



# Effective road safety measures in Greece

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## INTRODUCTION

Despite the significant progress achieved in road safety performance over the last decade, Greece, with 584 deaths in 2020, still lags far behind the EU average. In order to effectively address the major social and national issue of road crashes, a new **Strategic Plan for the improvement of road safety in Greece for the period 2021-2030** was recently developed by the Hellenic Ministry of Infrastructure and Transport with the scientific support of the Department of Transportation Planning and Engineering of NTUA.

## OBJECTIVE

The objective of this paper is the presentation of road safety **actions and measures** proposed in the framework of the development of the Greek Strategic Road Safety Plan for the period 2021-2030.

	UN Road Safety Pillars	Actions	Measures
M	Road Safety Management	9	40
B	Road User Behaviour	8	40
I	Road Infrastructure & Traffic	13	61
V	Vehicle	8	31
P	Post-crash Care	6	28
	<b>Total</b>	<b>44</b>	<b>200</b>

## ROAD SAFETY ACTIONS AND MEASURES

(M) Actions	(M) Measures
<b>M1. Integrated Road Safety Management Structure</b>	M1.1 Governmental Committee, M1.2 National Road Safety Body, M1.3 Organization of Road Safety Units, M1.4 National Road Safety Council, M1.5 ISO 39001 Certification
<b>M2. Road Safety Law</b>	M2.1 Institutionalization of responsibilities, M2.2 Institutionalization of accountability
<b>M3. Road Safety Fund</b>	M3.1 Function of Fund Management Authority, M3.2 Road Safety Fund Revenue System, M3.3 Budget Allocation and Execution
<b>M4. Road Safety Observatory</b>	M4.1 Collection of Crash data, M4.2 Collection of Traffic data, M4.3 Collection of Performance Indicators data, M4.4 Collection of Perception data, M4.5 Technical Analyses, M4.6 Monitoring the progress of actions, M4.7 Publication of Statistics and Results, M4.8 International Rankings
<b>M5. Road Traffic Code</b>	M5.1 Comprehensive penalty policy, M5.2 Settings for vulnerable road users, M5.3 Codification of Legislation
<b>M6. Infringement System Management</b>	M6.1 Change of Legal Framework, M6.2 Digital recording of traffic infringements, M6.3 Organization of a Traffic Infringement Management Center, M6.4 Driver Behavior Control System Automation, M6.5 System for informing road users on violations
<b>M7. National Road Safety Communication Policy</b>	M7.1 Central ten-year road safety campaign, M7.2 Annual thematic road safety campaigns, M7.3 Special Communication Actions, M7.4 Information campaigns in touristic areas, M7.5 Collaboration with Mass Media
<b>M8. Road Safety Action Plans</b>	M8.1 Road Safety Action Plans in Municipalities, M8.2 Road Safety Action Plans in Regions, M8.3 National Road Safety Action Plan for Motorcycles, M8.4 National Speed Management Action Plan, M8.5 Road Safety Action Plan in Touristic Areas, M8.6 Action Plan for the Adaptation to Automated Traffic
<b>M9. Road Safety Research</b>	M9.1 Interdisciplinary Road Safety Research, M9.2 Research on automated traffic, M9.3 Highlighting road safety research results
(B) Actions	(B) Measures
<b>B1. Enforcement</b>	B1.1 Systematic and targeted enforcement for road safety, B1.2 Monitoring and publication of monitoring results, B1.3 New Patrol Vehicles, B1.4 Surveillance cameras, B1.5 Equipment for alcohol and substances tests, B1.6 Violation and crash recording equipment, B1.7 Cross-border enforcement of sanctions
<b>B2. Driving Licenses</b>	B2.1 Upgrading of driver training and examination system, B2.2 Training and examination in hazard perception, B2.3 Accompanied driving, B2.4 Continuous training of professional drivers
<b>B3. Driver Education/Training</b>	B3.1 Continuing driver training programs, B3.2 Training in new driver support systems, B3.3 Training and performance assessment of professional drivers, B3.4 Diagnostic (traffic-psychological) evaluation of offenders, B3.5 Re-education of recidivist offenders, B3.6 Training through simulation
<b>B4. School Education</b>	B4.1 Education programs for children (<12 years old), B4.2 Education programs - adolescent education, B4.3 Train the trainer programs, B4.4 Education programs for parents, B4.5 Introduction of Traffic Education in Pedagogical Schools, B4.6 Traffic Education Parks, B4.7 Modernization of e-drive academy operation
<b>B5. Information Campaigns</b>	B5.1 Coordination of information campaigns of Public and Private Bodies, B5.2 Systematic information campaigns, B5.3 Public-Private Partnerships, B5.4 Coordinated campaigns with enforcement and infrastructure actions
<b>B6. Priorities for Driver Behaviour Improvement</b>	B6.1 Speed management, B6.2 Driver distraction, B6.3 Driving under the influence of alcohol, B6.4 Driving under fatigue, B6.5 Violation of priority
<b>B7. Protective Equipment Use</b>	B7.1 Helmet, B7.2 Safety belt, B7.3 Child restraint systems, B7.4 Safety equipment for bicyclists
<b>B8. Telematics</b>	B8.1 Promoting driver behavior monitoring using telematics, B8.2 Compulsory insurance with telematics for specific categories of drivers, B8.3 Telematics in fleet safety management
(I) Actions	(I) Measures
<b>I1. Integrated Management of Mobility</b>	I1.1 Metropolitan Agency for Mobility in Athens, I1.2 Integration of Road Safety in Sustainable Urban Mobility Plans (SUMP), I1.3 Upgrade and staff public transport, I1.4 Ensuring priority in public transport
<b>I2. Speed limits revision</b>	I2.1 Speed limit suitability check, I2.2 30 km/h zones in urban centers, I2.3 Reduction of speed limit to 80km/h in the rural network, I2.4 Introduction of variable speed limits on motorways
<b>I3. Speed management</b>	I3.1 Infrastructure adaptation, I3.2 Section control, I3.3 Dynamic speed signs
<b>I4. Road Safety Audit</b>	I4.1 Digital Road Register, I4.2 Road network safety assessment, I4.3 Road Safety Audit on the Existing Rural Network, I4.4 Road Safety Audit on the Existing Urban Network, I4.5 Road Safety Audit on New Road Works
<b>I5. Improvements in High Risk Sites on the Rural Road Network</b>	I5.1 Marking, I5.2 Safety barriers, I5.3 Improvement of electric lighting, I5.4 Roadside treatment, I5.5 Assessment and improvement of visibility, I5.6 Road pavement maintenance, I5.7 Upgrading of signage, safety barriers, electric lighting, vegetation, I5.8 Interventions at level train crossings
<b>I6. Interventions on the Rural Road Network</b>	I6.1 Road redesign, I6.2 Modification of road cross-section, I6.3 Redesign of intersections, I6.4 Roundabouts, I6.5 Leveling of intersections
<b>I7. Large Scale Infrastructure Projects</b>	I7.1 Upgrading roads to motorways, I7.2 Creation of bypass roads of settlements, I7.3 Preparation and implementation of tunnel safety plans, I7.4 Undergrounding of railway lines in cities

(I) Actions	(I) Measures
<b>I8. Interventions in the Urban Road Network</b>	I8.1 Redesign of intersections, I8.2 Roundabouts, I8.3 Widening of sidewalks, I8.4 Road pavement maintenance, I8.5 Upgrading of signage, safety barriers, electric lighting, vegetation
<b>I9. Traffic Calming Measures</b>	I9.1 Traffic Calming Measures, I9.2 20 km/h limit outside schools, I9.3 Upgrading of pedestrian crossings, I9.4 Creation of pedestrian roads
<b>I10. Pedestrian, Bicycle and e-Scooter Traffic</b>	I10.1 Creating infrastructure for bicycle traffic, I10.2 Configuration of intersections, I10.3 Special pedestrian crossing signage, I10.4 Update bicycle traffic rules
<b>I11. Road Safety Traffic Regulations</b>	I11.1 Improvement of signaling, I11.2 One-way roads, I11.3 Parking management, I11.4 Access control on highways, I11.5 Heavy vehicle traffic restrictions, I11.6 Creating overtaking lanes, I11.7 Management of adverse weather conditions
<b>I12. Road Works Management</b>	I12.1 Application of appropriate marking and signage, I12.2 Reduction of road works duration, I12.3 Proper restoration of road pavement, I12.4 Proper restoration of horizontal and vertical markings, I12.5 Driver information campaigns
<b>I13. Regulations</b>	I13.1 Updating and supplementing instructions and regulations, I13.2 Land use management, I13.3 Updating and supplementing urban planning regulations
(V) Actions	(V) Measures
<b>V1. Vehicle Fleet Renewal</b>	V1.1 Incentives for car fleet renewal, V1.2 Incentives for commercial fleet renewal, V1.3 Privileges for safe vehicles, V1.4 Systematic updating of EuroNCAP results
<b>V2. Vehicle Digital Identity</b>	V2.1 Vehicle Technical Inspection Centers interconnection system, V2.2 Integrated vehicle information system, V2.3 Driver information system
<b>V3. Vehicle Technical Inspection</b>	V3.1 Systematic vehicle inspections, V3.2 Special technical inspection of vehicles for tourism, V3.3 Reliability check of vehicle technical inspection
<b>V4. New active safety systems</b>	V4.1 Driver warning systems, V4.2 Driver support systems, V4.3 Electronic Tachograph, V4.4 Alcohol detector-key system, V4.5 Installation of black box in all vehicles, V4.6 Blind spot mirrors on trucks, V4.7 Pedestrian / bicyclist detection sensors in trucks
<b>V5. New passive safety systems</b>	V5.1 New child restraint systems, V5.2 Pedestrian protection systems, V5.3 Motorcycle protection systems
<b>V6. Regulations</b>	V6.1 Implementation of European Directives and Regulations, V6.2 Vehicle communication with other vehicles, infrastructure, and users (V2X), V6.3 Implementation of Regulation for Transport of Dangerous Goods, V6.4 Vehicle insurance check
<b>V7. Fleet safety management</b>	V7.1 Establishment of a vehicle fleet safety certification body, V7.2 Promoting fleet safety systems in companies, V7.3 Public Procurement only with certified companies
<b>V8. Connected &amp; Automated Vehicles</b>	V8.1 Legislative adjustments for automated vehicles, V8.2 Development of technological infrastructure for automated vehicles, V8.3 Vehicle - Road Infrastructure (V2I) Communication, V8.4 Automated Traffic Organization
(P) Actions	(P) Measures
<b>P1. Intervention Time Reduction</b>	P1.1 Promotion of the eCall system, P1.2 Promotion of the 112 call, P1.3 Response time performance indicators, P1.4 Emergency Lane assurance, P1.5 Organization of emergency vehicles in Motor Service Stations, P1.6 Plans for the location of emergency intervention units, P1.7 Development of a network of special rescue means, P1.8 Air transport system organization
<b>P2. Enhancing Emergency Response Units</b>	P2.1 Adequate staffing of units with rescuers, P2.2 Training of emergency response executives, P2.3 New Fire Brigade Vehicles, P2.4 New Fire Brigade Equipment, P2.5 New Ambulances, P2.6 New Ambulance Equipment, P2.7 Creation of Mobile Medical Units
<b>P3. First aid driver training</b>	P3.1 Training of candidate drivers in first aid, P3.2 Lifelong education of all citizens in first aid, P3.3 Driver training in crash management
<b>P4. Hospital Care Improvement</b>	P4.1 Organization of emergency care units, P4.2 Creation of Trauma Centers, P4.3 Organization of a network of care centers, P4.4 Multi-Injury Care Protocols (triage), P4.5 Blood Bank for the injured in road crashes
<b>P5. Establishment of Trauma Registry</b>	P5.1 Development of an Electronic Trauma Register, P5.2 Application of MAIS3+ protocol
<b>P6. Support of Road Crash Victims</b>	P6.1 Establishment of rehabilitation centers for the injured, P6.2 Psychological support for road crash victims, P6.3 Training of judicial officers

## KEY PRIORITY ACTIONS

The 200 Road Safety Measures were categorised based on their implementation priority (high, medium, low) that was determined through a **Delphi survey** among 21 road safety experts in Greece.

UN Road Safety Pillars	Key Priority Actions
Road Safety Management (M)	New Road Safety Law, Integrated System of Infringement Management, National Road Safety Fund, National Road Safety Observatory, Ten-year Communication Policy
Road User Behaviour (B)	Systematic Enforcement (Priorities for Driver Behaviour Improvement, Protective Equipment Use)
Road Infrastructure & Traffic (I)	Integrated Management of Mobility, Interurban Roads Improvements, Interventions in Cities, 30 km/h Zones in cities, Road Works Management
Vehicle (V)	Vehicle Digital Identity, New active safety systems
Post-crash Care (P)	Intervention Time Reduction

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