



European  
Commission



# Safety Performance Indicator (SPI) Public support for road safety policies



The purpose of the Safety Performance Indicator reports is to provide an overview of recent statistics on road safety performance indicators that are linked to traffic safety.

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# 1. Summary

The public support for different kinds of road safety policies can be an important factor to facilitate their actual implementation. This report provides an overview of the approval rates of six road safety measures in EU Member States and EFTA countries.

Data on the support for a variety of policy measures, collected in a standardised manner across different countries is scarce. For this report, data from the ESRA project (survey data) is used. The actual stages of implementation vary between countries and an overview of the legal situation regarding the included topics is provided.

The SPI Support for policy measures is defined as: *Percentage of road users who are in support of the policy measure*. The results on six policy measures are included in this report.

Based on these self-reported data the following can be concluded:

1. The share of road users who are supporting a legal obligation for zero tolerance for alcohol for all drivers varies between 42% and 83%.
2. The legal obligation to install alcohol interlocks for repeat offenders is supported by 66% to 90% of European road users.
3. The legal requirement for new cars to be equipped with Intelligent Speed Assistance (ISA) is supported by 44 to 80%.
4. The percentage of road users in favour of zero tolerance for the use of any type of mobile phone while driving ranges from 34% and 68%.
5. The mandatory use of helmets for cyclists is supported by between 23 and 87%.
6. Among the policy measures included in this report, the legal obligation for cyclists to wear reflective materials in the dark is the most accepted measure with an European average of 86% approval rate (55% to 95%).
7. On average, female road users show higher levels of support for all the presented road safety measures.

## 2. Introduction

### 2.1 Safety Performance Indicators (SPIs)

The most common indicators used for evaluating traffic safety are the number of traffic crashes, or the number of fatal/serious injuries due to a traffic crash. However, these numbers insufficiently reflect the actual problem and the underlying factors that lead to the crash. Moreover, crashes are relatively rare events, and are under-registered. Therefore, alternative proactive approaches have been adopted to evaluate road safety. For example, events/behaviors/attitudes which have a recognized relationship with crash frequency, and that are sensitive to policy measures, can be used as a proactive approach to evaluate safety. Since the 90's these so-called safety performance indicators (SPIs) are increasingly used to develop traffic safety policies.

The following *SPIs* are detailed in ERSO SPI reports:

- Speeding
- Distraction
- Fatigue
- Driving under the influence of alcohol and drugs
- Protection – the use of seat belts, helmets, and child restraint systems
- Support for policy measures
- Subjective safety and risk perception

Speeding, distracted driving, and using protective equipment are behaviours which can be observed, through roadside observations or measurements. For the SPI driving under the influence of alcohol and/or drugs, police-assisted random breath testing during roadside alcohol checks provides potentially the best data.

On the other hand, fatigued driving, support for policy measures or subjective risk perception are (practically) not observable. For those ones, well-designed questionnaire surveys may provide valuable data on road safety performance.

### 2.2 Aim of the ERSO SPI reports

The ERSO SPI reports provide an overview of the available data in the EU Member States as well as EFTA countries for each listed SPI. The reports aim to give insight into the differences between (groups of) countries regarding their road user behaviour or attitude. Where feasible, the reports look at whether SPIs are related to existing policies and regulations, providing possible effective interventions to increase

safe behaviour, or discourage unsafe behaviour. In addition to identifying relevant interventions, SPI data can be used to evaluate these measures and interventions.

For most SPI topics an ERSO thematic report exists as well. In these reports background information of risks, effects and causes are provided (see: [Thematic reports \(europa.eu\)](https://europa.eu)).

## 2.3 SPI Support for policy measures

This report is on the public support of the following road safety policy measures:

- Zero tolerance for alcohol (0.0‰) for all drivers
- Installation of an alcohol 'interlock' system for drivers who have been caught drunk driving on more than one occasion
- Legal obligation to install ISA in new vehicles
- Zero tolerance for using any type of mobile phone while driving for all drivers
- Requirement for all cyclists to wear a helmet
- Requirement for cyclists to wear reflective material when cycling in the dark

The **SPI Support for policy measures** is defined as:

*Percentage of road users who are in support of the policy measure.*

## 2.4 Data Source

Data on the perceived level of safety is presented in this report are based on the ESRA survey (E-Survey of Road users' Attitudes).

Within ESRA ([www.esranet.eu](http://www.esranet.eu)) a joint international initiative of road safety institutes, research centres, public services, and private sponsors, comparable data on road safety performance, in particular on aspects of road safety culture and behaviour of road users worldwide, have been collected and analysed.

ESRA data are collected by means of online panel surveys, providing a representative sample of the national adult population in each participating country (at least N = 1,000 per country). The extensive survey was conducted in 68 participating countries, covering six continents. Data on the level of support for policy measures were collected between 2018 and 2019 across 24 European countries, 22 of which are among the European Union and/or EFTA countries. In this report, the ESRA data for these 22 European countries are presented, i.e., Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy,

Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, and Switzerland. For details on the methodology of the data collection and analysis see: Meesmann, Torfs, Wardenier, and Van den Berghe (2023).

### **3. The level of support for road safety policy measures**

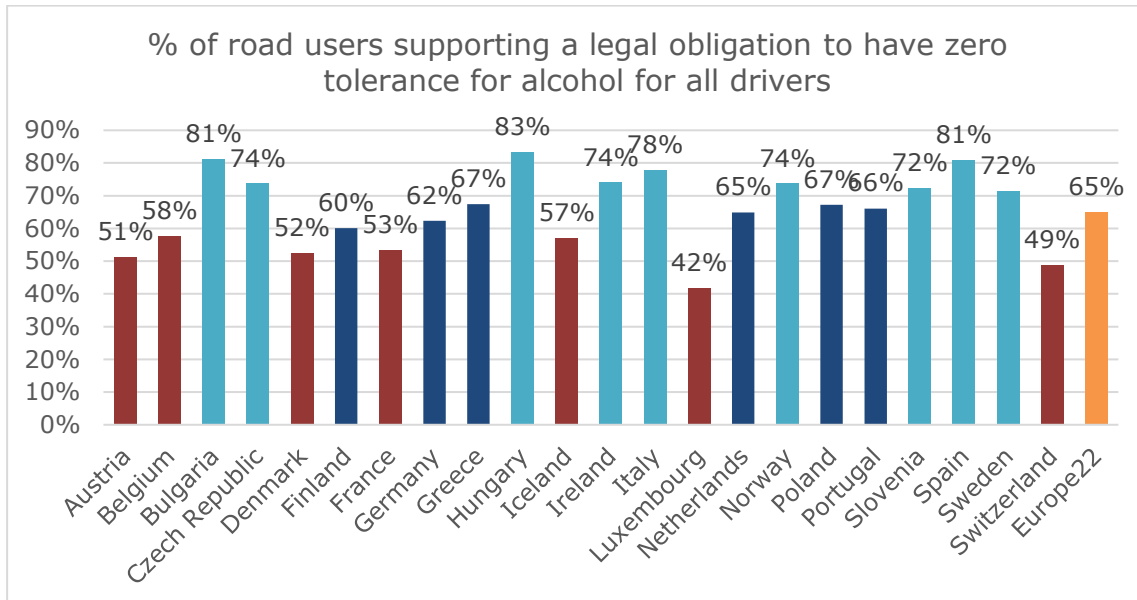
Each of the policy measures was presented to the surveyed road users with the option to express their support or opposition on a five-point scale with a range of answer options from 1 ('oppose') to 5 ('support'): 'Do you oppose or support a legal obligation to ...?' The percentages of road users who support a certain measure is based on the combined answers 4 and 5. Although the measures included in this report would affect road user groups differently, all road users were asked about their assessment. Further information and data on this topic can be found in Van den Berghe et al. (2022).

#### **3.1 Zero tolerance for alcohol for all drivers**

On average, 65% of European road users are in favour of a zero-tolerance policy for all drivers (not only novice drivers, commercial drivers etc.). The highest approval rate of the ESRA countries was found in Hungary (83%), where a legal blood alcohol concentration (BAC) limit of 0.0 already exists, followed by Bulgaria and Spain (81% approval rate and 0.5 BAC limit in both countries). Less than half of road users are supporting this policy in Luxembourg (42% with a BAC limit of 0.5) and Switzerland (49% with a BAC limit of 0.8). See chapter 4 for an overview of national regulations on driving under the influence of alcohol for regular car drivers and Figure 1 for support levels in the other European countries.

Female road users are clearly more in favour of zero tolerance for alcohol for all, with 75% support compared to 60% among male road users. There is also a clear trend of increasing support at an older age: about half of the 18 to 24 years old respondents and almost three quarters of the age group 65+ are in support of a zero-tolerance policy (Van den Berghe et al., 2022).

**Figure 1.** Percentage of road users supporting a legal obligation to have zero tolerance for alcohol for all drivers. Deviations of five percentage points or more from the average are indicated in red and light blue bars. (Source: <https://www.esranet.eu/>)



### 3.2 Installation of an alcohol 'interlock' system for repeat offenders

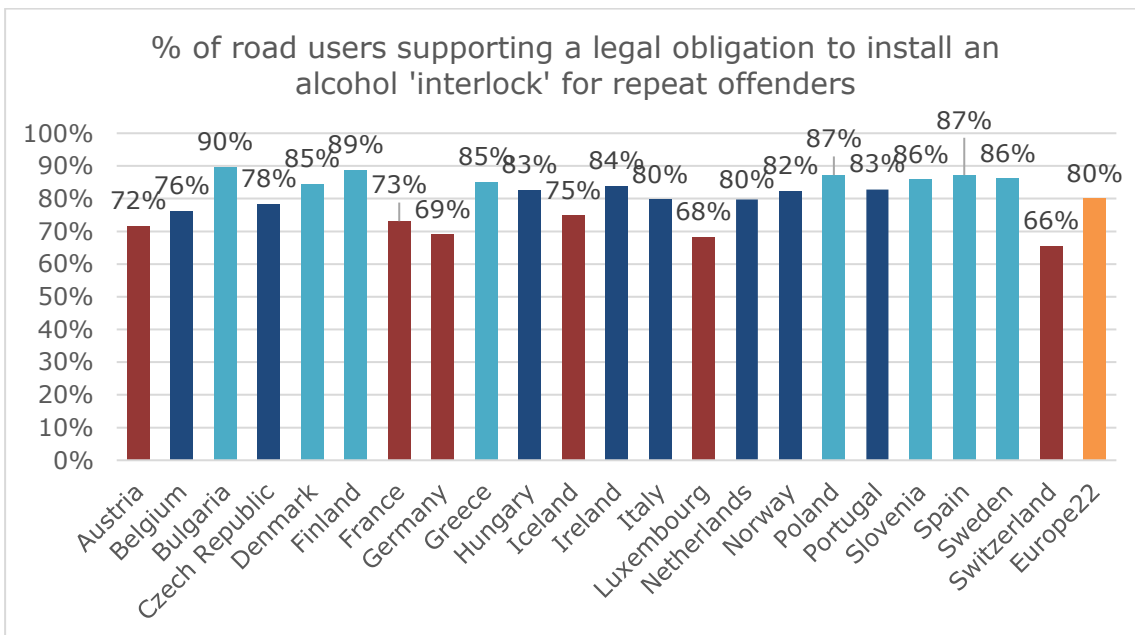
The average support level for mandatory installation of alcohol interlock systems for repeat offenders (drivers who have been caught drunk driving on more than one occasion) is 80%, meaning that 4 in 5 road users are in favour of this measure. Eight countries record 85% approval or more, with Bulgaria recording 90% followed by Finland with 89%. The latter has a voluntary programme in place, combining rehabilitation and the installation of an alcohol interlock. Two thirds of Swiss road users support this policy, which is the lowest level of support among the listed countries (see

**Figure 2).** An overview of alcohol interlock programmes in Europe is provided by ETSC (2020).

The level of support for alcohol interlocks is higher among females (82%) than males (76%), although the divide is not as big as for a zero-tolerance policy (see 3.1). Approval for this measure also increases with age (Van den Berghe et al., 2022).



**Figure 2.** Percentage of road users supporting a legal obligation to install an alcohol 'interlock' for drivers who have been caught drunk driving on more than one occasion. Deviations of five percentage points or more from the average are indicated in red and light blue bars. (Source: <https://www.esranet.eu/>)



### 3.3 Legal obligation for new cars to be equipped with Intelligent Speed Assistance (ISA)

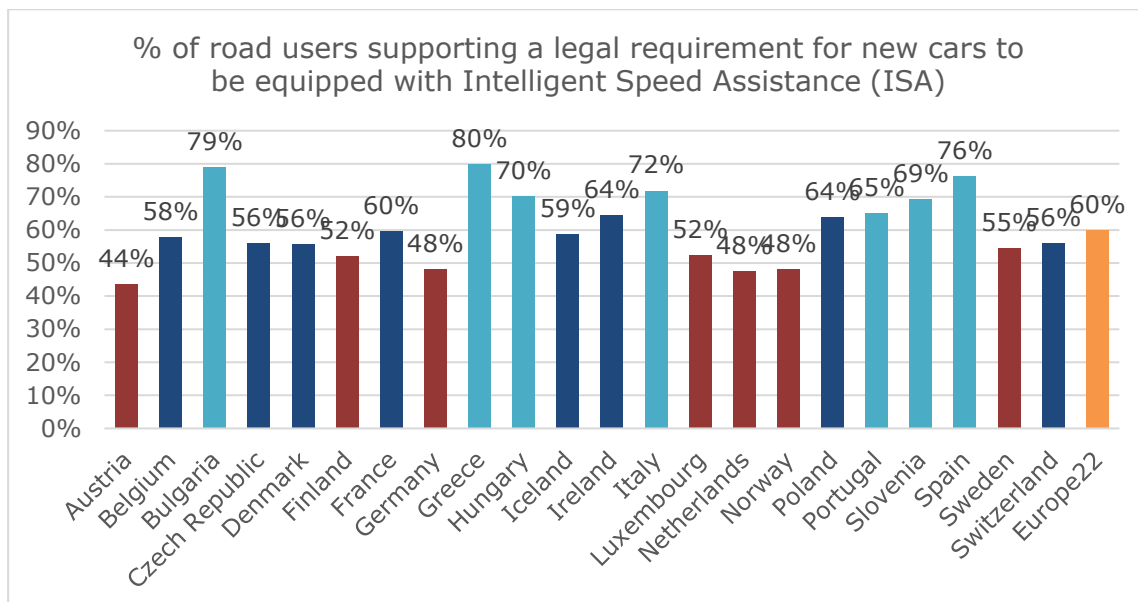
On average, 60% of European road users support a mandate for newly registered cars to be equipped with ISA (

**Figure 3).** The highest level of support was found in Greece (80%), followed by Bulgaria (79%) and Spain (76%), while Austrian road users show the least support for ISA (44%). Since 2022, ISA is mandatory for new models of vehicles sold in the EU (ETSC, 2021a).

Support for this measure varies by gender with female road users showing a higher level of support by about 7 percentage points. Approval of ISA in new cars also clearly increases with age. The age group 65+ supports the measure with 70%, while this value is 54% for the youngest group, 18 to 24 years of age (Van den Berghe et al.,

2022).

**Figure 3.** Percentage of road users supporting a legal obligation for new cars to be equipped with Intelligent Speed Assistance (ISA), which can be turned off manually. Deviations of five percentage points or more from the average are indicated in red and light blue bars. (Source: <https://www.esranet.eu/>)

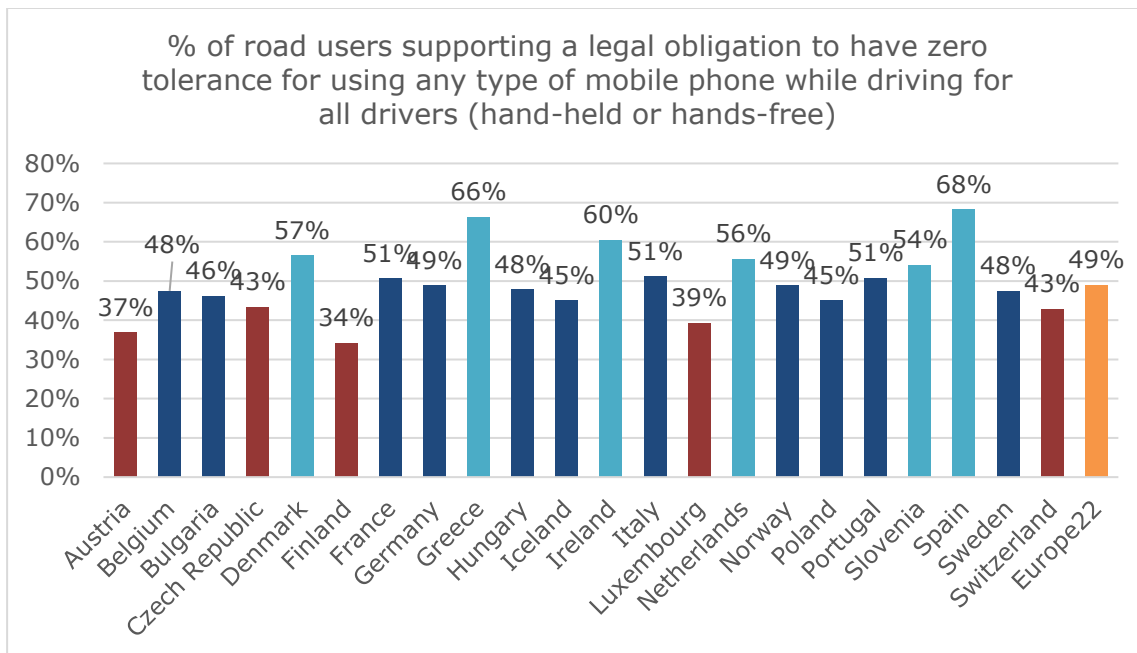


### 3.4 Zero tolerance for using any type of mobile phone while driving

**Figure 4** shows the levels of support for a zero-tolerance policy regarding any type of mobile phone use while driving, i.e., hand-held as well as hand-free phone use, with about half of European road users approving of this measure. This is the lowest value among the six policy measures included in this report. The use of handheld mobile phones while driving is banned across the European countries while handsfree use of a mobile phone is allowed (EC, 2023). Spain and Greece record the highest support levels (68% and 66%), and Finland and Austria the lowest (34% and 37%).

Again, female road users are more likely to be in favour of this measures than male road users (difference of six percentage points) and older people are more likely to agree than younger people (difference of 23 percentage points between youngest and oldest age group) (Van den Berghe et al., 2022).

**Figure 4.** Percentage of road users supporting a legal obligation to have zero tolerance for using any type of mobile phone while driving for all drivers (hand-held or hands-free). Deviations of five percentage points or more from the average are indicated in red and light blue bars. (Source: <https://www.esranet.eu/>)



### 3.5 Requirement for all cyclists to wear a helmet

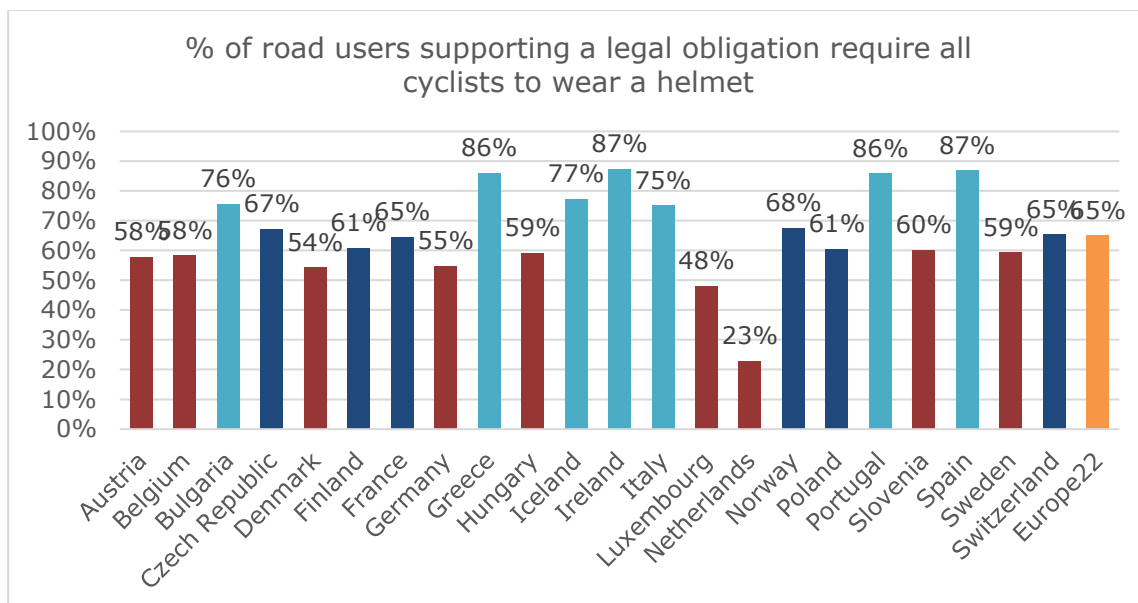
The average support for the mandatory helmet use for all cyclists in Europe is 65% (

Figure 5). Spain and Ireland show the highest levels of support (87% each) followed by Greece and Portugal (86% each). Spain has a helmet mandate for cyclists aged 15 or younger, while the other three countries do not have any type of regulation regarding bicycle helmets.

By far the lowest level of support for this measure was found in the Netherlands with 23% approval rate, which is half as much as the country with the second lowest value (Luxembourg with 48% in support). Neither the Netherlands nor Luxembourg currently have a helmet mandate for cyclists of any age.

Women are more likely to support a legal obligation for cyclists to wear helmets (71% support) than men (64% support) and older road users more than younger ones (Van den Berghe et al., 2022).

**Figure 5.** Percentage of road users supporting a legal obligation to have a requirement for all cyclists to wear a helmet. Deviations of five percentage points or more from the average are indicated in red and light blue bars. (Source: <https://www.esranet.eu/>)



### 3.6 Requirement for cyclists to wear reflective material in the dark

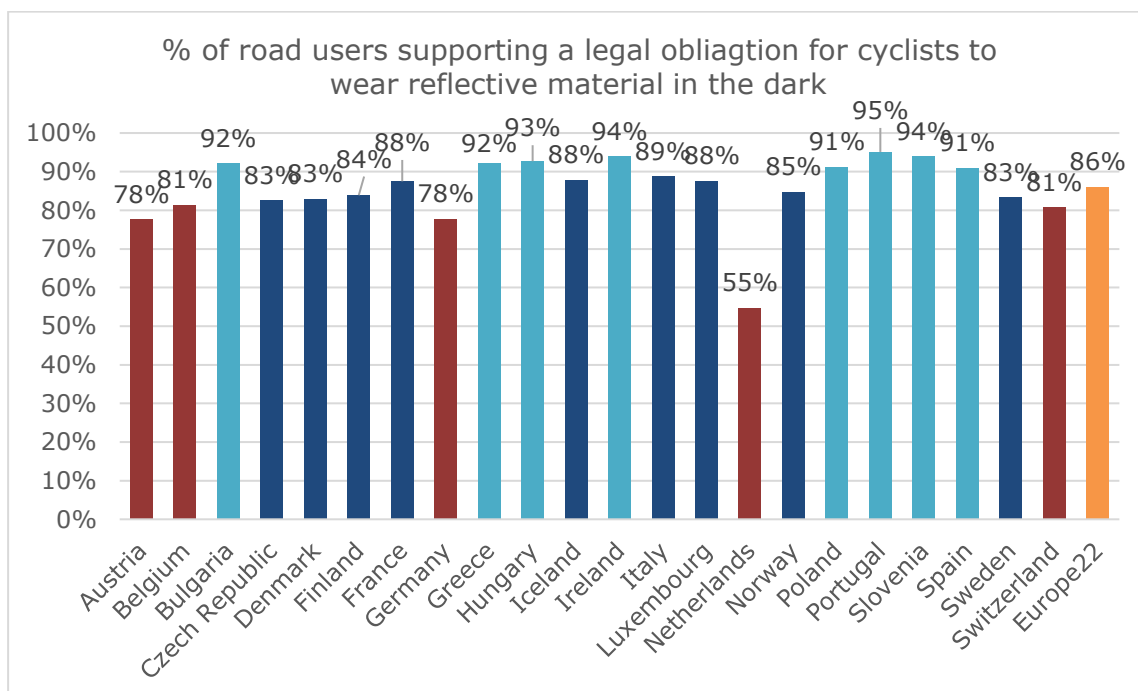
Among the policy measures included in this report, the requirement for cyclists to wear reflective material in the dark is met with the highest approval and an average support level of 86% (

Figure 6). 95% of Portugal's road users are in support of the measure, followed by Ireland and Slovenia (94% each). In total 12 of the 22

countries record support levels of over 90% or just below. By far the lowest approval rating was found in the Netherlands with 55% in support of the measure. This is 23 percentage points lower than the second lowest value of 78% in Austria and Germany. None of the countries scoring highest and lowest have regulations for mandatory use of reflective materials in the dark for cyclists.

Support for this measure differs by gender with a difference of 8 percentage points and higher levels of support from female road users. The age group 65+ shows 93% approval while the youngest group (18 to 14 years of age) still show an approval rate of 73% (Van den Berghe et al., 2022).

**Figure 6.** Percentage of road users supporting a legal obligation to have a requirement for cyclists to wear reflective material when cycling in the dark. Deviations of five percentage points or more from the average are indicated in red and light blue bars. (Source: <https://www.esranet.eu/>)



## 4. Legislation

Results for the support of six road safety policy measures of different kinds are included in this report. Some of the measures actually are

already cast into law in some of the countries.

**Table 1.** Overview of legislation regarding BAC limits for drivers and the obligation of cyclists to wear helmets in EU and EFTA countries.

(Sources: ETSC, 2021b; Yannis & Folla, 2022; SWOV, 2019)

Country	Legal blood alcohol concentration limits	Obligation to use bicycle helmet
Austria	0.5	Age 12 & younger
Belgium	0.5	No
Bulgaria	0.5	No
Croatia	0.5	Age 16 & younger
Czech Republic	0.0	Age 18 & younger
Denmark	0.5	No
Estonia	0.2	Age 16 & younger
Finland	0.5	Yes
France	0.5	Age 12 & younger
Germany	0.5	No
Greece	0.5	No
Hungary	0.0	
Iceland	0.2	Age 15 & younger
Ireland	0.5	No
Italy	0.5	No
Latvia	0.5	Age 12 & younger
Lithuania	0.4	Age 18 & younger
Luxembourg	0.5	No
Malta	0.5	For power assisted pedal cycles & children under 10 travelling in a safety seat
Netherlands	0.5	No
Norway	0.2	No
Poland	0.2	No
Portugal	0.5	No
Romania	0.0	No
Slovakia	0.0	Yes
Slovenia	0.5	Age 15 & younger
Spain	0.5	Age 15 & younger (all ages on rural roads)
Sweden	0.2	Age 15 & younger
Switzerland	0.8	No

Since 2022, new vehicles sold in the EU are legally required to be equipped with Intelligent Speed Assistance (ISA), which, however, can be turned off manually by the user (ETSC, 2021a). The use of handheld mobile phones while driving is banned across the European countries while handsfree use of a mobile phone is allowed (EC, 2023). For an overview of alcohol interlock programmes in the European countries see ETSC (2020). Regarding the suggestion for cyclists to wear reflective material when riding in the dark, there are regulations in some of the European countries, such as France, Bulgaria and Hungary, where cyclists are required to wear a reflective vest at night (or in poor visibility) but only on rural roads.

## 5. Limitations

Data sources on the support for road safety policy measures are rare and are methodologically limited to surveying. Hence, there are also limitations regarding the data source used. The ESRA data based on self-reported data can have disadvantages, such as social desirability bias (the tendency of respondents to provide answers which present a favourable image of themselves), non-accurate recall, misunderstanding of questions or selective non-response bias (occurring when subjects who refuse to take part in a study, or who drop out before the study can be completed, are systematically different from those who participate).

## 6. References

- ETSC (2020). Alcohol interlocks in Europe. Retrieved from: [https://etsc.eu/wp-content/uploads/ALCOHOL\\_INTERLOCKS\\_FINAL.pdf](https://etsc.eu/wp-content/uploads/ALCOHOL_INTERLOCKS_FINAL.pdf) [29.01.2024]
- ETSC (2021a). Intelligent Speed Assistance set for launch on all new EU vehicle types from 2022. <https://etsc.eu/intelligent-speed-assistance-set-for-launch-on-all-new-eu-vehicle-types-from-2022/> [27.02.2024].
- ETSC (2021b). Blood Alcohol Content (BAC) Drink Driving Limits across Europe <https://etsc.eu/issues/drink-driving/blood-alcohol-content-bac-drink-driving-limits-across-europe/> [29.01.2024]
- European Commission (2023). Road safety thematic report – Distraction. European Road Safety Observatory. Brussels, European Commission, Directorate General for Transport.
- Meesmann, U., Torfs, K., Wardenier, N., & Van den Berghe, W. (2023). ESRA2 methodology. ESRA2 report Nr. 1 (updated version).
- SWOV (2019). Bicycle helmets. <https://swov.nl/en/fact-sheet/bicycle-helmets> [29.01.2024]
- Van den Berghe, W., Sgarra, V., Usami, D. S., González-Hernández, B. & Meesmann, U. (2022) Public support for policy measures in road safety. ESRA2 Thematic report Nr. 9 (updated version).
- Yannis, G., & Folla, K. (2022). Baseline report on the KPI Helmet use among Cyclists and Powered two-wheelers (PTWs). Baseline project, Brussels: Vias institute.

