

**ITS CONGRESS 2017:
ITS IN LOCAL
DECISIONS**

Friday, 29 September 2017



ISA on all policy levels

Knowledge sharing session

ISA on all policy levels

ITS Congress 29/ 9/ 2017

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<http://etsc.eu/projects/is safer/>

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European Transport Safety Council

ETSC Network



iSAFER



To contribute to reducing speed-related road deaths and injuries across Europe.

Promoting the use of Intelligent Speed Assistance (ISA) at European and national level.

FUNDACIÓN **MAPFRE**



3M

25,670

people died in road traffic in the
EU28 in 2016

135,000*

seriously injured in
road traffic in the EU
in 2014

**Estimation for the European Commission based
on seriously injured as MAIS3+*

EU VEHICLE SAFETY STANDARDS

- Figures would have been significantly higher without vehicle safety measures already taken by the EU
- **Vehicle safety standards: exclusive competence** (Article 114 of the EU Treaty)
- Last revision of the EU common vehicle safety rules in 2009 with the **General Safety Regulation 661/2009** and **Pedestrian Protection Regulation 78/2009**
- The European Commission is considering making **24 new vehicle safety measures mandatory, ISA is one of them**

24 measures considered for EU legislation



- **Overridable assisting ISA** on all new vehicles default **ON**

- **Alcohol interlocks** on professional vehicles and a standard interface for all vehicles



- **Seat belt reminders on all seats** for all new cars

- **Autonomous Emergency Braking (AEB)**

- **Event Data Recorders (EDR)**

- **Improved pedestrian** protection offered by cars



- **Safer truck fronts and sides**

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INTELLIGENT SPEED ASSISTANCE

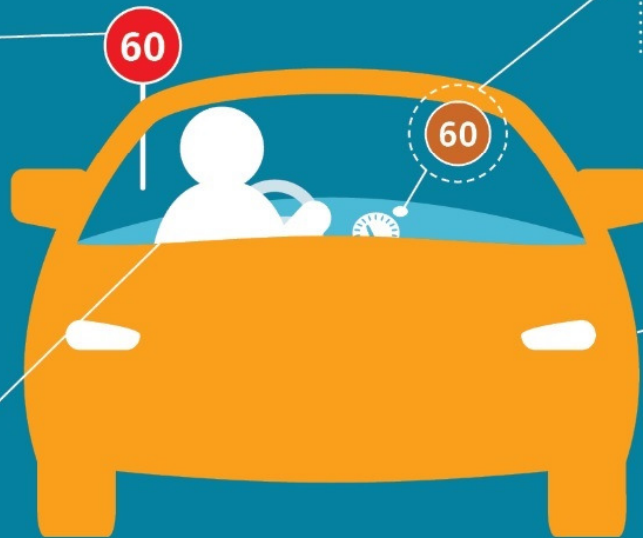
WHAT IS INTELLIGENT SPEED ASSISTANCE?

1. Car receives position information via GPS and current speed limit from a digital map. Can also be combined with video camera sign recognition.

2. Speed limit is displayed on the dashboard.

Driver can override system by pushing harder on accelerator.

3. Car helps driver not to speed when speed limit is reached.



INTELLIGENT SPEED ASSISTANCE

ISA COULD CUT **COLLISIONS BY 30%**
AND **DEATHS BY 20%**



Cars fitted with ISA
could **reduce CO₂**
emissions by **8%**



EuroNCAP awards
extra points to
cars fitted with ISA



78% of road users
64% of car drivers
say they support in-vehicle
speed limiters (SATRE 2012)

+ ISA helps drivers avoid speeding tickets !

TRL report 31/08/2017



**In depth cost-effectiveness analysis
of the identified measures and
features regarding the way forward
for EU vehicle safety**

Final Report

- 24 measures considered for mandatory fitment
- ISA is one of them
- Considered mature
- Cost benefit ration >1
- encouraging walking and cycling
- traffic calming effect
- reductions in insurance costs
- higher fuel efficiency
- reduced CO2 emissions

ALREADY AVAILABLE IN CARS

Ford S-Max, Galaxy, Volvo XC90, Citroen C3



ETSC movie 'Fit Safety as Standard'

<https://www.youtube.com/watch?v=SoZLrZTnUGs&t=26s>

All new London busses fitted with ISA

Mayor of London set out a 'Vision Zero' approach: no one to be killed in or by a London bus by 2030.

→ Bus Safety Programme: all new buses will have to be fitted with mandatory ISA

- TfL provides the Digital Speed Limit Map
- TfL buy ~900 buses /year. The whole fleet of 9000 buses will be renewed in 10 years.
- Technology for the ISA trial was provided by Zeta Automotive (part of Arriva group).



ISA as part of one integrated in-vehicle telematic system



Seat belt reminder



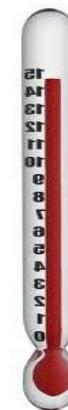
Follow up fuel consumption and CO2 emissions



Vehicle display



Alcohol interlock



Temperature monitoring



Central unit



Tachograph

Paving the way for autonomous cars

- ISA is the building block for future autonomous driving. Respecting speed limits is a pre-requisite for vehicle automation.
- Policymakers should not focus their regulatory eyes too far in the future. EU should introduce overridable, assisting ISA on all new vehicles.
- Semi-automated systems are already available and approved for use and have the potential to save many lives **today**.

Fitting **#SafetyAsStandard** as soon as possible

CONCLUSIONS

- Buy or procure fleets fitted with ISA today
- Ask your government to support the European Commission proposal (due in March 2018) in the Council, ask your MEP, your MPs
- Share our film
- Contribute to the online public consultation

https://ec.europa.eu/info/consultations/public-consultation-revision-vehicle-general-safety-regulation-and-pedestrian-safety-regulation_en



Q & A

- David Schoenmaekers, Belgian Federal Government, Department of Mobility and Transport,
- Ben Van Roose, Agoria
- Graziella Jost, ETSC
- Bert Boterbergh, Flemish Government, Mobility Department

Adding dynamic speed limits to Intelligent Speed Assistance

- C-ITS could enable dynamic ISA systems in which the speed limits were adjusted according to the prevailing conditions, just as they currently are in Smart Motorway management
- Dynamic speed management could be extended to all roads, without any need for the expensive installation of variable message signs
- A dynamic capability in ISA can add considerably to its overall safety impact (Carsten and Tate, 2005):
 - ISA with *fixed* speed limit information was predicted to save 37% of fatal accidents in GB
 - ISA with *dynamic* speed limit information was predicted to save 59% of fatal accidentsSo around a 60% increase in safety impact

TRL report 31/08/2017

- Share same camera with Automated Emergency Braking (AEB) and Lane Keeping Assistance (LKA)
- Would cost in the range of €47–62 per vehicle.
- The total cost for components (camera, ECU, brackets, trim, wiring) and OEM design and development, etc. was estimated at €186–249, *(NHTSA, 2012)*