

# **ROAD SAFETY IN COUNTRIES WITH LESS DEVELOPED INFRASTRUCTURES:**

## **Policies to maximize effect with minimum resources**

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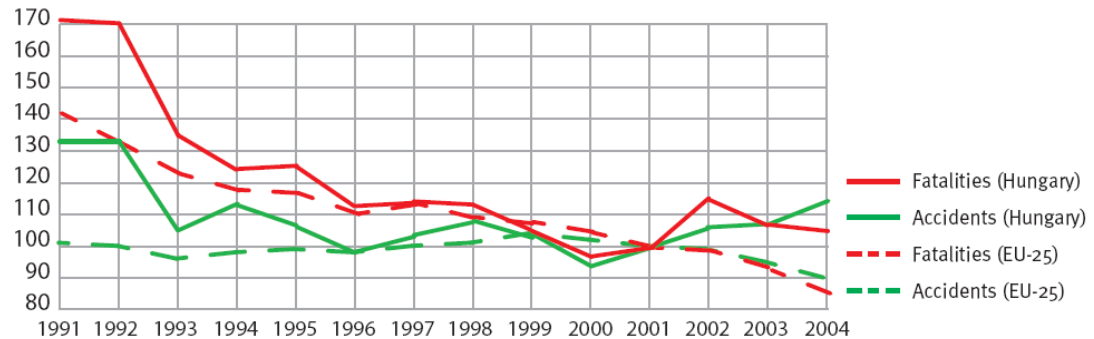


# 1991 – today

## A period of general decline in road accidents in European countries

### Hungary:

Figure 1. Annual developments (year 2001 = 100) in fatalities and accidents on national and EU-25 level.



Source: CARE project data (see also: [http://europa.eu.int/comm/transport/care/index\\_en.htm](http://europa.eu.int/comm/transport/care/index_en.htm))

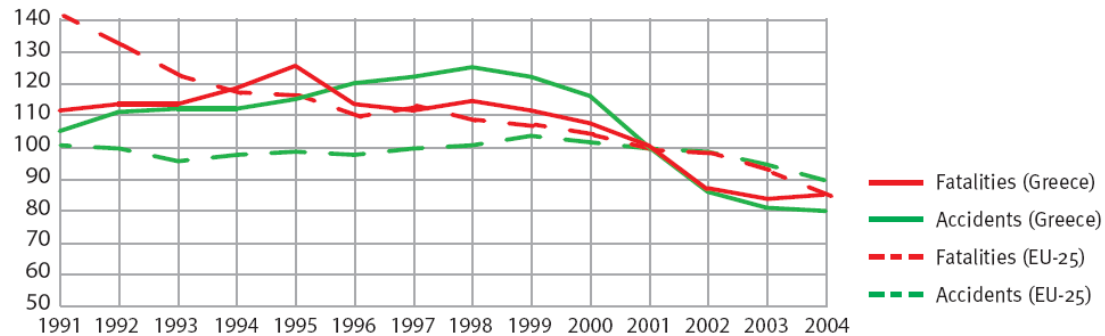


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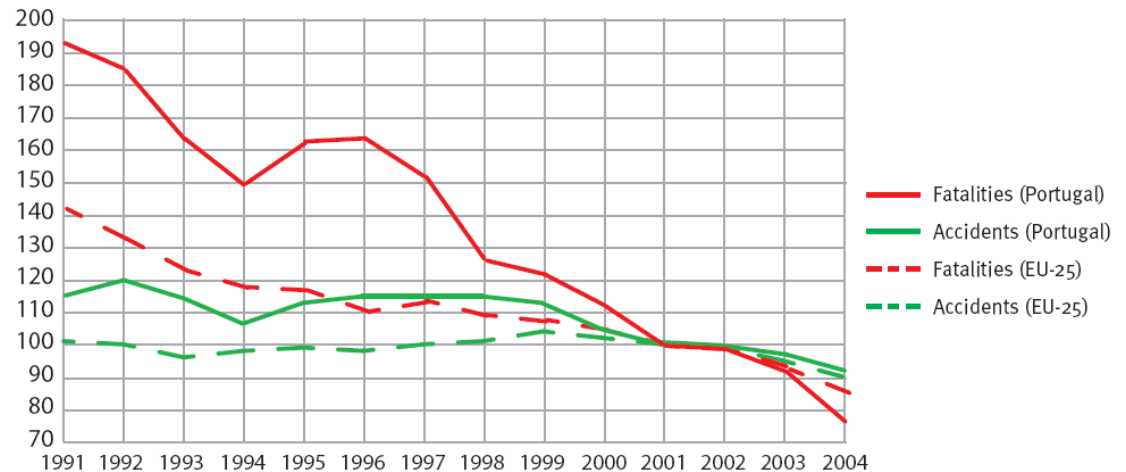


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### Portugal:

Figure 1. Annual developments (year 2001 = 100) in fatalities and accidents on national and EU-25 level.



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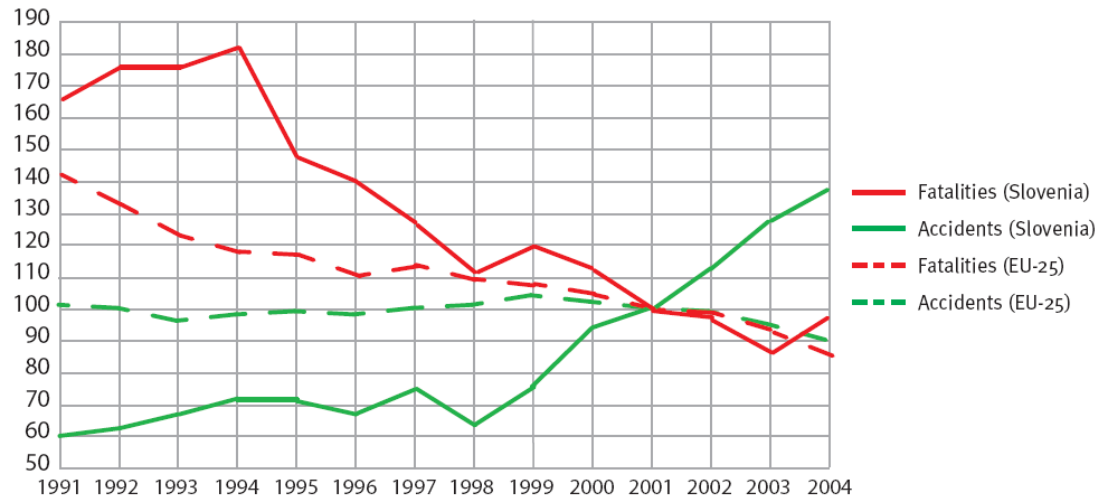


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### Slovenia:

Figure 1. Annual developments (year 2001 = 100) in fatalities and accidents on national and EU-25 level.



Source: CARE project data (see also: [http://europa.eu.int/comm/transport/care/index\\_en.htm](http://europa.eu.int/comm/transport/care/index_en.htm))



## Notable in the European experience:

- The “old” EU member states (e.g. Greece, Portugal, Ireland) show reduction in both fatalities and injuries.
- “New” members with lesser developed infrastructures (e.g. Estonia, Slovenia, Latvia) show decline in fatalities but increase in the number of injured (34% in Estonia, 24% in Latvia, 57% in Slovenia).
- “Old” member states show reductions in the number of accidents (Portugal: 19%, Greece: 32%, Ireland: 33%)
- “New” members show increases in most cases (48% in Slovenia, 20% in Latvia and 27% in Estonia, but Poland: reduction 19%).



# The basic premise of this paper is ...

...that besides the obvious road safety improvements that can be made by constructing large scale road infrastructures and more “intelligent” ones, substantial results can also be achieved through “softer” measures.



# “Softer” measures fall in the following eight categories:

1. Road safety education & awareness raising campaigns
2. Driver Education, Training & Licensing
3. Rehabilitation and Re-Licensing of existing drivers
4. Better maintained Vehicles
5. Small scale “infrastructure” improvements
6. Enforcement and monitoring actions
7. Institutional and Organisational strengthening, and
8. Post Accident Care.



# ROAD SAFETY EDUCATION & AWARENESS CAMPAIGNS

- The “target” is the minds of the people (drivers and pedestrians).
- Education for children of school age.
- Education of adults - special training programmes.
- Road Safety Campaigns (European examples: “Bob Campaign”, “Bodi PreViden” - “Be careful”, “First ride - safe ride”), road safety competitions. etc.



## DRIVER EDUCATION, TRAINING & LICENSING

- EU Directive for drivers’ training and examination: 91/439/EEC and 2000/56/EC.
- Stiffen the rules for new driver training and licensing.
- Provide certification for authorised Driving Schools.
- Training programmes for heavy goods transport drivers (especially for driving vehicles carrying dangerous goods).



## RE-HABILITATION AND RE-LICENSING OF EXISTING DRIVERS

- “*Re-habilitation*” of drivers: making existing drivers improve their skills and have an opportunity to re-train (to become more knowledgeable and more compliant to the new rules and safety regulations).
- Re-licensing: compulsory for drivers who have committed serious traffic offences (through the “point system”)



# BETTER MAINTAINED VEHICLES

- Road accidents due to poor technical state of the vehicle (normally brakes or steering) can be as high as 30%.
- Technical inspections for vehicles (especially trucks and buses) mandatory in public or private inspection centers.
- Information campaigns.
- Putting a maximum age for the vehicles in order to be allowed to circulate (a more extreme action for private cars – more common in buses and trucks).
- “Better equipped” vehicles, with safety equipment (e.g. seat belts and seat belt reminders, possibly automatic speed cuts, speed alerts, etc)



## SMALL SCALE “Infrastructures”

- Improvements in alignment, signing, safety barriers etc in black spots
- Intersection improvement for better channelisation of traffic at level intersections
- Arrangements for safer pedestrian movement
- Installation or improvement of street lighting
- Other improvements for better traffic management especially in urban areas



# ENFORCEMENT

- Full compliance with the traffic law could reduce road accidents by 50%.
- Enforcement campaigns effective only as long as they are applied consistently and objectively.
- Penalties must be applied uniformly (i.e. to all offenders at all times)
- “Enforcement” of specific measures has different impacts on road safety according to the overall state of road safety “culture” and “environment” in a given country



# ENFORCEMENT (Cont'd)

The following results can be stated on average for European countries (SUPREME project):

- Stationary speed enforcement (radar): -14% in fatal road accidents, and -6% in injuries.
- Patrolling along the highways: – 4% in fatal accidents, and – 16% in injuries.
- Drink driving enforcement: – 9% in fatal and -7% in injuries.
- Seat belt enforcement: – 6% in fatal and -8% in injuries.
- Reduction in blood alcohol limit: -8% in fatal and – 4% in injuries.



## ENFORCEMENT (Cont'd)

- Enforcement of working and resting times for professional drivers, very important for road safety.
- Tachographs, electronic or conventional, mandatory.
- Inspection and enforcement by the Labour Inspectorates and / or the Police, but on a regular basis.



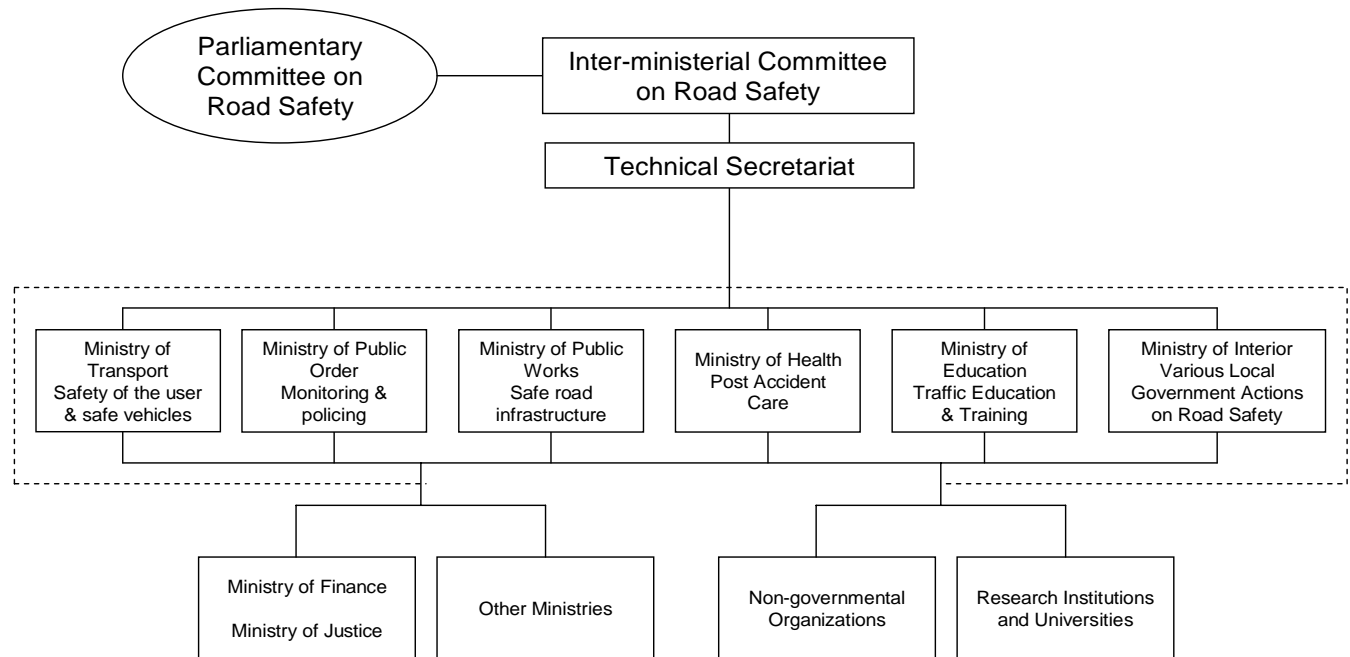
# INSTITUTIONAL ORGANISATION OF ROAD SAFETY

- The trend in institutional Organization of Road Safety is towards:
  1. “inter-departmental” road safety management and coordination.
  2. developing and approving long term road safety plans to achieve quantifiable targets.
- “Coordination” can be achieved by a simple mechanism of a “lean” body such an interdepartmental committee or General Secretariat attached to the highest possible level of governmental authority



# INSTITUTIONAL ORGANISATION OF ROAD SAFETY (Cont'd)

Example:



# INSTITUTIONAL ORGANISATION OF ROAD SAFETY (Cont’d)

Some simple recommendations:

- Establish a central multidisciplinary body responsible for road safety policy making, and formulation of long term action plans.
- Involve in the work of this body, as many different actors in road safety work as possible.
- Empower this body, as the leading agency for coordination between the various government departments as well as between local governmental and non-governmental organizations involved in road safety related work.
- Decentralize road safety implementation work
- Create road safety “centres of excellence” in various parts of the country, in order to: implement “local” solutions and adapt and materialise the central long term action plan.
- Create mechanism for data collection and statistics and analysis on road safety issues.



## POST ACCIDENT CARE

- Create mechanisms (for incident detection and management) by which the victims of road accidents can be transported speedily to a hospital or health care unit, or in any way find the medical care they need
- Integrate road safety issues in the public health agenda.
- Other actions in: “*World report on road traffic injury prevention*”, World Health Organisation Geneva, 2004



# THE NEED FOR A STRATEGIC ROAD SAFETY PLAN

Road Safety Plans necessary in order to:

- Specify clearly laid out objectives for road safety over the respective time period,
- Specify the actions and measures at all levels of government and non-government Organisations,
- Give specific priorities,
- Plan the resources necessary in order to carry out road safety actions.



# THE NEED FOR A STRATEGIC ROAD SAFETY PLAN (Cont'd)

Examples of strategic road safety actions (EU level):

- Creation of a *European Road Safety Action Programme* [1] (*Vision Zero*, etc)
- *European Road Safety Charter* [2],
- *White Paper on Transport Policy* [3],
- *European Road Safety Observatory* [4].

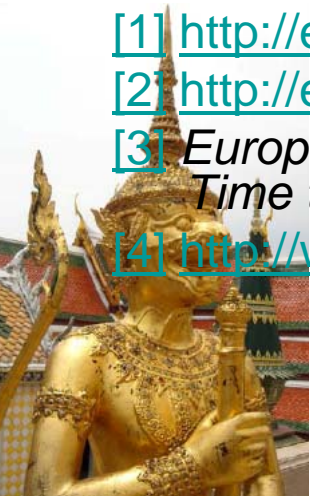
Continuously review and complete safety rules, strengthening the functioning of European safety agencies and gradually extending their safety-related tasks.

[1] [http://ec.europa.eu/transport/road/roadsafety/rsap/index\\_en.htm](http://ec.europa.eu/transport/road/roadsafety/rsap/index_en.htm)

[2] [http://ec.europa.eu/transport/roadsafety/charter/index\\_en.htm](http://ec.europa.eu/transport/roadsafety/charter/index_en.htm)

[3] *European Commission White Paper European transport policy for 2010: Time to decide, 2001 and revision 2006.*

[4] <http://www.erso.eu/>



# THE NEED FOR A STRATEGIC ROAD SAFETY PLAN (Cont'd)

Example of the **new 5 year plan for Greece** - 6 major areas of actions :

- I. Safety of the road user and safe vehicles (*Ministry of Transport and Communications*)
- II. Surveillance / enforcement of traffic Safety rules (*Ministry of Interior*)
- III. Safe road infrastructure (*Ministry of Environment, Physical Planning and Public Works*)
- IV. Post accident treatment (*Ministry of Health*)
- V. Traffic education and education on traffic safety (*Ministry of Education and Religious Affairs*)
- VI. Traffic safety actions and local authorities participation (*Ministry of Interior, Public Administration and Decentralization*)



# CONCLUSIONS

- The creation of better conditions for road safety in a given country requires a well coordinated and longer term programme of actions adapted to the “culture” and socio-economic conditions of the country.
- Equal attention to both: “hard” actions (involving development of large scale infrastructures), as well as “softer” actions (involving “building” awareness and enforcing road safety behaviour, better and more efficient mechanisms for education and training, as well as monitoring, and post accident care.
- Countries while in the course of developing their road and road related infrastructures must take a very serious look at the “soft” measures and include them in their priority actions for road safety.

