and 12 mobile speed cameras
- Speed enforcement system – speed cameras equipped with 24/7 monitoring and a re-trained deep neural network for ANPR/MMR (Automatic Number Plate Recognition and Make and Model Recognition).
- Developed by a Latvian technology company
- The Road Traffic Safety Directorate (CSDD) implemented the system, pre-processes traffic violation case, prepares a draft the decision and sends it to the State police
- The State Police adopts a final decision.
- ± 500,000 decisions on penalties each year



Police vehicle with a 360-degree camera system

- From 2020, the State police uses special unmarked police vehicle with a 360-degree camera system
- The car allows police officers to record various types of traffic violations, such as the use of mobile phones while driving, driving in a public lane
- The Register of vehicles and their drivers, automatically recognizes the plate numbers, and immediately checks whether the car possesses an insurance and technical inspection through the CSDD



Drones

- From 2020 the State Police have started to use drones for road traffic for both traffic monitoring, as well as for other tasks, such as searching for missing people in the forest.
- Drones are not used as a technical mean, such as speed cameras, but rather as a means of obtaining evidence –The police need to stop the vehicle after the camera has recorded a road traffic offence.

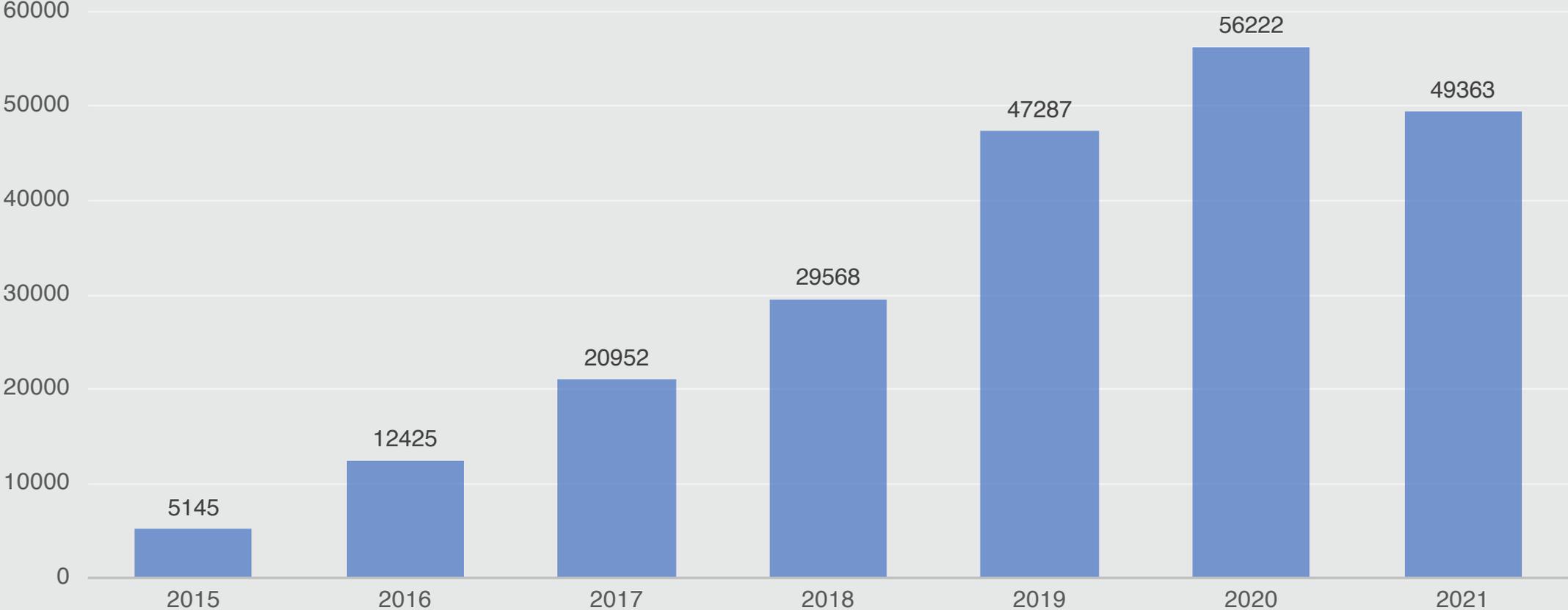


Police mobile application

- In 2014, the Riga Municipal Police introduced a mobile application “Riga Municipal Police” to encourage the community to report violations of public order
- In 2021 road traffic offences – **67,3 %** of reported cases, i.e. 33434 reports out of 49 363 in total
- From 2015 to 2021 road traffic offences – **73%** of all reports , i.e. 161 462 reports out of 220 962 total reports



Number of events received from the RMP App



Disputable preventive nature of surveillance tools in road traffic control

- Visual surveillance tools in road traffic control in Latvia
 - can be treated as examples of **benevolent surveillance** aimed at improving road safety in a preventative manner
 - at the same time the tools still having a pronounced **punitive** dimension that is associated with monetary fines
- While some tools have a positive impact on road safety, [e.g. speed cameras, at least in the places where they are deployed] others [e.g. drone and police car with 360-degree camera] are more questionable
- It is debatable whether the deployment of the tools has significantly altered the way the public approaches on road safety in Latvia

PREVENTION

VS.

PUNISHMENT

The changing relationship between civilians and the police

Digital surveillance tools can:

- **depersonalise** the interaction between civilians and law enforcement (e.g. in case of speed cameras). The tools cannot replace police control on roads.
- **encourage** such an interaction (e.g. RMP app).

Unintended technology uses, e.g. traffic violations vs. serious offences

Participatory surveillance as encouraging reactive rather than proactive police work - while the presence of RMP app has increased public participation in ensuring public order and traffic safety, its application suggests that police work can become more **reactive, rather than preventive.**

Existing and future risks of surveillance tools

- While some tools, e.g. speed cameras primarily interfere with the right to [privacy](#) and [data protection](#), the use of other tools, in particular drones, CCTV cameras and the RMP app, poses threats to a much wider range of fundamental rights, such as [freedom of peaceful assembly](#), [discrimination](#) as well as [democratic values](#).
- The planned expansion and possible use of the surveillance tools in [future](#) pose serious concerns about their impact on fundamental rights and democracy.
- According to Riga development program for 2022 – 2027 it is planned to [expand the CCTV network](#) to cover the whole city, including using portable video surveillance cameras and [unmanned aerial vehicles](#) for video surveillance. It is planned to install more than 200 new cameras so there would be ± 500 cameras in total.



Photo by Lianhao Qu on Unsplash

Lawful use of the surveillance tools

Limitations of fundamental rights

- In the interests of

Tools are used to ensure road safety in order to protect **human life and health**, the environment, and also property owned by natural and legal persons (Article 2 of the Road Traffic Law)

However,

- provided for by law
- necessary
- proportional

Lawful use of the surveillance tools

- There is a **need to adopt further regulation** to meet the **conditions for limitations of fundamental rights**, e.g. with regard to the use of drones by the police, and set obligations to evaluate their effectiveness, necessity and proportionality.
- Compliance with **data protection requirements**, such as **transparency** and **DPIA**, which need to be strictly followed, is **lacking** in some cases.
- **Further regulatory framework and governance mechanisms** should be established around surveillance technologies, including impact assessment, monitoring and independent oversight mechanisms in order to ensure their responsible and trustworthy use.

Thank you!

