



Safety Management Systems

Road traffic and transport

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Henk Stipdonk, SWOV

Expertise

physics, traffic theory, navigation safety, road safety, data, analysis

Team

data-experts, civil engineers, psychologists, mathematicians, ...

Projects

Pendant, SafetyNet, DaCoTA, SafetyCube, SaferWheels, SaferAfrica, ...

Methods

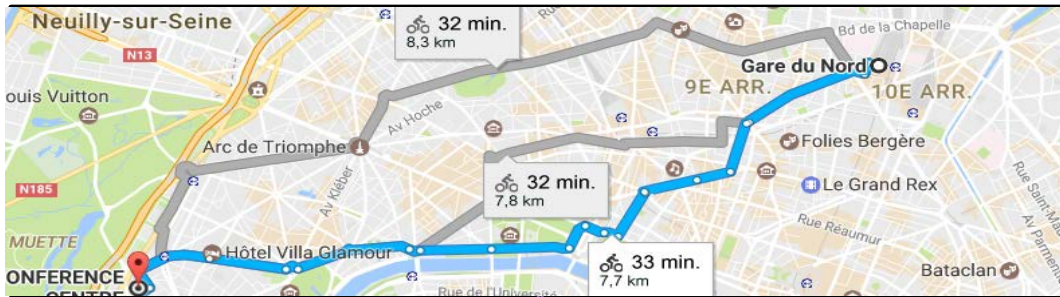
In depth analysis, data matching, empirical research, instrumented bicycles, ...

Data sets

Crashes, mobility, hospital, violations, fleet, driving license, infrastructure, ...

Risk, distance travelled and casualties

Distance travelled



Casualties (road deaths, serious road injuries)

Risk determined by conditions and properties:
SPI's, measures, factors

Improve safety by controlling risk factors

Road Safety Management Systems

Comparison between Road and rail/air/navigation:

- Hardly any professional users (except truck-taxi- and bus drivers)
- Very many different (road) authorities (municipalities, provinces)
- Enforcement: secondary police task
- Diversity in users (pedestrians, cyclists, trucks)
- Road users not always formally trained
- Guidelines (road design, enforcement) ignored

Road Safety is relatively poor

Road safety worldwide is a major problem

- 1.2million road deaths annually
- no internationally organised approach
- highly diversified problems
- very difficult to improve
- approaches are multiple

- it is everyone's problem, hence it is no one's problem

How to introduce an SMS in road safety

We need to distinguish two sectors:

- SMS in professional road transport organisations (a real challenge)
- SMS in road safety in general (the real challenge)

SMS for Professional road users

Some current Dutch SMS initiatives (ILenT)

1. System supervision

- drive and rest times for truck drivers
- truck overloading
- regulations regarding transport of dangerous goods.

2. Weighing in Motion (WiM)

3. Safety Culture

SMS for road safety in general

- The safe system approach (OECD)
- Sustainable safety (NL)
- Zero vision (SE)

A shared responsibility exists amongst those who design, build, maintain and use roads and vehicles and provide post-crash care to prevent crashes resulting in serious injury or death.

The only way to make road traffic safe is by professionally removing all risk factors of travellers.

The professionals need to take over.