



La Prévention Routière  
Internationale



**RoadSafety** UAE

# International Conference on Road Safety Education Abu Dhabi, UAE 2017 November 1st & 2nd

## Technical assistance in Criminal Justice System for protecting Road Safety

Prof. Dr. jur. Dieter Müller, College of  
Police Saxony/Germany



# Outline

1. Key facts for Road Safety at a glance
2. Requirements for perfect Road Safety legislation
3. Requirements for perfect police in Road Safety matters
4. Requirements for perfect justice in Road Safety matters
5. Need for an interdisciplinary approach
6. Requirements for perfect Road Safety prevention

# Key facts – Road Safety worldwide

1. About 1.25 million people die each year on the world's roads.
2. Almost 50% of people dying on the world's roads are vulnerable road users like cyclists and pedestrians.
3. Only 17 countries have amended their laws to bring them into line with best practice on one or more key risk factors for road traffic injuries in the last three years.
4. Work in Road Safety is teamwork and has to save lives.

Key facts – Road Safety work is influenced by ...

**Education**

**Enforcement**

**Toward Vision Zero  
Vision is mission!**

**Engineering**

**Prevention**

# Key facts – Partners and stakeholders of Road Safety



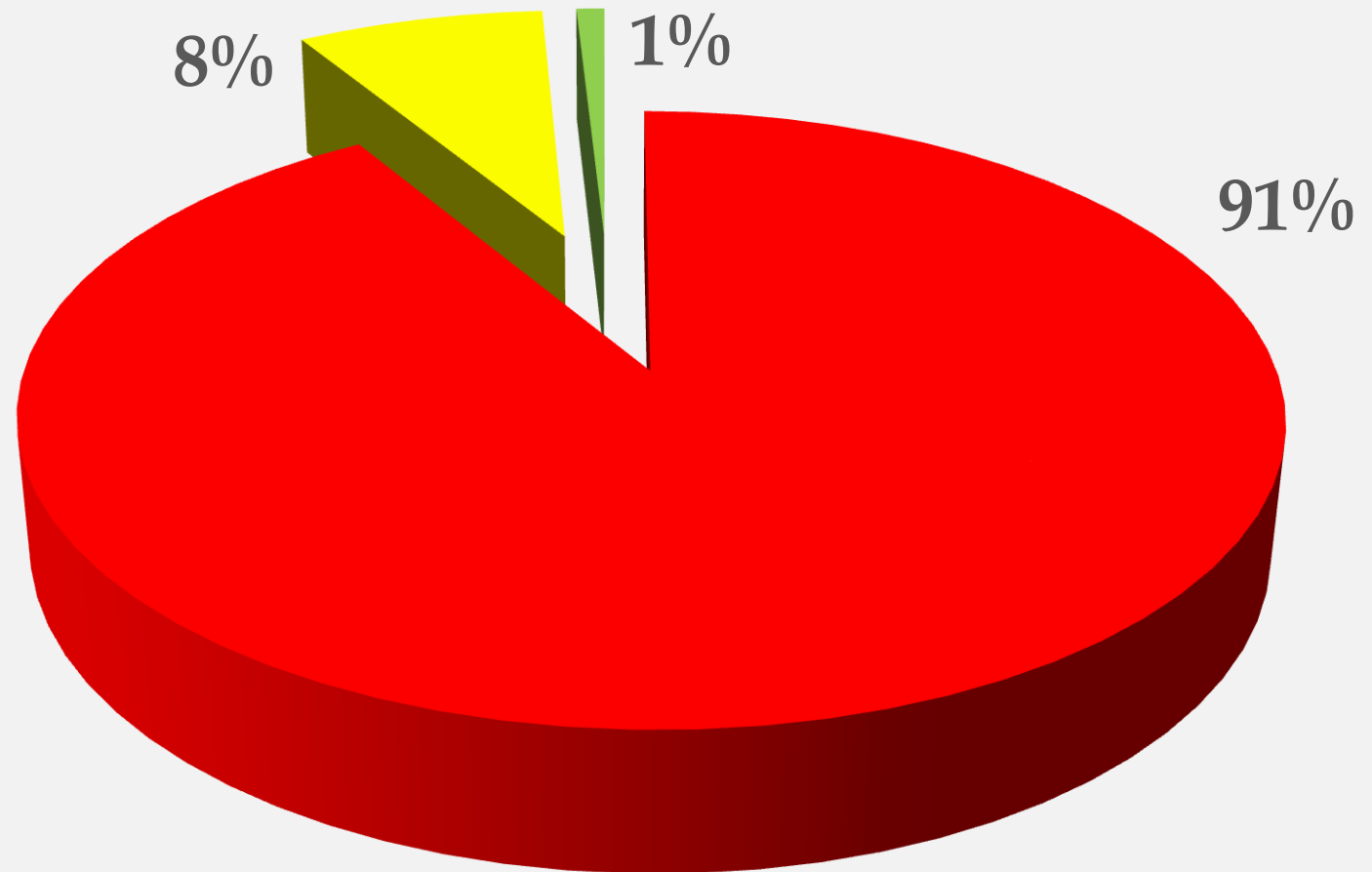
**Other institutions  
and people**

**Automotive industry  
and economics**

**Councils and  
associations**

**Government  
and politics  
(federal and  
local)**

# Main causes for personal injury road accidents German data 2016 (all 16 federal states)



■ Driver failures    ■ Road environment    ■ Dangerous vehicles

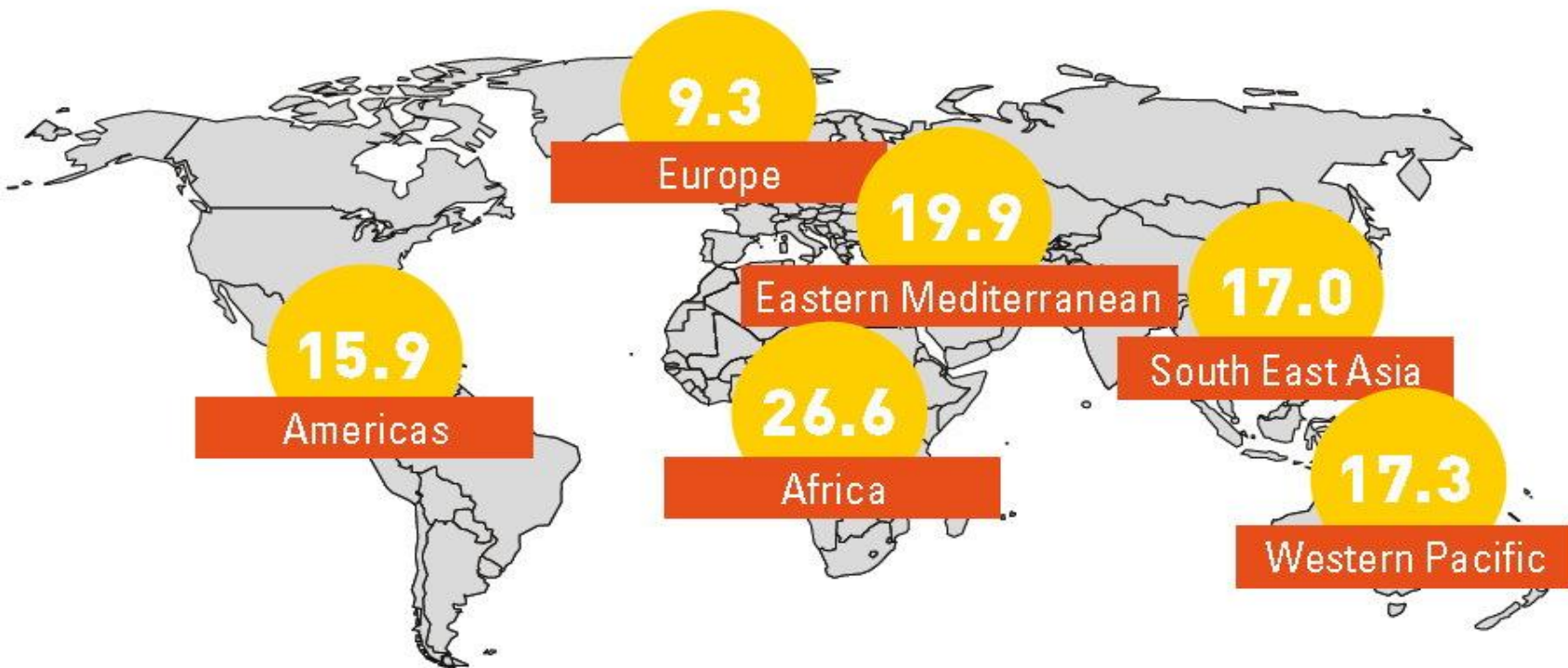
# First problem of road safety = The driver

## German data 2013 – 2016 (all 16 federal states)

Police reported violation type for personal injury road accidents	2013	2014	2015	2016
Fail to turn right or left, improper u-turn, failure by leaving a parking position	55.480 (1.)	58.178 (1.)	57.975 (1.)	58.034 (1.)
Fail to stop	51.055 (2.)	53.947 (2.)	53.361 (2.)	53.510 (2.)
Tailgating	45.735	49.522 (3.)	50.667 (3.)	51.221 (3.)
Speeding	48.730	45.888	47.024	47.023
Using wrong part of the road	24.032	24.997	24.763	25.187
Wrong behaviour towards pedestrians	16.232	15.979	16.629	16.477
Drunk and drug driving	13.327	13.011	12.660	12.875

# Death rate by road accident WHO 2015

The chance of dying in a road traffic crash depends on where you live



Road traffic fatalities per 100 000 population

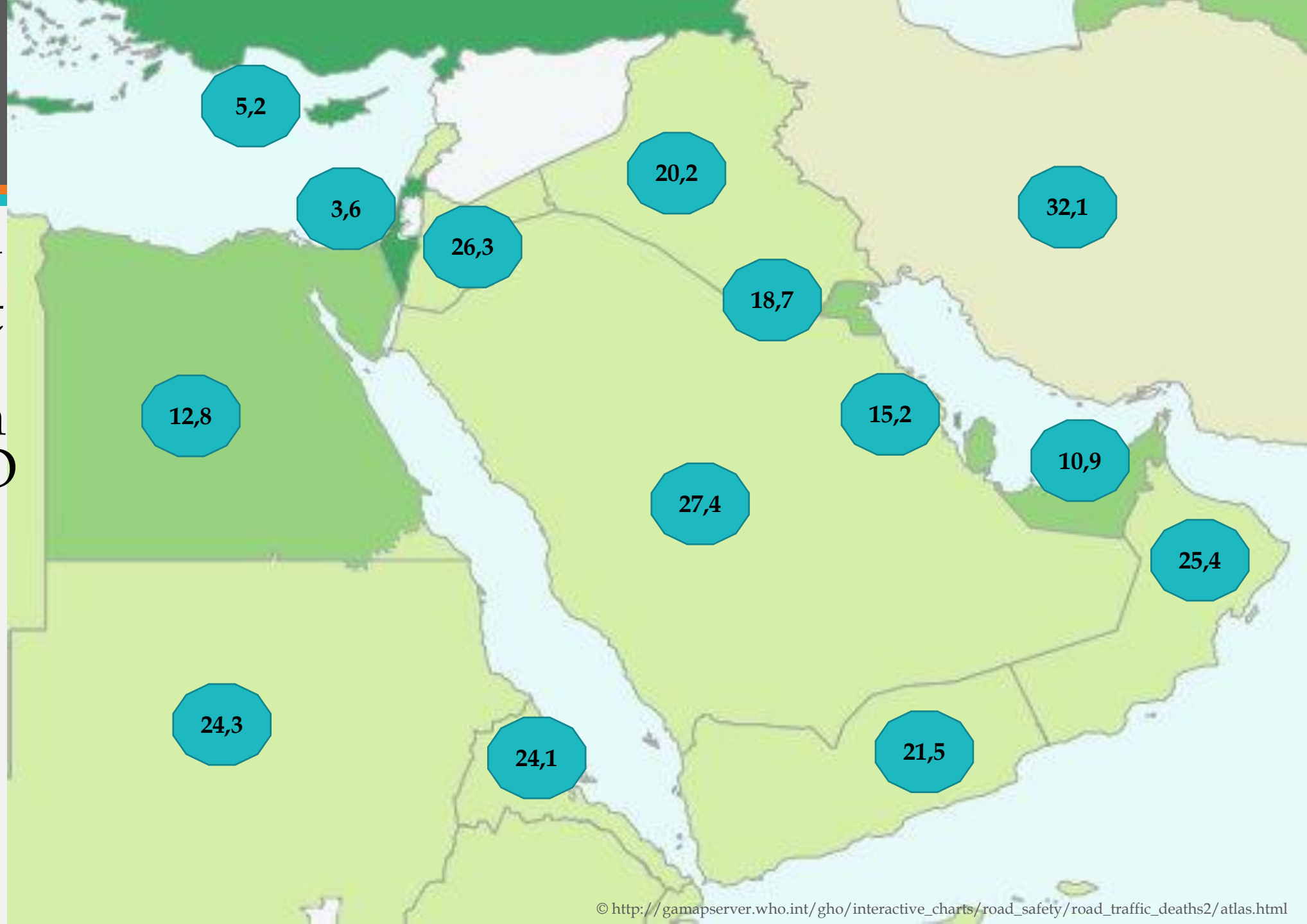


# 49%

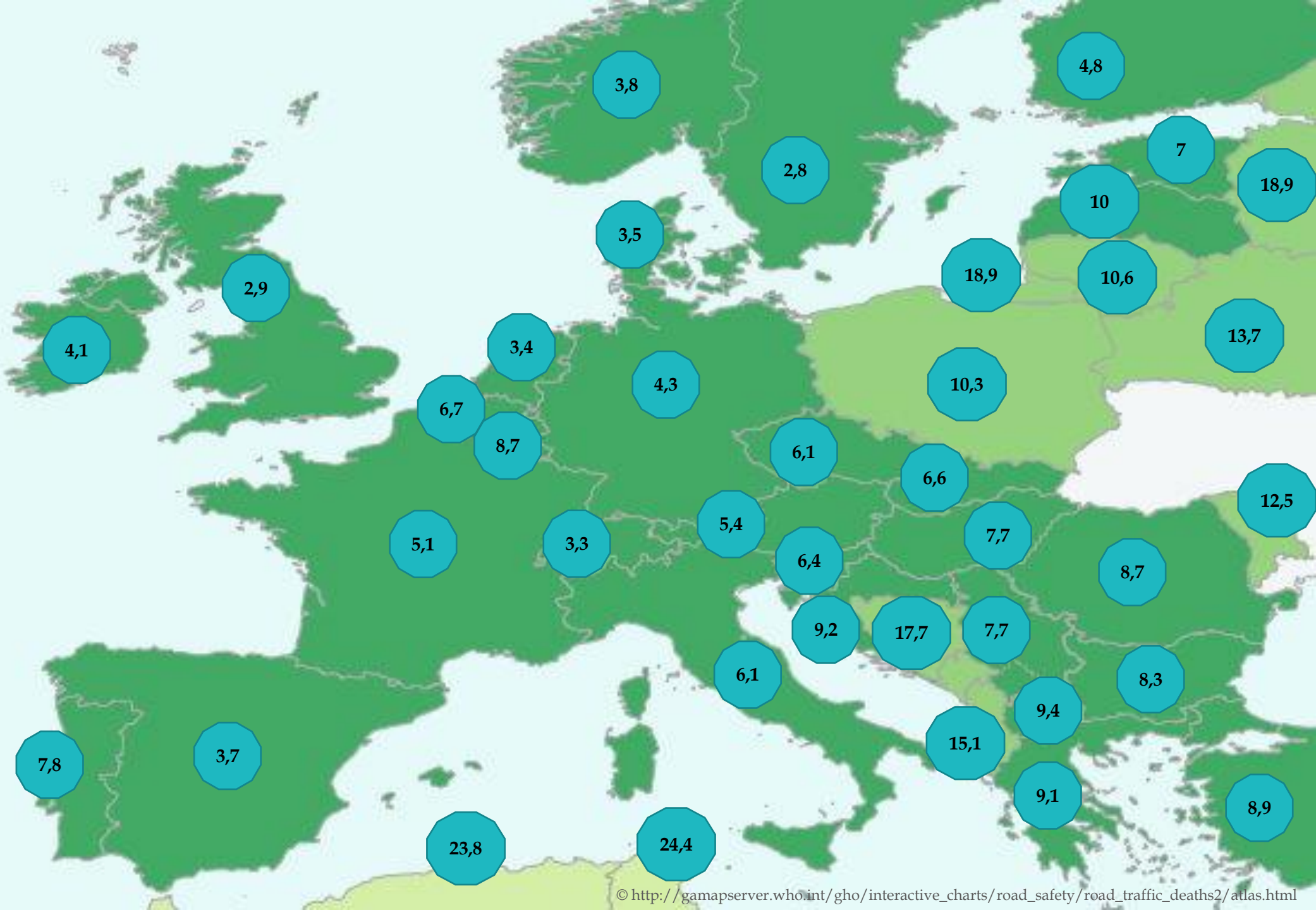
of all road traffic deaths are among pedestrians, cyclists and motorcycles.



# Death rate by road accident per 100.000 population in Arabia (WHO 2013)

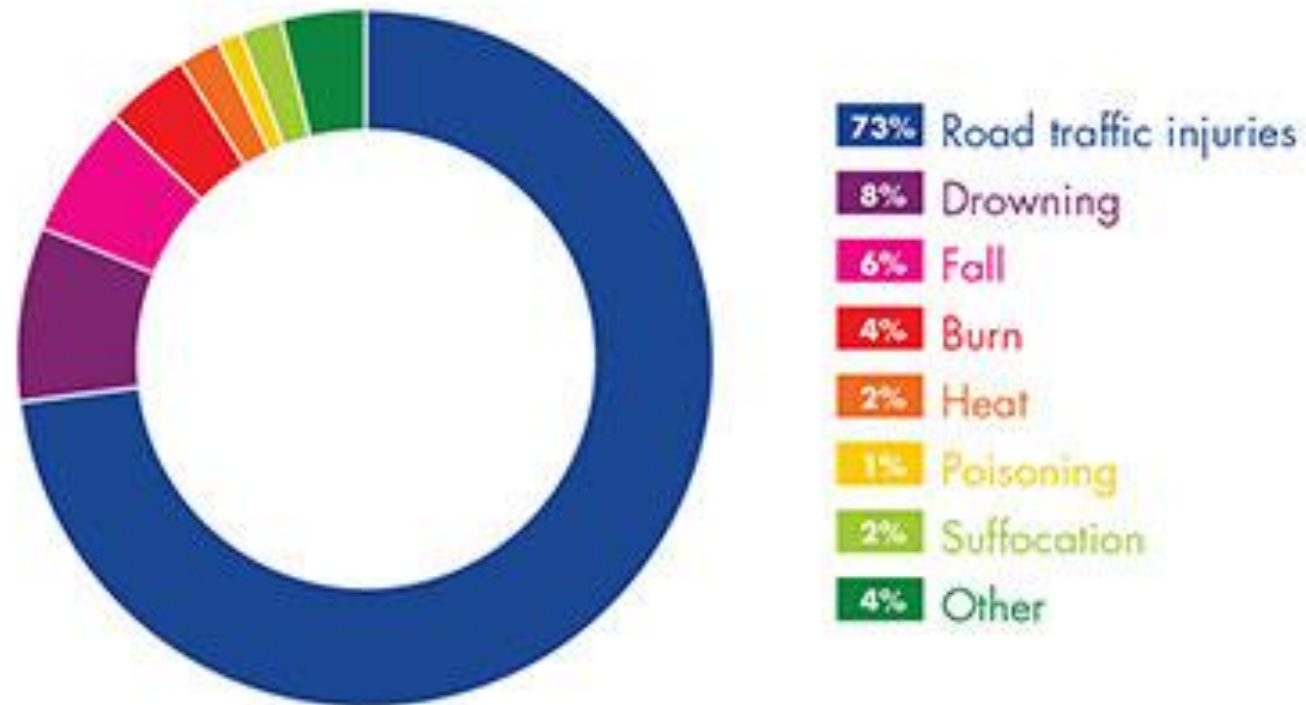


# Death rate by road accident per 100.000 population in Europe (WHO 2013)



# Key facts and consequences

**Childhood Fatal Injuries**  
By Cause, Abu Dhabi Emirate, 2007-2011

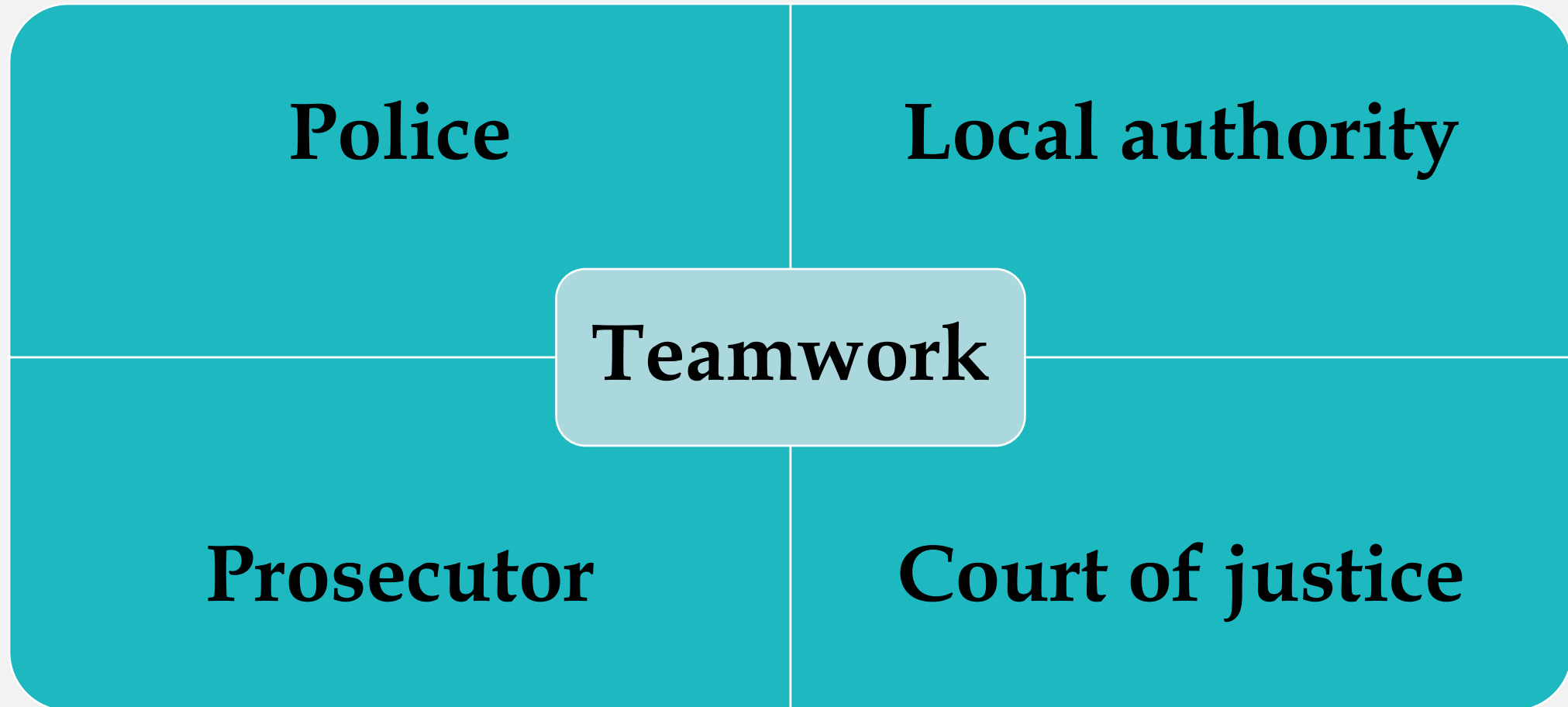


HAAD Fatal Injury Statistics

# Key facts and consequences

1. If we have to face a lot of complex problems, we have to focus on main causes of accidents and most vulnerable road users.
2. If we have to enforce to many drivers, we have to use helpful and accurate traffic monitoring systems and to figure out the most dangerous drivers.

# Requirements for perfect road safety legislation – monitored, enforced and decided



# Requirements for perfect road safety legislation – designed for road users

## Legislation has to be designed for reducing road traffic injuries!

Therefore perfect road safety legislation should be ...

1. useful and fair to handle for all road users,
2. easy to understand, well known and accepted,
3. easy to enforce and to prove,
4. violations must be easy to judge.

# Requirements for perfect road safety legislation – Competent authority monitoring and enforcement

Road Traffic Act

Local authority

Driving Licence Regulation

Local authority

Vehicle Registration Regulation

Local authority

Road Traffic Regulation

Local authority/Police

Schedule of Fines

Local authority/Police

# Requirements for perfect Road Safety legislation

1. Highest fines for offences with biggest safety risks.
2. Good balance between rule, offence and fine = easy to enforce and harsh to fine.
3. Immediately consequences for driver faults in point system for driving license.
4. Responsibility for car owners according to offences committed with their car.
5. Law for confiscating cars of criminal offenders.



# Obligation message

## § 2 Abs. 12 German Road Traffic Act

### Obligation message from police to local authority (department of driving license) for driver assessment

**Information about possession or consuming of illegal drugs**

**Information about alcohol misuse or abuse**

**Information about aggressive behaviour on the roads and outside the roads**

**Information about driving relevant diseases**

# Obligation message

## § 2 Abs. 12 German road traffic act

**Police gets information of ...**

Enforcement

- **Obligation message**

Accident engineering

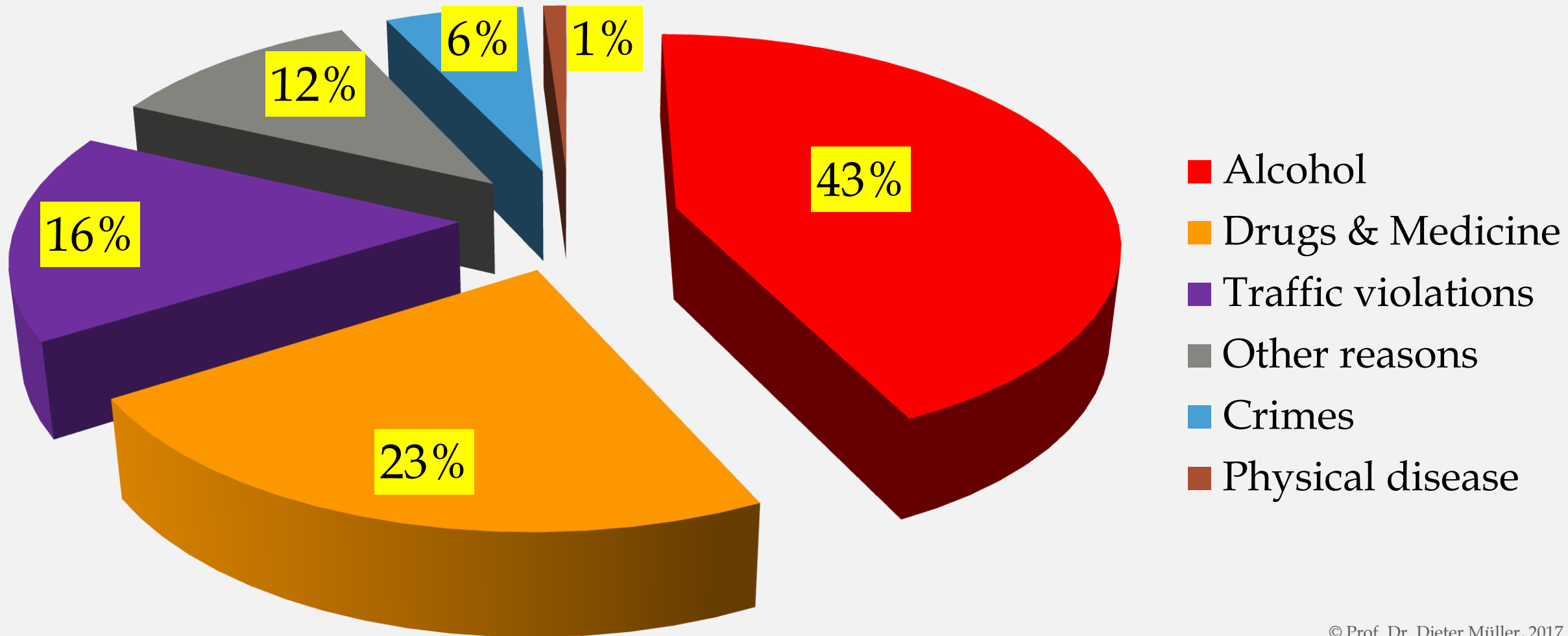
- **Obligation message**

Other policing activities

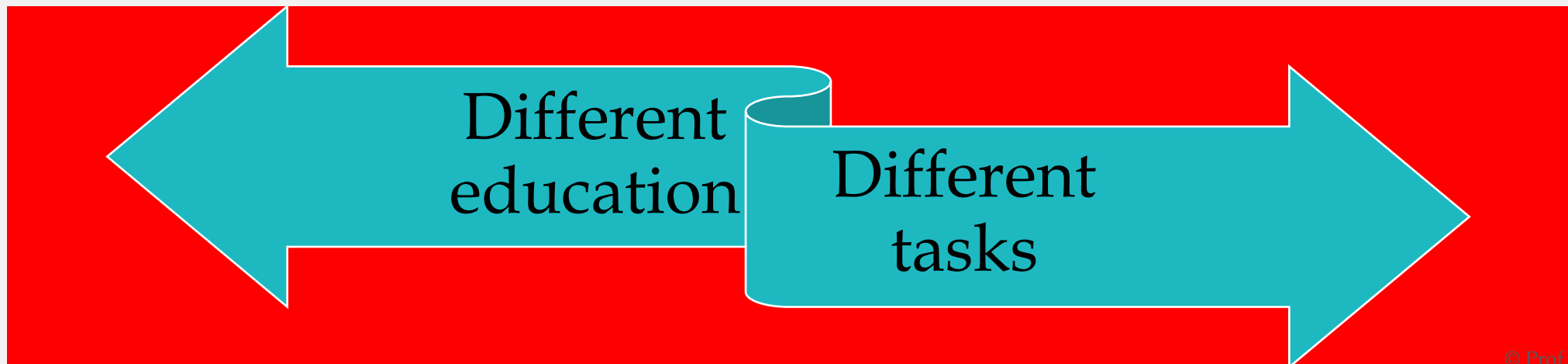
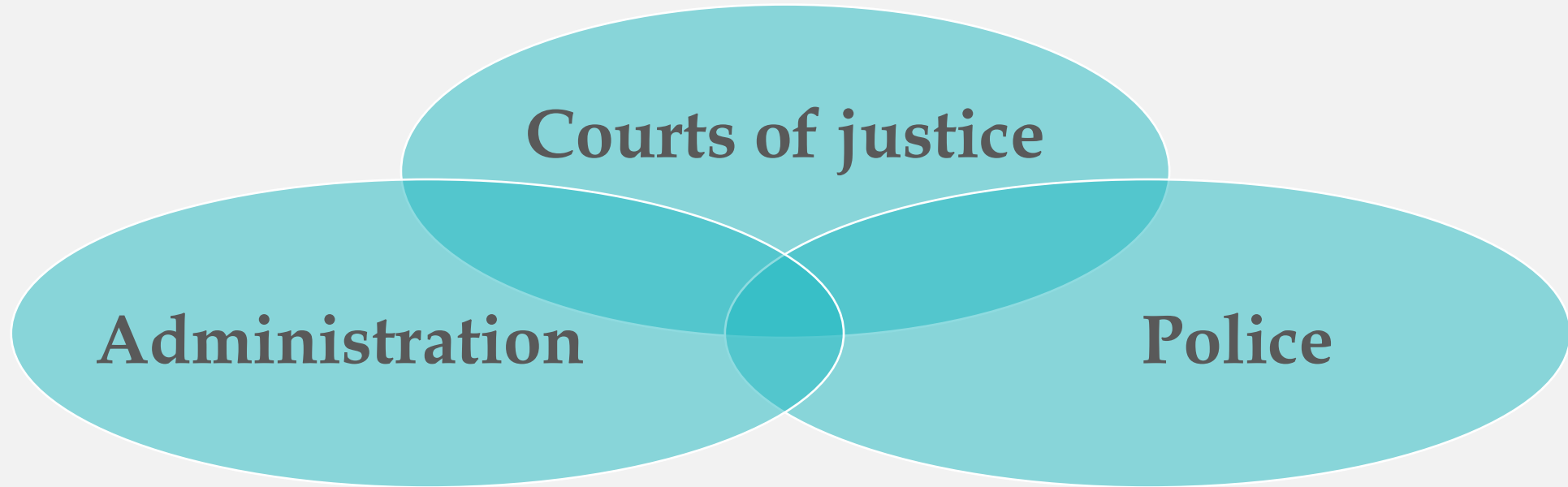
- **Obligation message**

# Medical-psychological Assessment

## Causes for MPA 2016



# Requirements for perfect road safety legislation – main problem is lack of teamwork



# Requirements for perfect police in road safety matters

## How many police officers ...

Police officers per 100.000 population

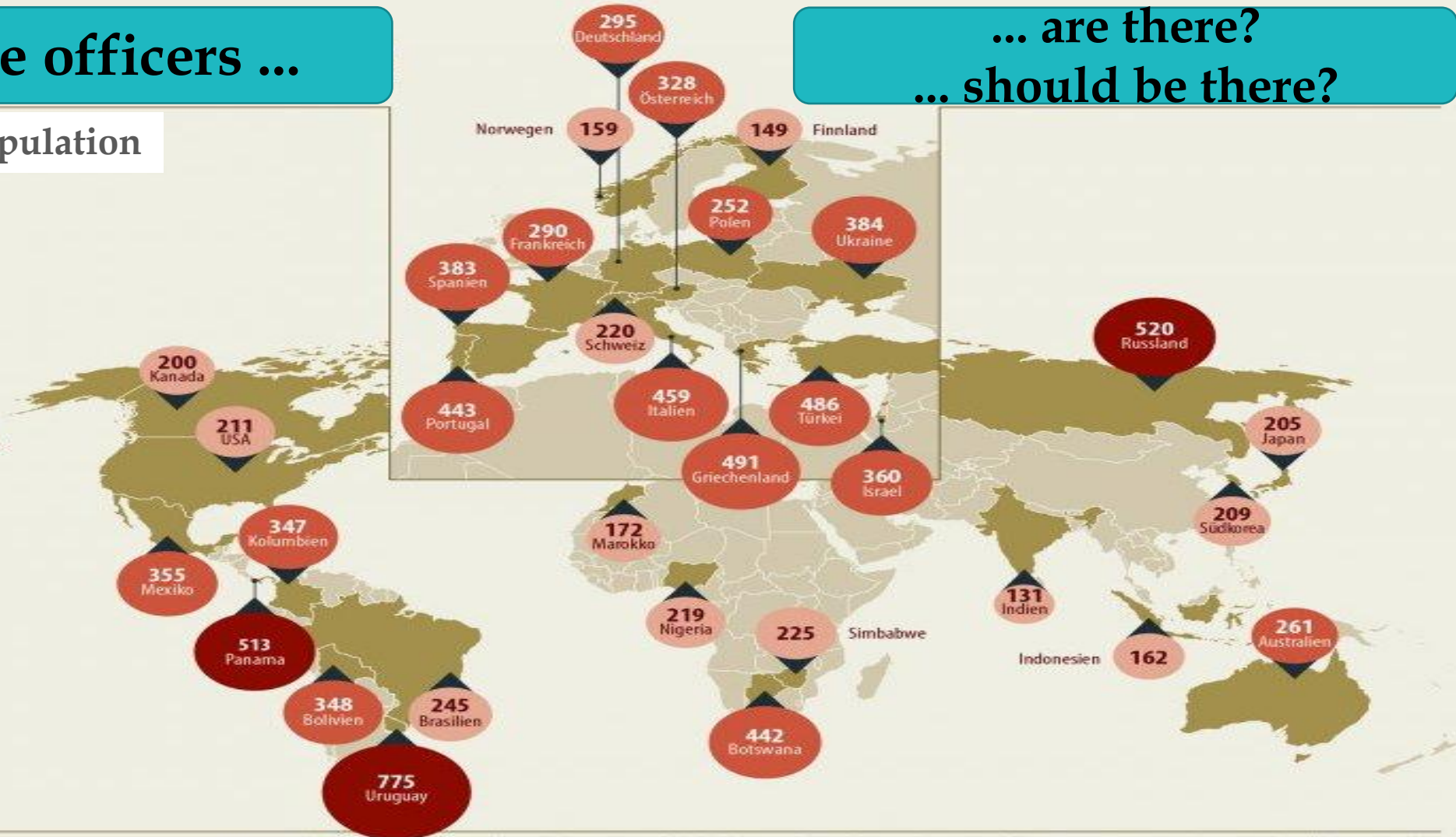
0 – 250

250 – 500

> 500



... are there?  
... should be there?



# Requirements for perfect police in road safety matters



**Driving faults reasons?**



**Violations obviously and hidden**



**Accidents obviously and hidden, black spots**

# Requirements for perfect police in road safety matters

**Good  
legislation**

The diagram consists of three teal circles arranged horizontally. The first circle on the left contains the text 'Good legislation'. To its right is a light blue plus sign. The second circle in the middle contains the text 'Sufficient enforcement'. To its right is a light blue equals sign. The third circle on the right contains the text 'Less accidents'.

**Sufficient  
enforcement**

**Less  
accidents**

# Requirements for perfect Road Safety justice



## Judges and procurators (coroners) need ...

1. Special law studies in Road Safety
2. Special interdisciplinary studies and trainings after finishing law school
3. Internship in the fields of police and local authorities.
4. Continuing interdisciplinary training and discussion courses with doctors, psychologists, engineers, police and local authorities.



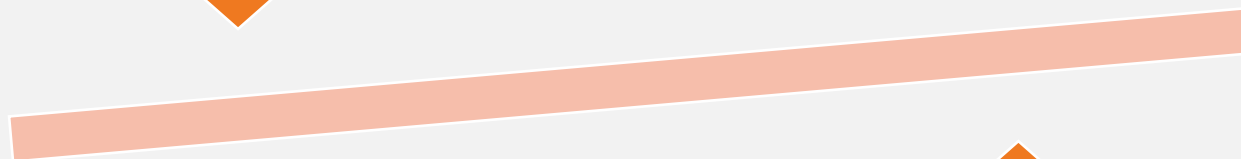
# Organizations and consequences

1. If legislation isn't focussed enough on Road Safety, it is to strengthen.
2. If there is not enough staff, best qualified staff is needed.
3. If best results are needed, best practise has to be installed.
4. If Road Safety staff don't understand each others knowledge and tasks, they have to learn together about each other by theory and practise.

# Organizations and consequences



We need training programmes for all participants



Well trained and well known people are able to find common solutions



# Interdisciplinary approach

**Road Safety staff must have the basic knowledge of...**

Medical conditions of driving, which depends on:

1. Vision and hearing.
2. Attention and concentration.
3. Memory and good reaction time.
4. Muscle power and control.
5. Cardiology, neurology, psychiatry, diabetes, substance misuse and dependence.
6. Especially senior and disabled drivers.

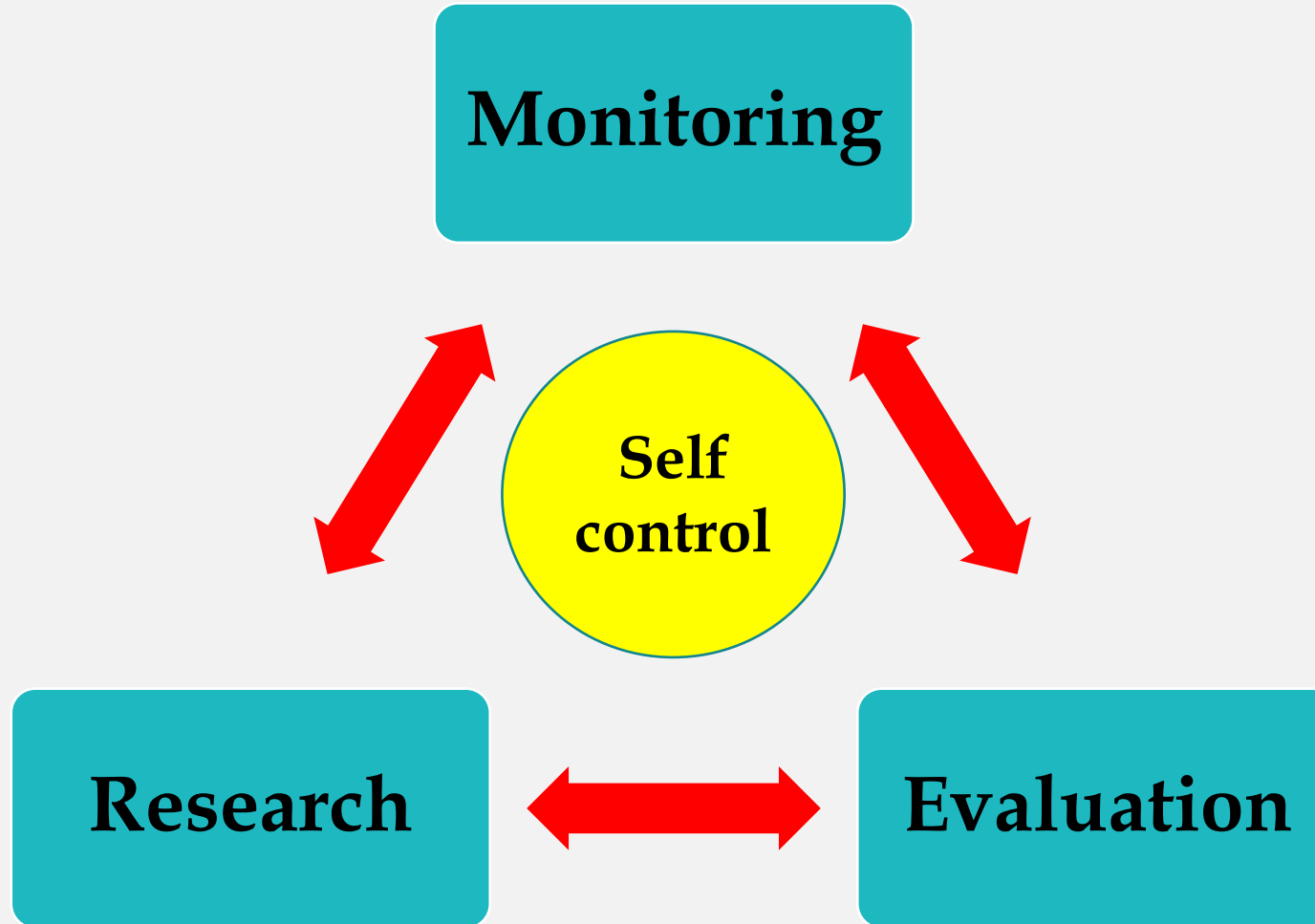
# Interdisciplinary approach

**Road Safety staff must have the basic knowledge of...**

Psychological conditions of driving, which depends on:

1. Insight and understanding of driving process.
2. Judgement and decision of driving.
3. Planning and organisation of driving.
4. Ability to self-monitor the driving abilities.
5. Sensation seeking and risky driving.

# Interdisciplinary approach



# Policing partners are ...





# German Road Safety Council

German Road  
Safety Council

## Board

(honorary)

28 elected members, 6 Chair of committees

## Committees

Adult Road Users

Children

Vehicles

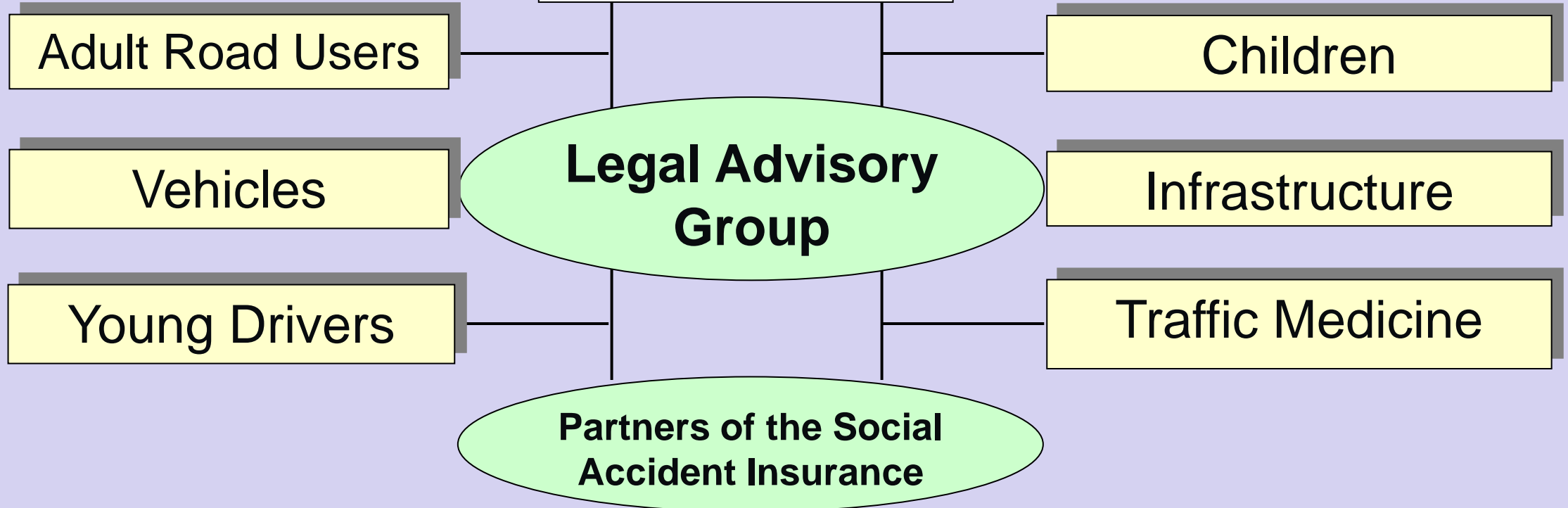
Infrastructure

Young Drivers

Traffic Medicine

**Legal Advisory  
Group**

**Partners of the Social  
Accident Insurance**



# German Road Safety Association (DVW)

- ⊕ Non-profit organisation for Road Safety
- ⊕ Established since 1924
- ⊕ Programmes are funded by
  - ⊕ the German Federal Ministry of Transport and Digital Infrastructure
  - ⊕ members
  - ⊕ sponsors





Your new campaign  
should be helpful ...

KIDS LOVE TO FLY,  
BUT NEVER IN CARS  
Child car seat save lives



**Nobody is perfect, ...  
not even in Road Safety  
work!**



# Sources

- Zaal, D. (1994), Traffic law enforcement: A review of the literature.
- Dishinger, Patricia C. (2000), Medical Conditions and Car Crashes.
- Zaidel, David M. (2002), The impact of enforcement on accidents.
- Stuster, Jack (2004), Aggressive driving enforcement.
- Berg, H. – Y. (2006), Reducing crashes and injuries among young drivers: what kind of prevention should we be focusing on?
- Zwahlen, Helmut T. (2007), Crash Reduction Factors for Education and Enforcement.
- Fell, James C. (2014), Effects of Enforcement Intensity on Alcohol Impaired Driving Crashes.

# Your speaker

Prof. Dr. jur. Dieter Müller

Police College of Saxony

Friedensstrasse 120

02929 Rothenburg/O.L., Germany

Tel.: 00493591-326250 (private)

E-Mail: [ivvb@ivvbautzen.de](mailto:ivvb@ivvbautzen.de)

Website: <http://www.ivvbautzen.de>

Facebook:

<https://www.facebook.com/ivvbautzen/?ref=bookmarks>

<https://www.facebook.com/dieter1959> (private)



# Germany – Facts and Figures

Capital:

Berlin

Federal states:

16

Population:

82,67 Mio.

Size:

357,021 sqkm

Roads:

230,082 km

Passenger cars:

45,071,200

Police Officers:

250,000

Judges:

15,000

Prosecutors:

5,200

