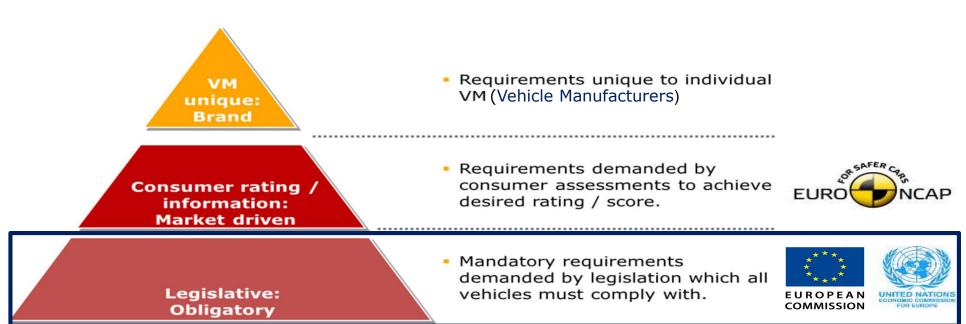




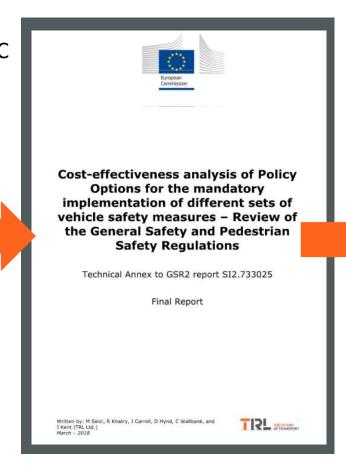
European Union





 2014-21: TRL supported the EC developing requirements and test procedures

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- 25 March 2019: The EU institutions reached a provisional political agreement on the revised GSR and PSR
- 16 April 2019: Positive vote in the European Parliament on the revised GSR and PSR proposed by the Commission in May 2018
 - **16 December 2019:** EC Journal Publication
- 5 January 2020: Entry into force
- 5 July 2022: Mandatory date

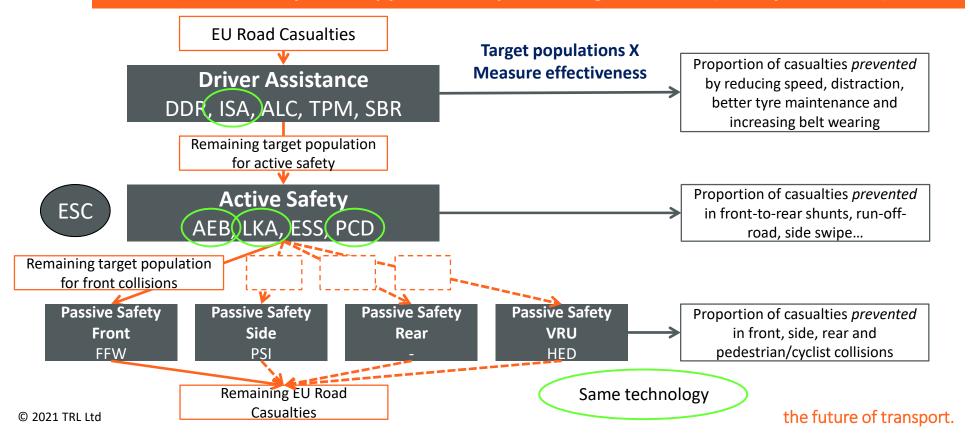
the future of transport.



Code	Measure name	Vehicle categories
AEB	Advanced Emergency Braking (light duty, vehicles and pedestrians/cyclists)	M1, N1
DDR	Driver Drowsiness and Attention Monitoring (DDAM), Advanced Distraction Recognition (ADR), and Driver Readiness Monitoring for Automated Driving (DRMAD)	M1, M2, M3, N1, N2, N3
EDR	Event Data Recorder	M1, M2, M3, N1, N2, N3
ELK	Emergency Lane Keeping	M1, N1
FFW	Frontal Full-Width Impact	M1. N1
HED	Pedestrian and Cyclist Enlarged Head Impact Zone	M1, N1
ISA	Intelligent Speed Assistance	M1, M2, M3, N1, N2, N3
REV	Reversing Safety	M1, M2, M3, N1, N2, N3
TPM	Tyre Pressure Monitoring (heavy duty)	M2, M3, N2, N3, O3, O4
VIS	Direct Vision & Pedestrian and Cyclist detection (heavy duty)	M2, M3, N2, N3
ALC	Alcohol interlock installation document	M1, M2, M3, N1, N2, N3
ESS	Emergency stop signal	M1, M2, M3, N1, N2, N3
PSI	Pole side impact occupant protection	M1, N1



TRL's 'vehicle safe system' approach for preventing casualties (example for cars)

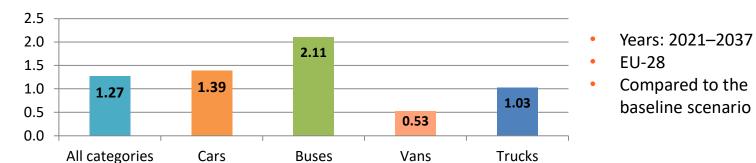




TRL Cost Effective study on behalf of the European Commission

- Savings of 700,000 casualties (25,000 fatalities, 141,000 serious casualties prevented)
- Cost-effective Benefits to society exceed the costs
- The GSR proposal is technologically advanced helping the EU Industry to remain competitive with regard to the challenges of developing automated vehicles

Cost-effectiveness Benefit-to-cost ratios (BCR) of the Commission Proposal



Values greater than 1 indicate that the benefits are greater than the costs

the future of transport.



UK Position on GSR and PSR

- Updates will not be applied automatically adopt in full, partially or not at all?
- Cost effective benefits are only achieved through full package of measures
 International trade deals and automotive safety standards
- Without action the UK will have lower minimum safety standards than EU27
 The Carbon-Safety Link ... Opportunity for the UK to lead the world
- Planning for zero carbon journeys with zero fatalities must embrace innovation and mobility changes – driven by cost, digitalization, connectivity and automation



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