A Speed Management Strategy for the Peloponnese

Alexandra Laiou[1], George Yannis[1], Katarina Možina[2]

[1]National Technical University of Athens

AMZS [2]Automobile & Motorcycle Association of Slovenia

Framework

Speed is one of the **three main risk factors** on roads, the others being alcohol and non-use of seat belts.

Speeding is a primary factor in about **one third of fatal accidents** and an aggravating factor in all accidents.

Effective speed management can lead to fast progress in reducing road deaths.

Tackling speed related problems is a **priority at both European and national level** as reflected in the current EU and National Road Safety Programmes 2011-2020.

A Speed Management Strategy for the Peloponnese

In Greece, in 2013, **speed infringements** were the **most commonly recorded**, almost three times the number of the second most common type of infringements.

A **two-year multi-component speed management strategy** was developed for Greece within the "ROSEE-Road safety in South East European regions" project of the South East Europe Transnational Cooperation Programme.

Focused on the area of **Peloponnese** which concentrates a **significant population and traffic** and where **new motorways** were recently completed contributing to the increase of speeds.

A Speed Management Strategy for the Peloponnese

The procedure followed included the:

- Identification of **stakeholders involved in speed management** in the Peloponnese.

- Identification of the general **road safety legislative framework**.

- Presentation of the **road safety situation** in the Peloponnese in relation to speed.

- Development of the **speed management strategy proposal** (objectives, action areas, stakeholders and partners, time-schedule, monitoring and evaluation procedure).

Stakeholders involved in speed management

- Traffic Police Departments

- National Road Authority (Ministry of Infrastructure)

- Two Regional Road Authorities (Peloponnese, Western Greece)

- Six Departmental Road Authorities (Achaia, Argolida, Arcadia, Ilia, Korinthia, Lakonia, Messinia)

- Several Municipal Road Authorities

- Private Motorways Concessionaires

- Non-Governmental Organizations (NGOs)

General road safety legislative framework

- There is **no regional road safety strategy** for the Peloponnese.

- Driving at excessive or inappropriate speed is one of the road safety problems identified in the **National Road Safety Strategic Plan, 2011-2020** and aimed to be tackled through the proposed procedures.

- Procedures foreseen by the **DIR2008/96/EC**, adopted by the Greek legislation, are, to a more or less extent, related to speed management given that they aim to improve the conditions and make the road network safer.

Road safety situation in relation to speed

- In 2013, in **Greece**, **799 fatal** road accidents were recorded, out of which **241** were attributed to **speeding**.

- In 2013, **178.416 speed infringements** in a total of 485.184 infringements (**36,8%**) were recorded in **Greece**.

  In the **Peloponnese, 35.623 speed infringements** out of 67.524 infringements (**52,8%**) were recorded in 2013.

	Number of accidents per level of severity in Peloponnese (2013)			
Regional sections	Fatal	Serious Injuries	Light Injuries	Total
Achaia	24	31	156	211
Arcadia	8	17	77	102
Argolida	17	19	74	110
Ilia	26	15	79	120
Korinthia	13	30	132	175
Lakonia	9	20	47	76
Messinia	16	14	82	112
Peloponnese (total)	113	146	647	906

Speed management strategy

Three **strategic objectives** are set in the strategy:

- Objective 1: Provide a road environment that supports and encourages road users to drive at safe speeds.

- Objective 2: Establish a culture which rejects excessive speeding.

- Objective 3: Use Police enforcement to control intentional excessive speeding.

Three **action areas**, each one of them corresponding to each of the aforementioned objectives:

- Road Infrastructure and Engineering (to achieve Objective 1).

- Road Safety Education and Campaigns (to achieve Objective 2).

- Speed Enforcement (to achieve Objective 3).

Road Infrastructure and Engineering

- **Setting proper speed limits** in accordance with infrastructure characteristics and accepted by the road users.

- **Speed limit signage** installed in a conspicuous and consistent way, with particular attention to high risk sites, to approaches to urban areas and to intersection approaches.

- **'Self-explaining' road environment:** the design of roads should not violate road users' expectations and should enhance proper driving behaviours

- **Separation of users with incompatible speeds** (road users with significant differences in mass or speed)

- **Traffic calming and speed reduction measures** (e.g. installation of speed bumps, creation of bottlenecks, transitional zones between rural and urban parts, installation of speedometers and variable message signs.

Road Safety Campaigns and Education

- Campaigns should involve a **variety of means** (radio, TV, newspapers & magazines, leaflets in toll stations etc.) and should **target the entire community**.

- Focus should be on:
  - Informing road users about the **consequences** of speeding.
  - Persuading road users that speeding is a **dangerous and unacceptable behaviour**.
  - Explaining to road users that even a speed lower than the posted speed limit, may be excessive for certain **adverse conditions**.
  - Help road users realize the **necessity** of speed enforcement.

- **Road safety activities and knowledge in schools** to familiarize children with basic traffic regulations, with the identification of hazards in road traffic and with the consequences of dangerous road behaviour, such as speeding.

Speed Enforcement

For the development of an efficient speed enforcement system:

- Road users should **be aware of** speed enforcement **activities**.

- Speed controls and infringements should be **recorded systematically**, using proper equipment.

- The **locations** for speed controls and the **duration** of the speed enforcement program should be carefully selected.

- The **results** of speed enforcement activities should be recorded and be publicly available.

www.rtvslo.si

Stakeholders and roles

Implementation of road infrastructure and engineering measures
- National Road Authority (Ministry of Infrastructure)
- Regional, Departmental and Municipal Road Authorities
- Private Motorways Concessionaires

Public educational and awareness raising campaigns
- Regional, Departmental and Municipal Road Authorities
- Traffic Police Departments
- Private Motorways Concessionaires
- Non-Governmental Organizations (NGOs)

Speed enforcement
- Traffic Police Departments
- Private Motorways Concessionaires

Time-schedule

A **two-year** period is considered adequate for the implementation of all the procedures and measures proposed in the strategy.

	Months																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Action Area: Road Infrastructure & Engineering																								
Setting proper speed limits	▉	▉	▉	▉	▉																			
Speed limit signage						▉	▉	▉																
'Self-explaining' road environment	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉
Separation of users with incompatible speeds	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉
Traffic calming and speed reduction measures	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉
Action Area: Road Safety Campaigns and Education																								
Public education campaigns									▉			▉				▉				▉				
Road safety activities and knowledge in schools	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉
Action Area: Speed Enforcement																								
Speed enforcement activities									▉	▉		▉	▉			▉	▉			▉	▉			
Monitoring, Evaluation and Reporting																								
Implementation Monitoring	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉	▉
Evaluation and Progress Reports									●			●				●				●				●

Monitoring and evaluation

Monitoring of the road safety level at all levels (Region, Departments, Municipalities).

Monitoring of the road safety level using **indicators** such as:
- the number of people killed, heavily and slightly injured
- the number of injury accidents, or damage only accidents
- the number of accidents or casualties per million vehicle.Km
- the number of people killed per million inhabitants etc.
- severity indices (number of people killed per 100 accidents etc.)
- the percentage of road users driving with excessive speed etc.

Monitoring and evaluation

Implementation of Speed Management Activities is monitored and systematically published at all levels (Region, Departments, Municipalities).
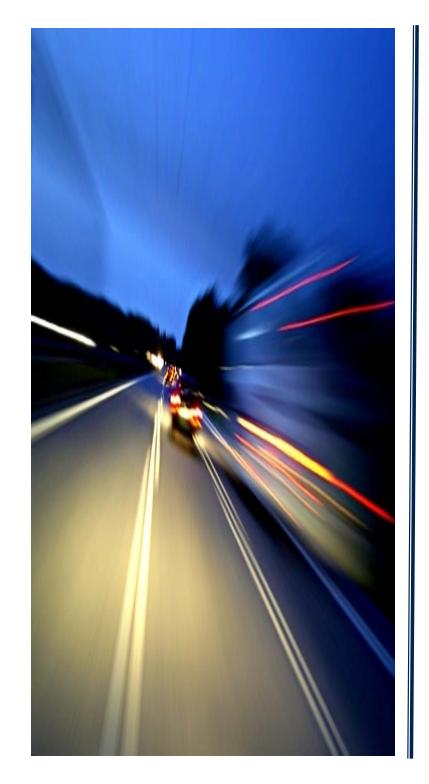
Monitored using **quantitative indicators**, such as:
- the number and/or the length of road segments, in which speed limits were evaluated and updated,
- the number and/or the length of road segments, in which speed limit signage was improved,
- the number of engineering measures implemented, according to the 'self-explaining' road approach,
- the number of engineering measures implemented, aiming at traffic calming and speed reduction,
- the number of speed controls performed by the Traffic Police,
- the number of speeding infringements, etc.

Conclusions

- Worldwide, the need for action to address speeding is recognised.

- Stakeholders to be involved in a speed management strategy include both those with responsibilities for and those with a strong interest in speed management.

- There is no single solution to the problem of excess and inappropriate speeds. A set of countermeasures is necessary, increasing the effectiveness of each individual measure.

- The most appropriate combination of measures must be determined based on an assessment of the local conditions.

- Given that speed management is a highly controversial issue, political support is essential for a successful programme.

Hellenic Institute of Transportation Engineers
National Technical University of Athens

6th Pan-hellenic Road Safety Conference
Athens, 12-13 March 2015

A Speed Management Strategy for the Peloponnese

Alexandra Laiou[1], George Yannis[1], Katarina Možina[2]

[1]National Technical University of Athens

AMZS [2]Automobile & Motorcycle Association of Slovenia