



EU Road Safety Exchange National Workshop GREECE
Online event

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Powered Two Wheelers Safety Greece – State of play

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Presentation Outline

- Key Statistics
- Problems and Actions
- Concluding Remarks

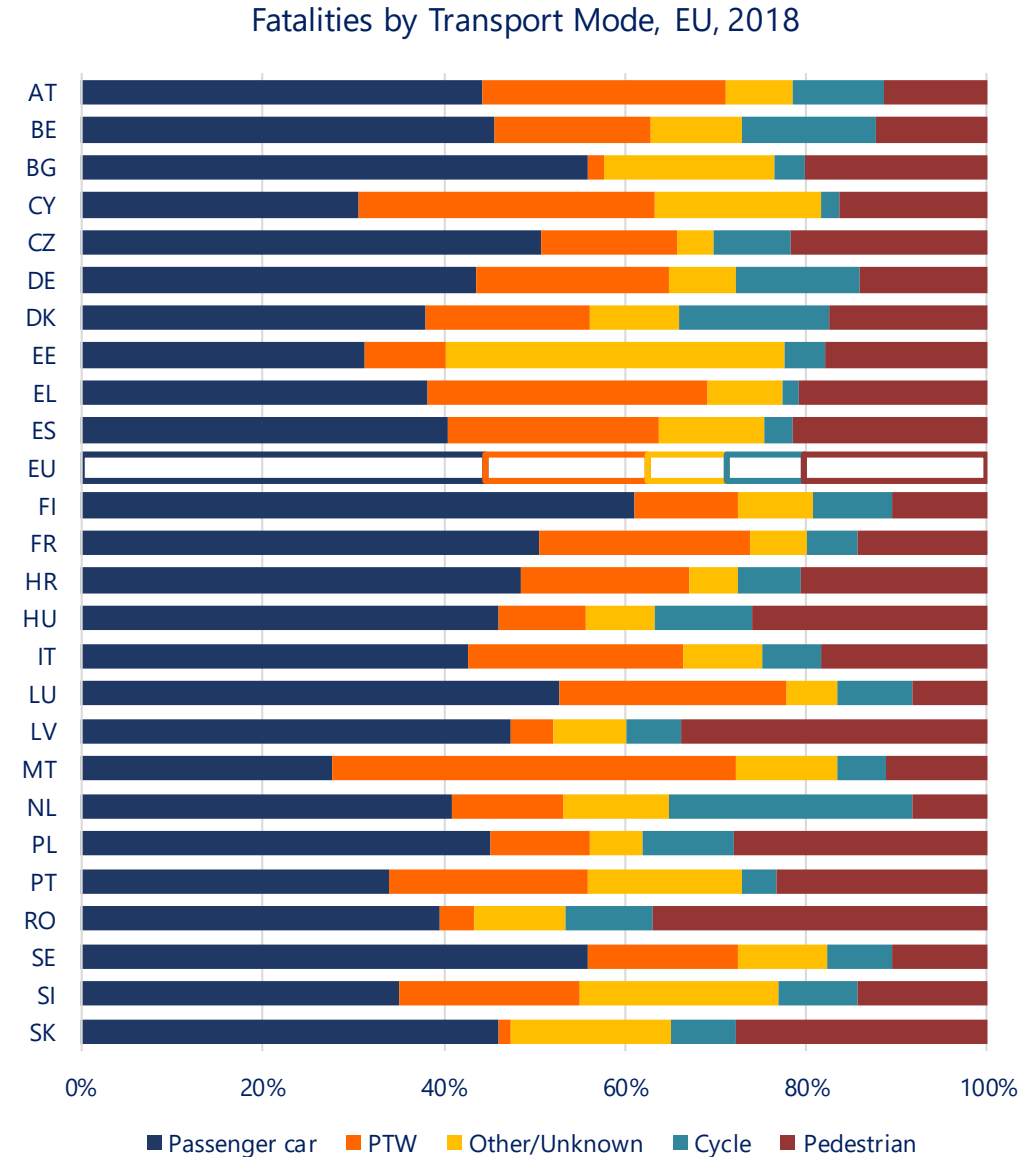


Key Statistics



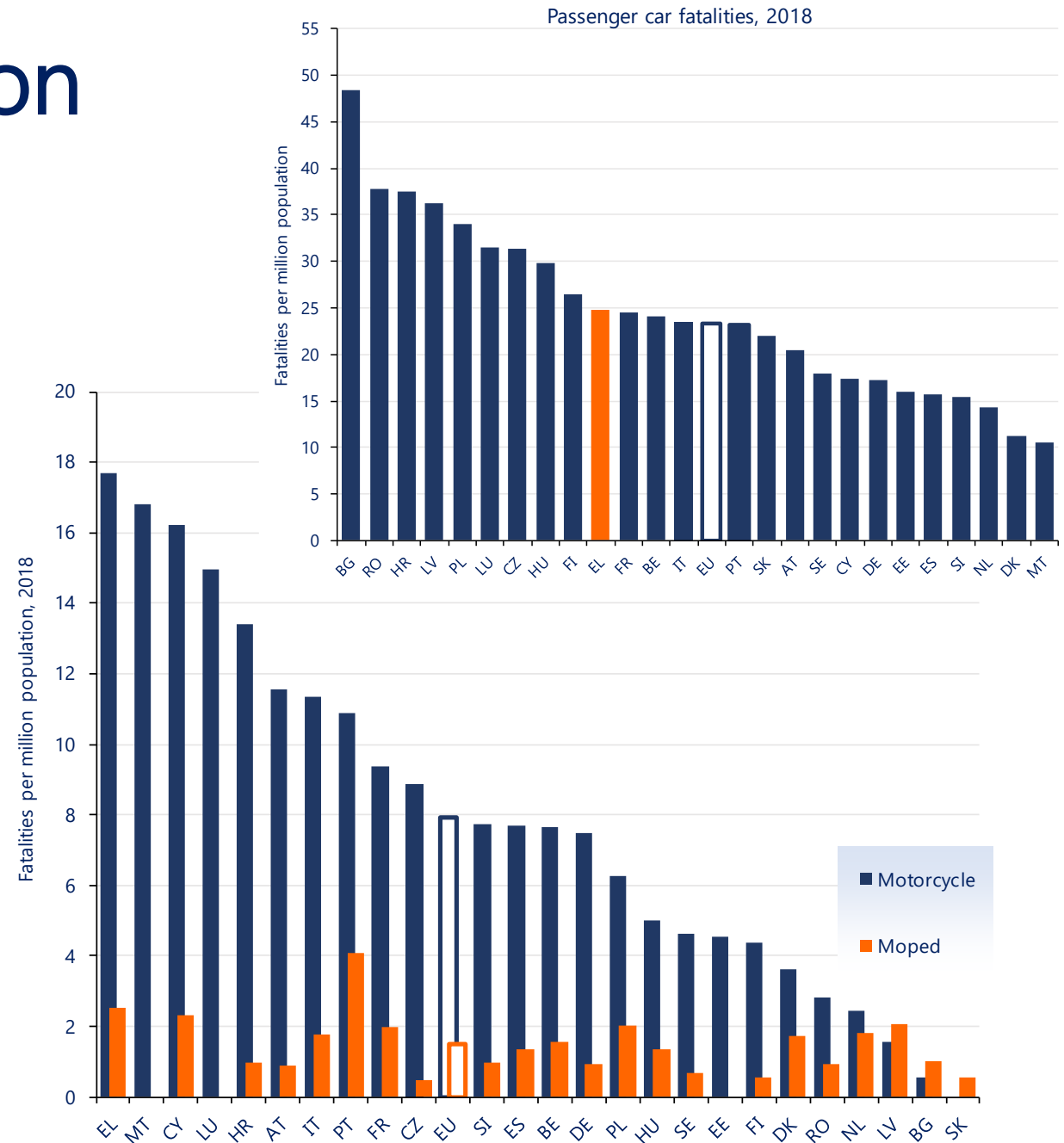
Fatalities by Transport Mode in the EU

- Most fatalities in the EU concern **passenger cars** (44%)
- **PTW fatalities** in the EU account for 18%
- **Greece** has the highest percentage of PTW fatalities in the EU (31%)



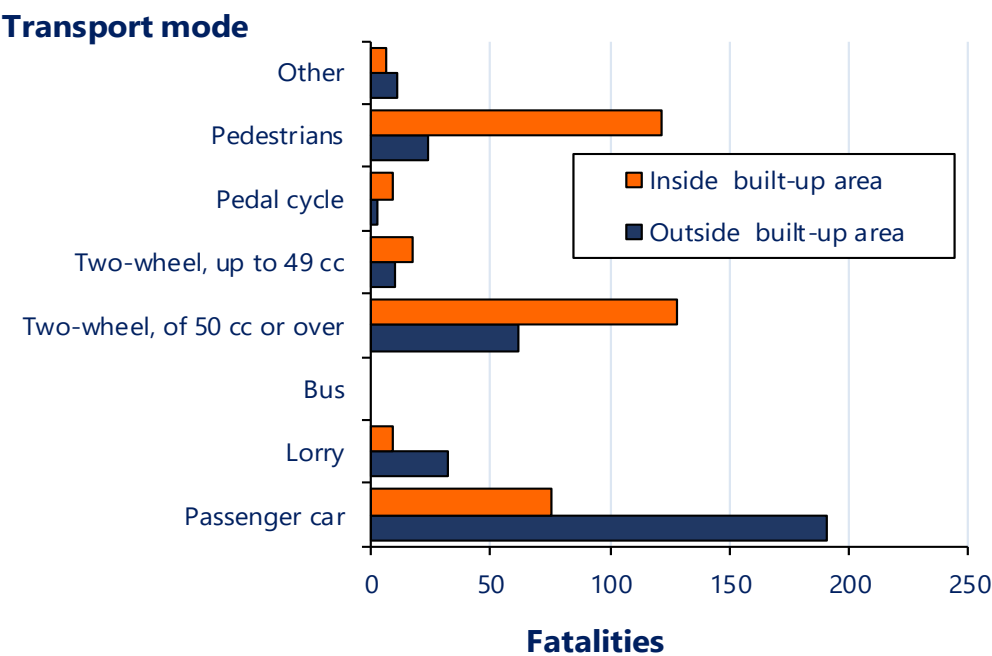
PTW Fatalities per population

- **Motorcycles and mopeds** (including e-bikes >25km/h) are preferred by a large part of population in Greece, especially during summer months
- The proportion of motorcycles in the total vehicle fleet was **19%** in 2018, while mopeds represented another **12%**
- In 2018, Greece had the **highest motorcyclist fatality rate** in the EU (18 fatalities per million population), while the EU average was about 8



Fatalities by Transport Mode in Greece

- In 2018, **38%** of fatalities were passenger car occupants
- Most car occupant fatalities occurred outside built-up areas, while most **motorcycle** and pedestrian fatalities occurred **inside built-up areas**
- The accident **severity** of motorcyclists was 1,5 times higher than that of passenger cars, while the severity of moped riders was 3 times higher

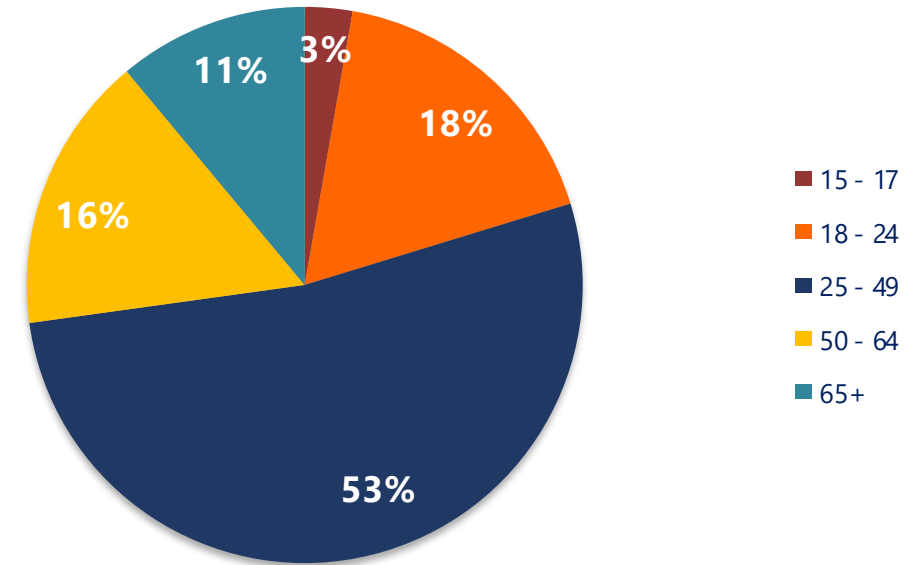


Transport mode	Fatalities				Road Accidents*			Fatalities per 100 accidents		
	Inside built-up area	Outside built-up area	Total	%	Inside built-up area	Outside built-up area	Total	Inside built-up area	Outside built-up area	Total
Passenger car	76	191	267	38%	8.690	2.380	11.070	1	8	2
Lorry	9	32	41	6%	567	404	971	2	8	4
Bus	0	0	0	0%	290	45	335	0	0	0
Two-wheel, of 50 cc or over	128	62	190	27%	5.992	743	6.735	2	8	3
Two-wheel, up to 49 cc	17	10	27	4%	357	106	463	5	9	6
Pedal cycle	9	3	12	2%	185	39	224	5	8	5
Pedestrians	122	24	146	21%	1.960	95	2.055	6	25	7
Other	6	11	17	2%	215	203	418	3	5	4
Unknown	2	0	2	0%	341	32	373	1	0	1
Total	367	333	700	100%						
%	52%	48%	100%							

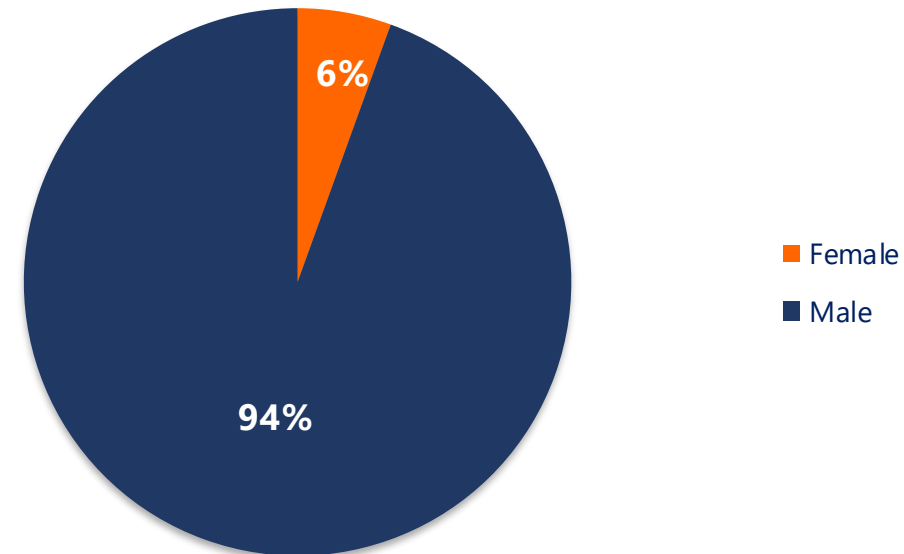
PTW fatalities by Age and Gender

- Almost 95% of PTW fatalities were **males**, while on average male fatalities were 80% of total fatalities
- In 2018, almost 53% of killed PTW were aged between **25-49 years old**
- **18-24 y.o. riders** constitute 17,5% of PTW fatalities, followed by the 50-64 y.o. age group (16,1%)

PTW fatalities by age group, 2018



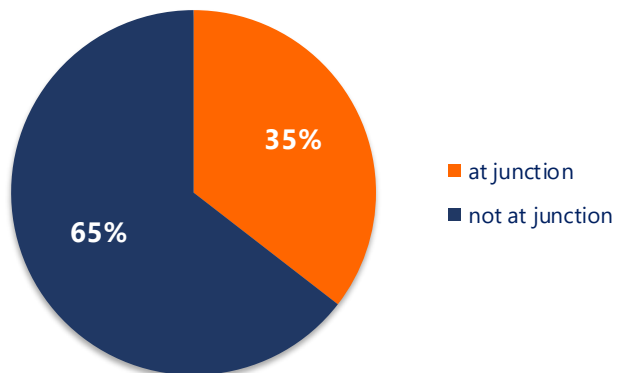
PTW fatalities by Gender, 2018



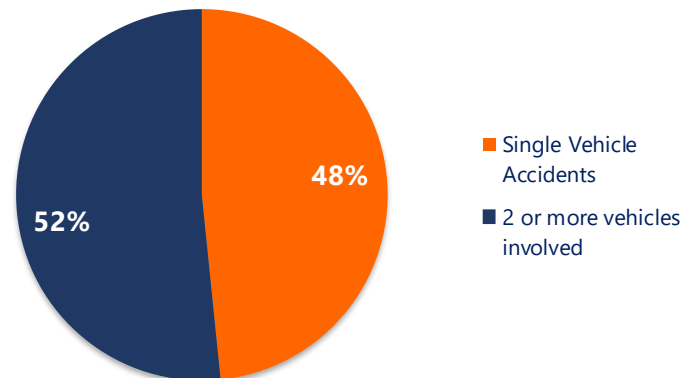
PTW fatalities by Accident Characteristics

- Almost 48% of PTW fatalities occurred in **single vehicle accidents**, almost equal to the respective rate of passenger car fatalities (49%)
- 35% of PTW fatalities occurred **at junctions**, while the respective rate for passenger car fatalities was only 16%
- Most PTW fatalities were recorded during the **summer** months and at **weekends**

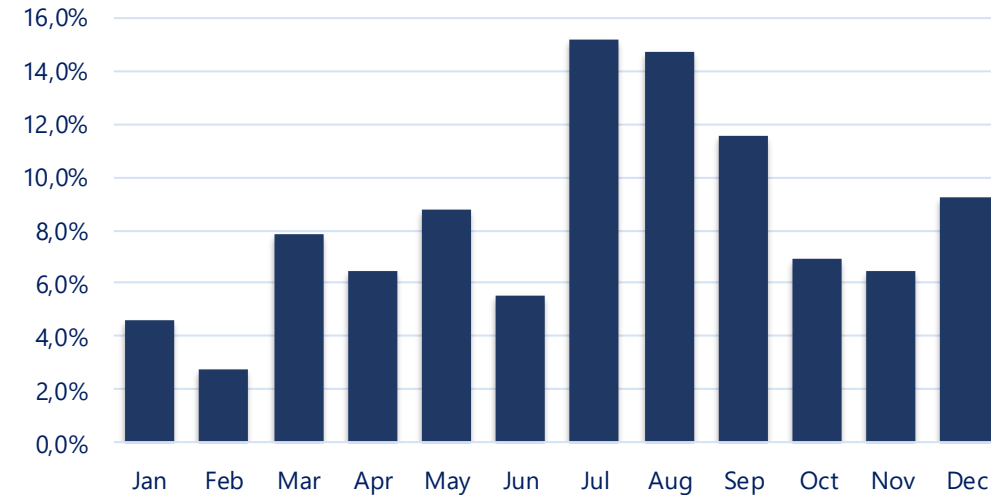
PTW fatalities at junctions, 2018



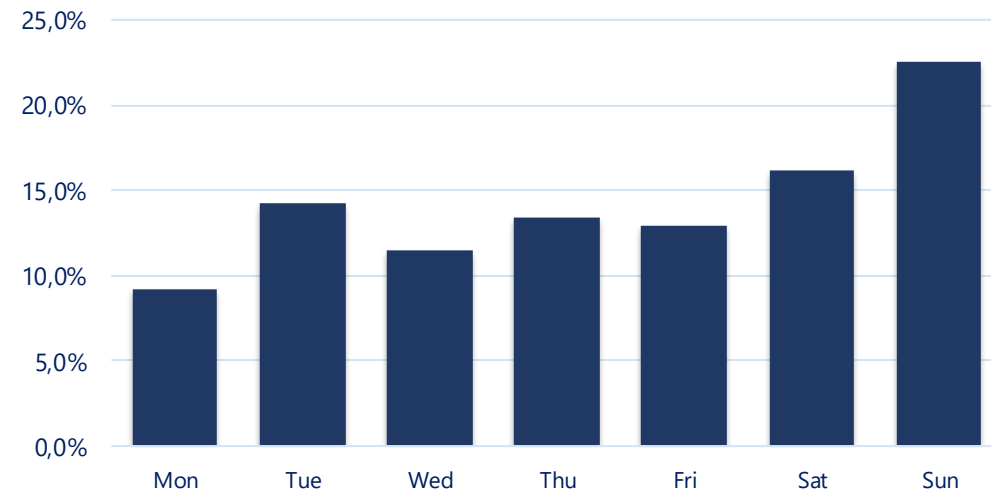
PTW fatalities by number of vehicles involved, 2018



PTW fatalities by month, 2018



PTW fatalities by day of week, 2018



PTW Accident Risk, Greece 2003

- Accident risk of **moped drivers** is 5 times the risk of car drivers, while the risk of **motorcyclist drivers** is about 10 times the average risk of car drivers
- **Young drivers** and drivers **>65 years old** are at increased risk, especially when riding mopeds or motorcycles
- Accident risk of PTW decreases with **vehicle age**
- Accident risk outside built-up areas at **nights or at weekends** is much higher, especially for PTW's.

Number of road fatalities per million vehicle-kilometres

Vehicle type	Driver's age							Total
	16-17	18-24	25-34	35-44	45-54	55-64	>65	
PTW < 50 cc	54,7	26,7	18,4	45,3	42,5	26,6	357,8	40,1
PTW > 50 cc	-	202,0	62,3	59,5	30,1	141,9	115,4	77,8
Passenger car	-	25,2	7,7	6,3	5,3	6,5	11,5	8,0
Total	-	40,6	11,9	9,3	6,3	7,9	17,0	11,8

Vehicle type	Vehicle Age					Total
	< 1 year	1-2 years	3-5 years	6-10 years	> 10 years	
PTW < 50 cc	52,5	32,8	28,0	31,1	12,2	40,1
PTW > 50 cc	101,3	84,1	62,1	63,4	38,3	77,8
Passenger car	8,5	8,3	4,5	5,6	13,3	8,0
Total	15,3	13,8	7,6	7,4	14,3	11,8

Helmet Use Rate, 2009

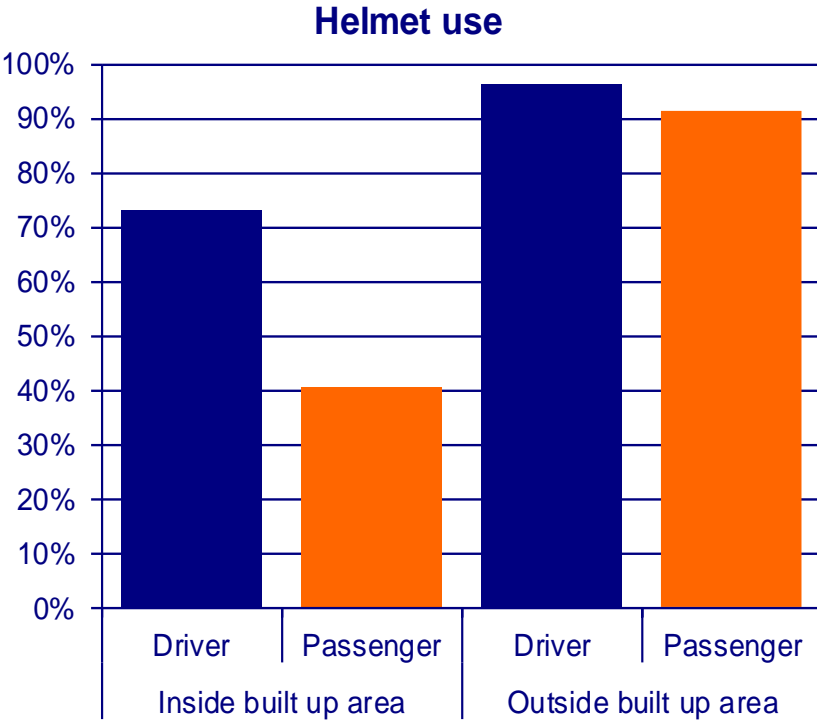
- 75% of motorcycle riders use their helmet
- Young females (16-24) have lower helmet use rates than young males, while the opposite is the case for the other age groups
- Only 41% of motorcycle passengers use their helmet inside built-up areas
- More than 90% of riders use their helmet outside built-up areas

Driver	Male			Female			Total
	16-24	25-54	>55	16-24	25-54	>55	
Yes	61%	79%	67%	44%	82%	100%	75%
No	39%	21%	33%	56%	18%	0%	25%
Total	100%	100%	100%	100%	100%	100%	100%

	Inside built up area		Outside built up area	
	Driver	Passenger	Driver	Passenger
Yes	73%	41%	96%	91%
No	27%	59%	4%	9%
Total	100%	100%	100%	100%

Driver	Power Two Wheel		
	Large	Small	Total
Yes	80%	72%	75%
No	20%	28%	25%
Total	100%	100%	100%

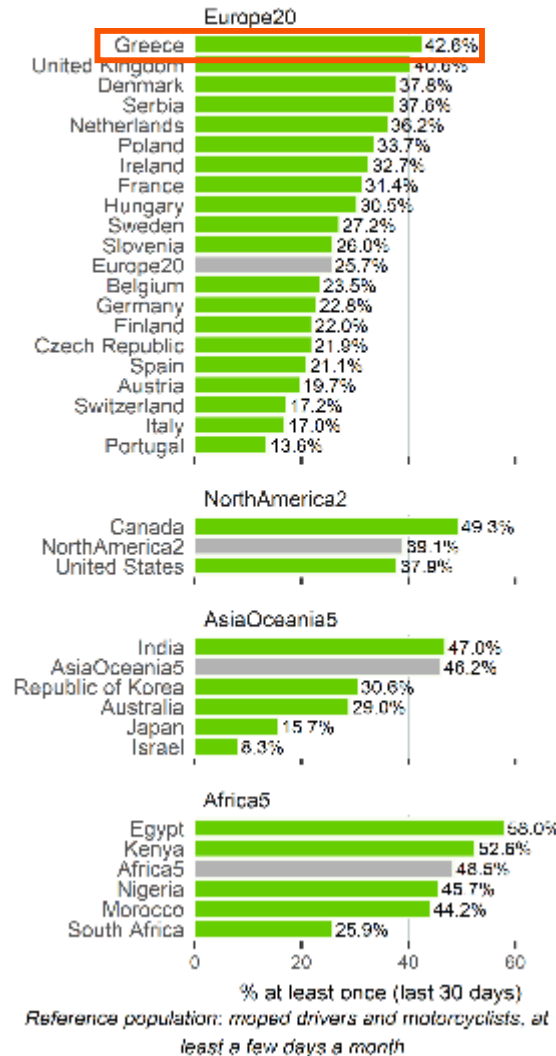
Source: [NTUA, 2009](#)
 Processing: [NTUA - Road Safety Observatory](#)



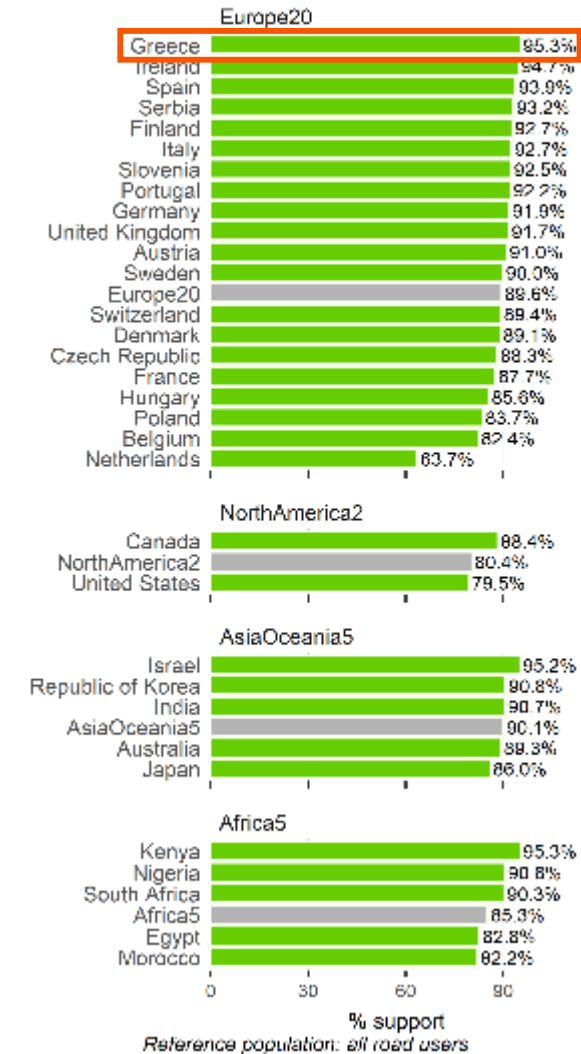
Self-declared behaviour

- 42,6% of Greek motorcyclists and moped drivers reported that they didn't wear a **helmet** at least once in the last 30 days while the European mean is 25,7%
- The requirement for all moped drivers and motorcyclists to wear a helmet has **the highest support** in Greece (95,3%)

SELF-DECLARED BEHAVIOUR AS A MOPED DRIVER OR MOTORCYCLIST
Ride a moped or motorcycle without helmet



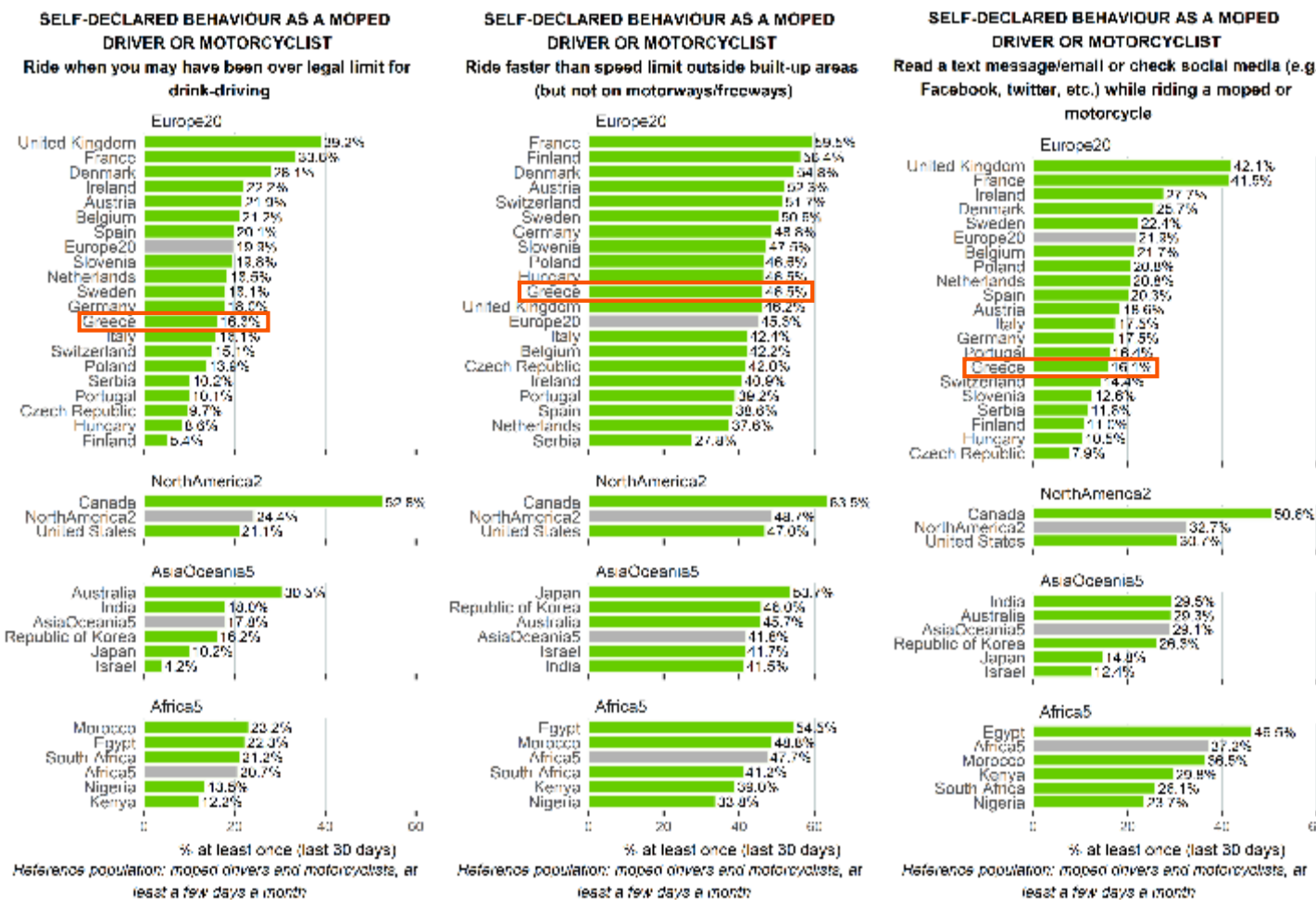
SUPPORT FOR POLICY MEASURES
Require all moped drivers and motorcyclists to wear a helmet



Source: ESRA2 survey

Other self-declared behaviours by Greek PTW riders

- 16,3% of Greek PTW riders declared that they rode at least once in the last 30 days when they may have been over the legal limit for **drink-driving**, while the respective European mean is 20%
- For **riding faster than the speed limits** outside built-up areas (not on motorways) the reported percentages for Greece (46,5%) are similar to the European mean (45,3%)
- In terms of distraction, 16,1% of Greek PTW riders admitted to **reading a text message or checking social media** while riding at least once in the last 30 days



Problems and Actions



PTW riders' behaviour

- The **causes of motorcycle crashes** could be attributed to:
 - failure to use defensive driving techniques
 - failure to follow speed limits
 - careless/ aggressive behaviour of other drivers
- Low rates of **helmet** and other protective equipment use by all PTW riders (including e-bikes >25km/h)
- High number of **professional PTWs** (couriers, deliveries, usually < 125cc) with inappropriate behaviour
- A relative high number of young people riding mopeds or motorcycles **without driving license**



Road safety management

- Insufficient **control of traffic violations** on:
 - helmet use
 - riders speeding
 - inappropriate behaviour of drivers
- Lack of proper road **infrastructure** contributing to PTW safety:
 - inappropriate junction settings (inside urban areas)
 - lack of proper road markings and traffic signs
 - lack of appropriate guardrails
- Lack of **targeted road safety measures** and programmes for PTW safety



Necessary actions for PTW safety (1/2)

- **Increase of helmet use**
 - Increase of traffic controls on helmet use
 - Awareness campaigns
- **Improvement of PTWs' behaviour**
 - Improvement of education and driving licence exams
 - Lifelong training / awareness of PTWs
 - Increase of controls on speeding and driving without licence
- Lifelong **training / awareness of other drivers** on their behaviour towards PTWs
- **Improvement of professional PTWs' safety** (couriers, deliveries)



Necessary actions for PTW safety (2/2)

- Revision of the **institutional framework** for the management of the traffic violations
- Development of an **integrated system** for the management of traffic violations
- **Road infrastructure interventions** for PTWs (use of bus lanes, PTW advance stop lines, intersections, etc.)
- Development and implementation of an **integrated road safety policy** for PTWs
 - Target setting and selection of specific measures
 - Systematic monitoring of the measures implementation and of the targets
 - Strengthening road safety management within the local Authorities



Concluding Remarks

A photograph of a paved road with the words "SAFETY FIRST" painted in large, white, bold, italicized capital letters. The road is flanked by green grass on both sides. The text is centered on the road and takes up most of the lower half of the image.

**SAFETY
FIRST**

Conclusions

- The rate of PTWs' fatalities in road accidents is especially high in Greece, leading to the **high need for further measures** to be taken.
- Need for an **integrated action plan** focusing on the reduction of PTW accidents comprising:
 - Systematic traffic law enforcement
 - Adjustment of road infrastructure
 - Improvement of driving licence system
 - Incentives for acquiring protective equipment
 - Equivalences between motorcycle driving licences
- Development of **road safety culture** not only for drivers and riders, but also for the Authorities involved in the design, implementation and monitoring of PTW safety policies.





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