



National Technical University of Athens Road Safety Observatory



# Monitoring road safety attitudes globally

## **Dimitrios Nikolaou**

Transportation Engineer, Research Assistant

Together with: Alexandra Laiou, George Yannis



## The ESRA project

- ESRA (E-Survey of Road users' Attitudes) is a joint international initiative of research centers and road safety institutes across the world
- ➤The project now is in its second stage (ESRA2, 2018-2021)
- ESRA2 partners (2018):
  - ESRA coordination: Vias Institute (BE)
  - ESRA2 core group partners: BASt (DE), bfu (CH), CTL (IT), IATSS (JA), ITS (PO), KFV (AT), NTUA (EL), PRP (PT), SWOV (NL), TIRF (CA)
  - 17 more supporting partners







# Background - ESRA1

The first edition of the ESRA survey (ESRA 1) was launched in three waves during the period 2015-2017

ESRA1 started with 17 countries in 2015

➢ It had grown to 38 countries in 2017

Data was gathered from almost 40,000 road users in 38 countries across 5 continents





## Objectives

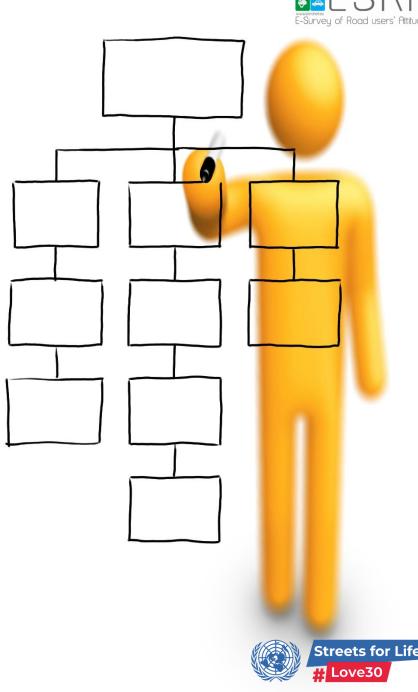
- Collecting data on road users' opinions, attitudes and behaviour with respect to road traffic risks
- Compare the results of all participating countries
- Provide scientific support to road safety policy making at the national and internationals levels
- Repeat this survey on a triennial basis



## Methodology

> An extensive online panel survey

- A representative sample (at least N=1,000) of the national adult populations in each participating country
- The developed common questionnaire (UK English) is translated into national language versions
- The questionnaire covers four main road safety topics in different road safety themes: speeding, DUI, distraction/fatigue and protective systems





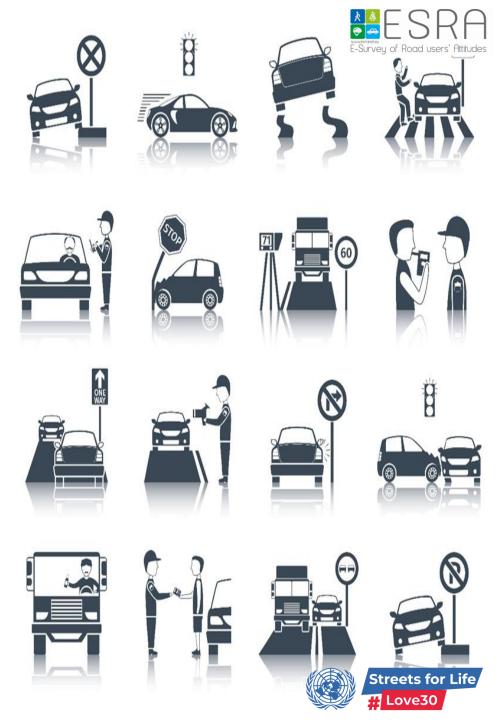
## The ESRA2 questionnaire

#### Main target groups:

- Car drivers
- Moped drivers and motorcyclists
- Cyclists
- Pedestrians

#### Main themes:

- Use of different transport modes
- Acceptability of safe and unsafe traffic behaviour
- Support for policy measures
- Self-declared safe and unsafe behaviour in traffic
- Attitudes towards safe and unsafe traffic behaviour
- Subjective safety and risk perception
- Involvement in road crashes
- Enforcement
- Other items (e.g. socio-demographic information)
- Vehicle automation



## Participating countries

- The ESRA2 edition was released in two waves: a first wave in 2018 involving 32 countries and a second wave in 2019-2020 including 16 additional countries (data from more than 45,000 road users across 48 countries)
- The participating countries in the first wave were: <u>Europe</u>: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Portugal, Serbia, Slovenia, Spain, Sweden, Switzerland, United Kingdom

<u>America</u>: Canada, USA

<u>Asia and Oceania</u>: Australia, India, Israel, Japan, Republic of Korea <u>Africa</u>: Egypt, Kenya, Morocco, Nigeria, South Africa

The additional countries in the second wave were: <u>Europe</u>: Bulgaria, Iceland, Luxembourg, Norway <u>America</u>: Colombia <u>Asia and Oceania</u>: Lebanon, Malaysia, Thailand, Vietnam <u>Africa</u>: Benin, Cameroon, Ghana, Ivory Coast, Tunisia, Uganda, Zambia









## Outcomes

The common results of the ESRA2 survey are published in a Main Report, a dedicated report on the Africa continent, a Methodology Report and 15 Thematic Reports

Driving under influence	Child restraint systems	Cyclists
Speeding	Unsafety feeling & risk perception	Moped drivers & Motorcyclists (NTUA, CTL)
Distraction (mobile phone use)	Enforcement	Young road users
Fatigue (SWOV, NTUA)	Vehicle automation	Elderly road users
Seat belt	Pedestrians	Gender aspects

- > 48 country fact sheets have been produced
- Furthermore, ESRA2 data have been used in scientific journal papers, national reports and many conference presentations







## **Driver Fatigue - Findings**

- In most countries one fifth to one quarter of car drivers report to have driven while having trouble keeping eyes open in the past 30 days
- Self-declared fatigued driving rates are higher for male drivers than for female drivers
- Less than 3% of road users find fatigued driving personally acceptable worldwide
- The personal acceptability of fatigued driving is slightly higher among the younger age groups
- A large majority of road users perceive tired driving as a frequent cause of accidents
- Drivers who feel that it is acceptable to drive being so sleepy that you have trouble keeping your eyes open are
  6.5 times more likely to drive when they are tired





## PTW riders - Findings

- In all the examined countries, the safety perception scores for PTWs do not exceed 7 points indicating that road users do not consider these transport modes to be safe enough
- Self-declared riding without helmet is significantly higher in Africa (49%), North America (46%) and Asia-Oceania (39%) than in Europe (26%)
- In all regions, people who support the legal obligations related to helmet use are less likely to ride without a helmet
- Male PTW riders are generally more likely to report speeding with a significant gender difference in Europe and Africa
- The odds of reading a text message/email or checking social media while riding decrease with the increase of the rider's age in Europe and Africa



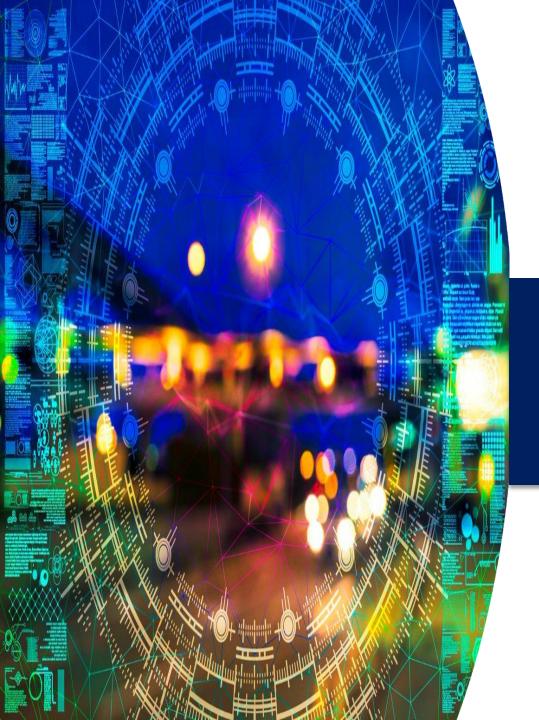


## Future challenges

- Repeat systematically this initiative and compare the progress (time series) in combination with other mobility and safety changes
- Compare self-declared attitudes with measured behaviour (KPIs)
- Expand the attitudes survey to all transport modes
- Expand this attitudes survey globally, as key road user behaviour monitoring tool, supporting accountability of the Authorities









National Technical University of Athens Road Safety Observatory



# Monitoring road safety attitudes globally

## **Dimitrios Nikolaou**

Transportation Engineer, Research Assistant

Together with: Alexandra Laiou, George Yannis

