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# Greek driver needs on ITS in relation to driver accident history



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E. Sigalas, Dr. G. Yannis, Dr. Ioanna Spyropoulou

## Objective

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- ✓ Identify driver behaviour on ITS in Greece
  - ✓ Driver needs of ITS
  - ✓ Driver acceptability on ITS
  
- ✓ Relate driver behaviour towards ITS in relation to appropriate parameters

*...to bare in mind*



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## Greek Driver Particularities

- ❖ Driver behaviour → mentality
- ❖ Road safety → high accident rates
- ❖ ITS implementation → familiar with few systems

### ❖ GENERAL INFORMATION

- Within the framework of SARTRE (Social Attributes to Road Transport Risk in Europe)
- Identification of similarities and differences of the behaviour and attributes of drivers from different nationalities in relation to Road Safety
- Conducted in 23 European Countries in 2002

### ❖ GREEK SURVEY

- Sample population: 1.000 active Greek drivers

### ❖ Intelligent Transport Systems

- Intervening
  - Speed limit
  - Alcohol
  - Fatigue
- Monitoring
  - Black Box (accident data/cause)
  - Black Box (driver behaviour/police)
- Driver information
  - Route Guidance
  - Traffic Congestion
- e-Identification
  - Data for Driver Services
  - Data to Police

### ❖ Study Parameters

- General Driver Characteristics

- Age
- Gender
- Profession
- Education
- Area
- Area Size

- Specific Characteristics

- Vehicle Type
  - Vehicle Engine Size
  - Annual Driven Mileage
  - Speeding history
- Driver Needs
  - Driver Acceptability
- Accident History

## Accident History



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In the last 3 years, how many accidents have you been involved in, as the driver of a vehicle, in which someone (including yourself) was injured and received medical treatment?

If answer is 0 → damage only or no accident at all

In the last 3 years, how many damage only accidents have you been involved in, as the driver of a vehicle?

If answer is 0 → injury or no accident at all

If answer is 0 to both questions → no accident at all

# Greek Driver Needs 1/3

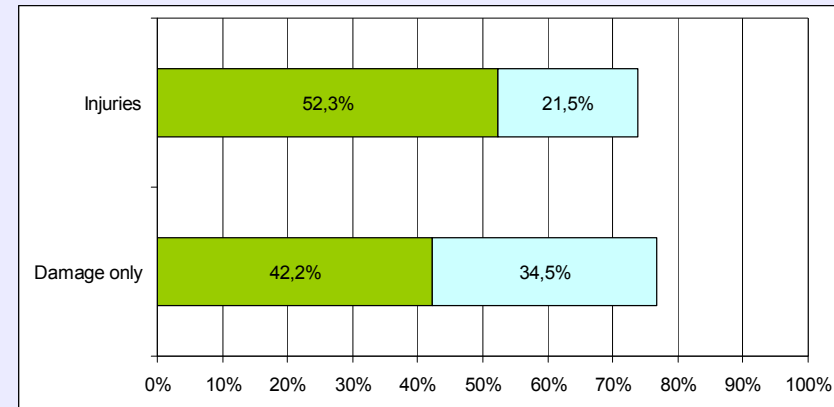


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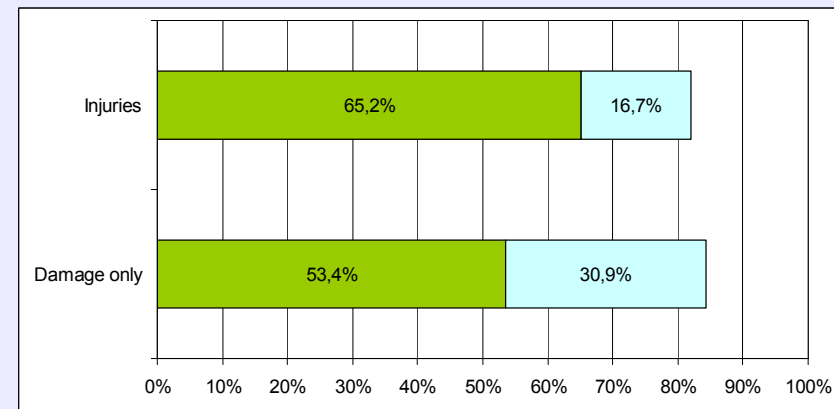


## ❖ Would you find useful...

A guidance navigation system to help you find your destination?



A congestion (traffic jam) warning device?



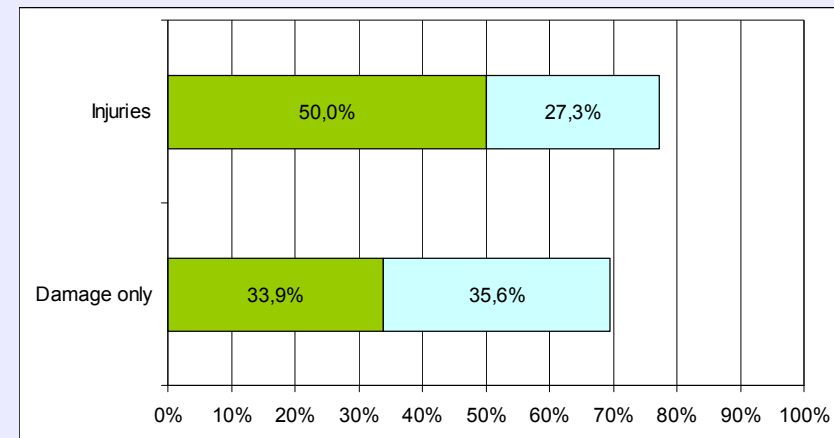


## Greek Driver Needs 2/3

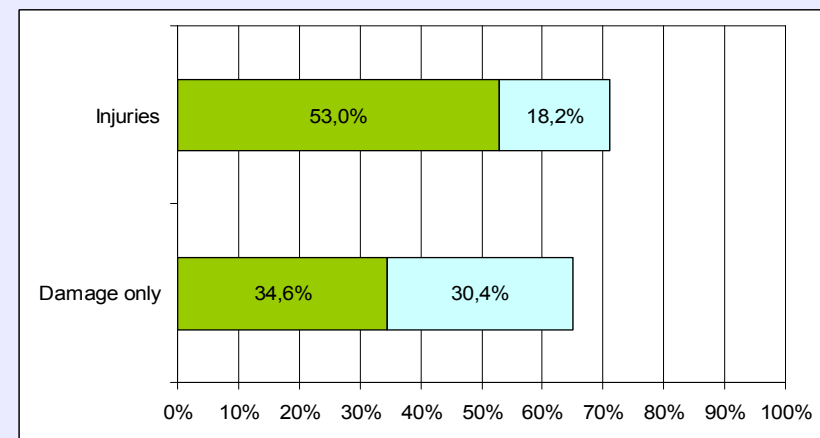


### ❖ Would you find useful...

A system that prevented you exceeding the speed limit?



An alcohol-meter to check if you had been drinking and that prevented you driving if you were over the limit?

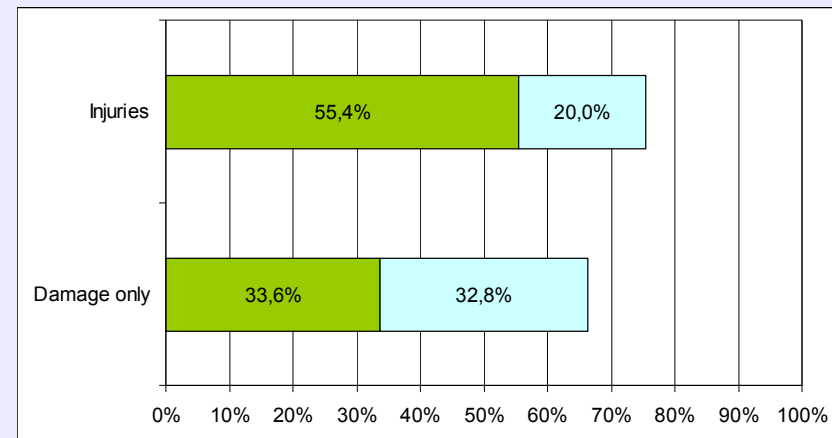


## Greek Driver Needs 3/3



### ❖ Would you find useful...

A system that detected 'fatigue' and forced you to take a break?



### ❖ OVERALL - GREEK drivers find

...more useful information systems, and namely the warning congestion system, regardless of the accident history classification.

..least useful the alcohol system (damage and injuries), regardless of the accident history classification

# Greek Driver Acceptability 1/3

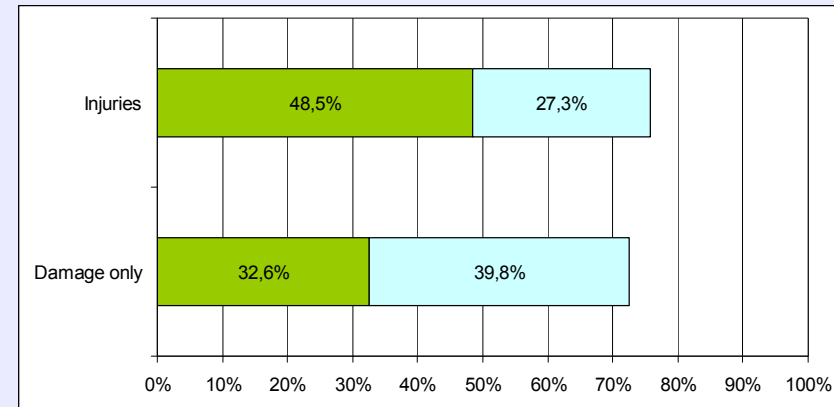


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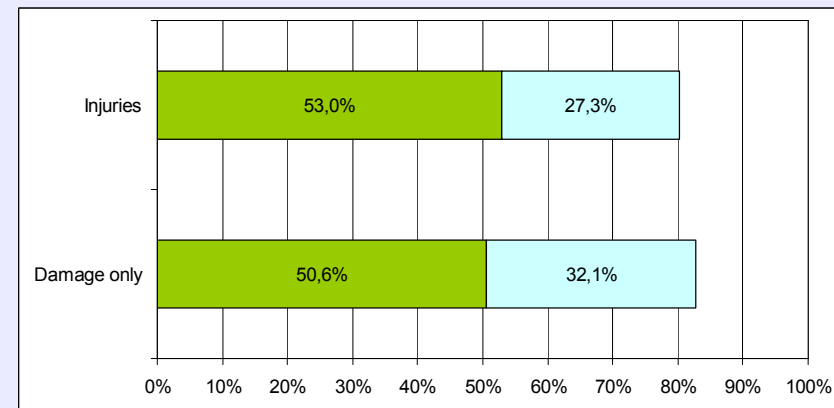


## ❖ Would you be in favour of...

Speed limiting devices fitted to cars that prevent drivers exceeding the speed limit?



The use of a 'black box' to identify what caused an accident?

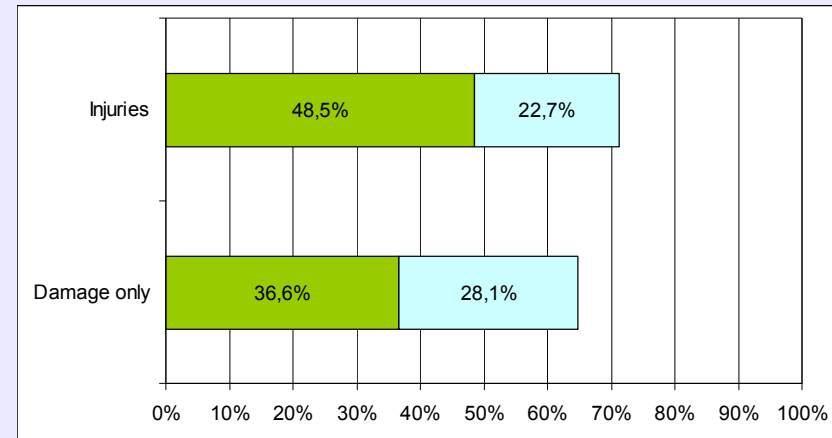


# Greek Driver Acceptability 2/3

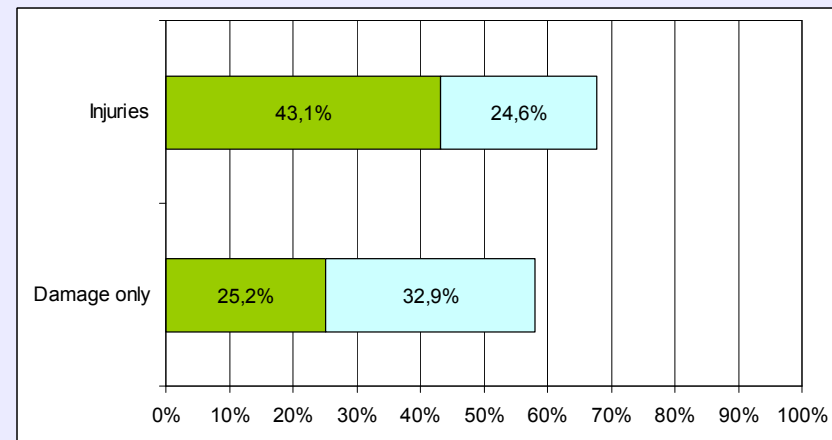


## ❖ Would you be in favour of...

The use of a 'black box' to record a driver's behaviour that could be used as evidence by the police to prove speeding/dangerous driving?



Electronic identification of your vehicle that would give access to services?

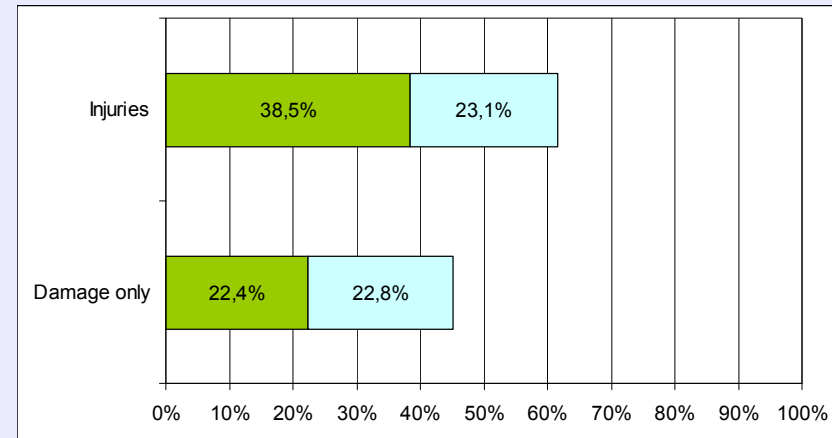


## Greek Driver Acceptability 3/3



### ❖ Would you be in favour of...

Electronic identification of your vehicle also for enforcement by the police?

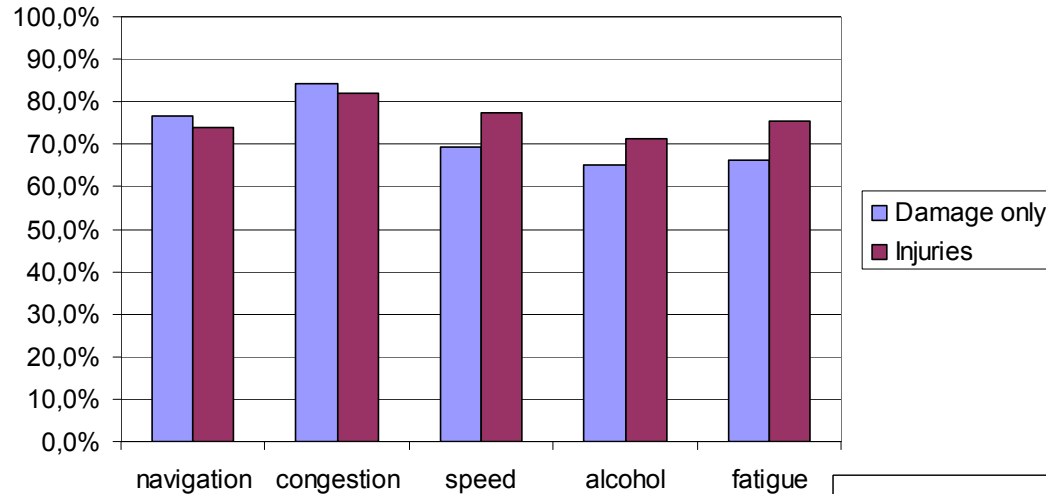


### ❖ OVERALL - GREEK drivers would be

...most in favour of a black box providing information about the accident, regardless of the accident history classification.

..least in favour of electronic identification providing information to the police, regardless of the accident history classification.

# Conclusions 1/2



Need:

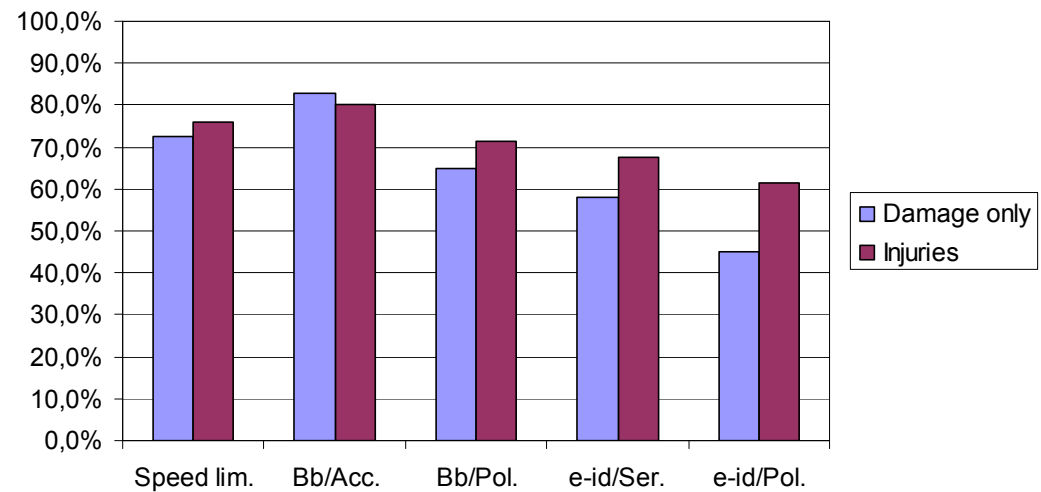
is ↑ for information systems

↑ with accident severity for control systems

Acceptability:

is ↑ for non intruding -  
intervening systems

↑ with accident severity for  
intruding-intervening  
systems



- ❖ Both needs and acceptability score quite high
- ❖ There is a trend showing influence of accident history and driver attitudes
- ❖ Updated Clustering

### Good/Popular Systems

- Route Guidance
- Traffic Congestion
- Black Box (accident data)
- e-identification (data for driver services)



### Bad/Unpopular Systems

- Speed limit mon. & int.
- Alcohol mon. & int.
- Fatigue mon. & int.
- Black Box (driver behaviour)
- e-identification (data to police)

## Future Work..



### ❖ Include the 'no accident' category in the analysis

Model estimated number of accidents (damage only or injury) from a number of parameters including driver and other specific characteristics and driver attitudes towards needs and acceptability...



### ❖ Check for correlations between driver attitude towards ITS and driver characteristics

### ❖ Check for correlations between driver attitude to specific ITS (alcohol,ISA) and related experience





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**THANK YOU !!**



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**Ioanna Spyropoulou**  
[iospyrop@central.ntua.gr](mailto:iospyrop@central.ntua.gr)