

2nd Meeting of Western Balkans Road Safety Observatory
Role of the Traffic Safety Agency and Importance of reliable data in Policy Making

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Road Safety in Greece

A decade of improvements

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NTUA Road Safety Observatory

- The NTUA Road Safety Observatory (www.nrso.ntua.gr) is a **Center of Research and Innovation Excellence on Road Safety**, with global recognition [ranked: 2nd in Europe and 6th worldwide (AAP 2018)]
- A **Team of 35+ Scientists**: internationally recognized Professors, Senior Transportation Engineers, PostDoc, PhD Candidates and other scientists
- An **international reference website** - information system with state-of-the-art road safety data and knowledge:
 - more than 100.000 visits per year
 - 100+ electronic newsletters since 2007
 - tens of tweets and social media posts annually (160.000 post views)
 - network of more than 4.500+ road safety experts in Greece (1.000+) and worldwide (3.500+)
- An excellent **research activity**:
 - More than 100 Diploma Theses & 6 PhD Theses,
 - More than 100 road safety research projects, mostly highly competitive,
 - More than 500 road safety publications (> 200 in scientific Journals),
 - More than 100 scientific commissions,
 - International Cooperations: European Commission, UN/ECE, OECD/ITF, WHO, World Bank, EIB, CEDR, FEHRL, ERF, IRF, UITP, ETSC, WCTR, TRB, decades of Universities and Research Centers.



George Yannis, Road Safety in Greece - A decade of improvements



Presentation Outline

1. Basic Road Safety Figures in Greece (4)
2. Overview of the decade 2011-2020 (5)
3. Next Steps for the decade 2021-2030 (3)
4. Key Lessons and Opportunities (2)

Basic Road Safety Figures in Greece





| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020/2019 | 2020/2010 | 2016/2020 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|-----------|
| Injury Road crashes | 15,032 | 13,849 | 12,398 | 12,109 | 11,690 | 11,440 | 11,318 | 10,848 | 10,737 | 10,712 | 9,105 | -15.0% | -39.4% | -19.6% |
| Fatalities | 1,258 | 1,141 | 988 | 879 | 795 | 793 | 824 | 731 | 700 | 688 | 579 | -15.8% | -54.0% | -29.7% |
| Serious Injuries | 1,709 | 1,626 | 1,399 | 1,212 | 1,016 | 999 | 879 | 706 | 727 | 652 | 487 | -25.3% | -71.5% | -44.6% |
| Slight Injuries | 17,399 | 15,633 | 14,241 | 13,963 | 13,548 | 13,097 | 12,946 | 12,565 | 12,422 | 12,350 | 10,130 | -18.0% | -41.8% | -21.8% |
| Vehicle Fleet (x1000) | 8,062 | 8,087 | 8,070 | 8,035 | 8,048 | 8,076 | 8,173 | 8,263 | 8,237 | 8,402 | 8,519 | 1.4% | 5.7% | 4.2% |
| Fatalities per million vehicles | 156 | 141 | 122 | 109 | 99 | 98 | 101 | 88 | 85 | 82 | 68 | -17.0% | -56.4% | -32.6% |
| Speed infringements | 263,382 | 238,033 | 186,675 | 178,816 | 156,892 | 173,476 | 176,592 | 208,190 | 213,333 | 234,169 | 206,554 | -11.8% | -21.6% | 17.0% |
| Drink & drive infringements | 38,033 | 34,992 | 30,707 | 30,853 | 29,597 | 29,191 | 33,192 | 32,964 | 33,394 | 31,557 | 19,096 | -39.5% | -49.8% | -42.5% |
| Seat belt infringements | 49,703 | 37,120 | 33,722 | 35,478 | 34,526 | 29,611 | 34,831 | 31,510 | 33,380 | 34,594 | 30,174 | -12.8% | -39.3% | -13.4% |
| Helmet infringements | 51,526 | 47,250 | 47,736 | 58,122 | 54,354 | 52,783 | 63,971 | 59,405 | 52,706 | 52,089 | 46,394 | -10.9% | -10.0% | -27.5% |

Road fatalities in Greece have decreased by **54%** since 2010, however injury road crashes decreased only by **39%**

The rate fatalities per number of vehicles has decreased by **56% since 2010**

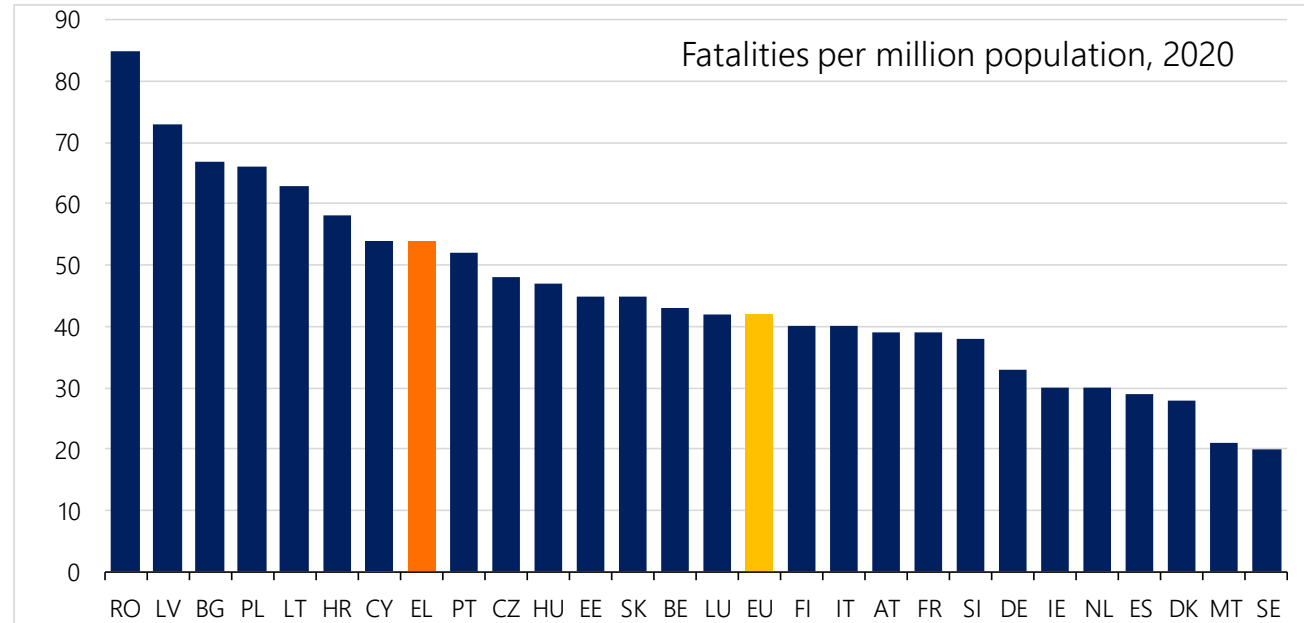
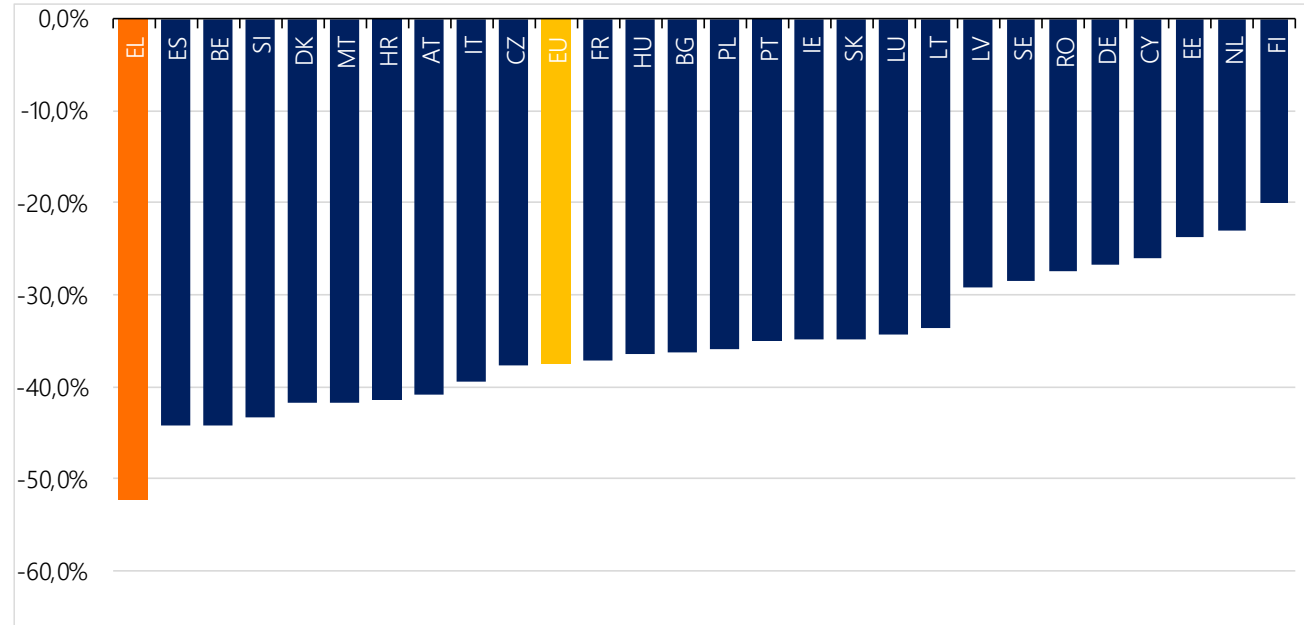
A significant **annual decrease by 16%** in road fatalities was recorded in 2020, also **due to the pandemic** and related traffic restrictions



Notes: Figures in *italics* are based on provisional data
 Issued: March 3rd, 2021
 About the data: www.nrso.ntua.gr/wp-content/uploads/nrso-data-gr9.pdf
 Sources: Hellenic Statistical Authority (ELSTAT)
 Traffic Police
 Processing: NTUA - Road Safety Observatory

Evolution of Road Fatalities Greece, 2010-2020

- Over the last decade, Greece recorded the **highest decrease in road fatalities** per million population (**52%**) in the EU
- At EU level, road fatalities per million population were **decreased by 37,5%** over the same period
- With 54 fatalities per million population, **Greece is ranked 20th** in 2020 (from position 26th in 2010)



Road Crash Factors in Greece

- Driving at high **speeds**
- High rates of **motorcyclists**
- Low rates of **seat belt** and **helmet** use, especially for passengers
- Unorganised and unprotected traffic of **vulnerable road users**
- Driving under the influence of **alcohol** and using a **mobile phone**
- **Aggressive driving**

| % Fatalities (2019) | Greece | EU (27) |
|-----------------------------------|--------|---------|
| Inside built up areas | 54% | 39% |
| Drivers | 68% | 64% |
| Passengers | 11% | 15% |
| Pedestrians | 21% | 20% |
| Powered Two Wheelers | 36% | 18% |
| Young Drivers (18-24) (% drivers) | 13% | 13% |
| Elderly Drivers (64+) (% drivers) | 21% | 23% |
| Single Vehicle Accidents | 52% | 39% |

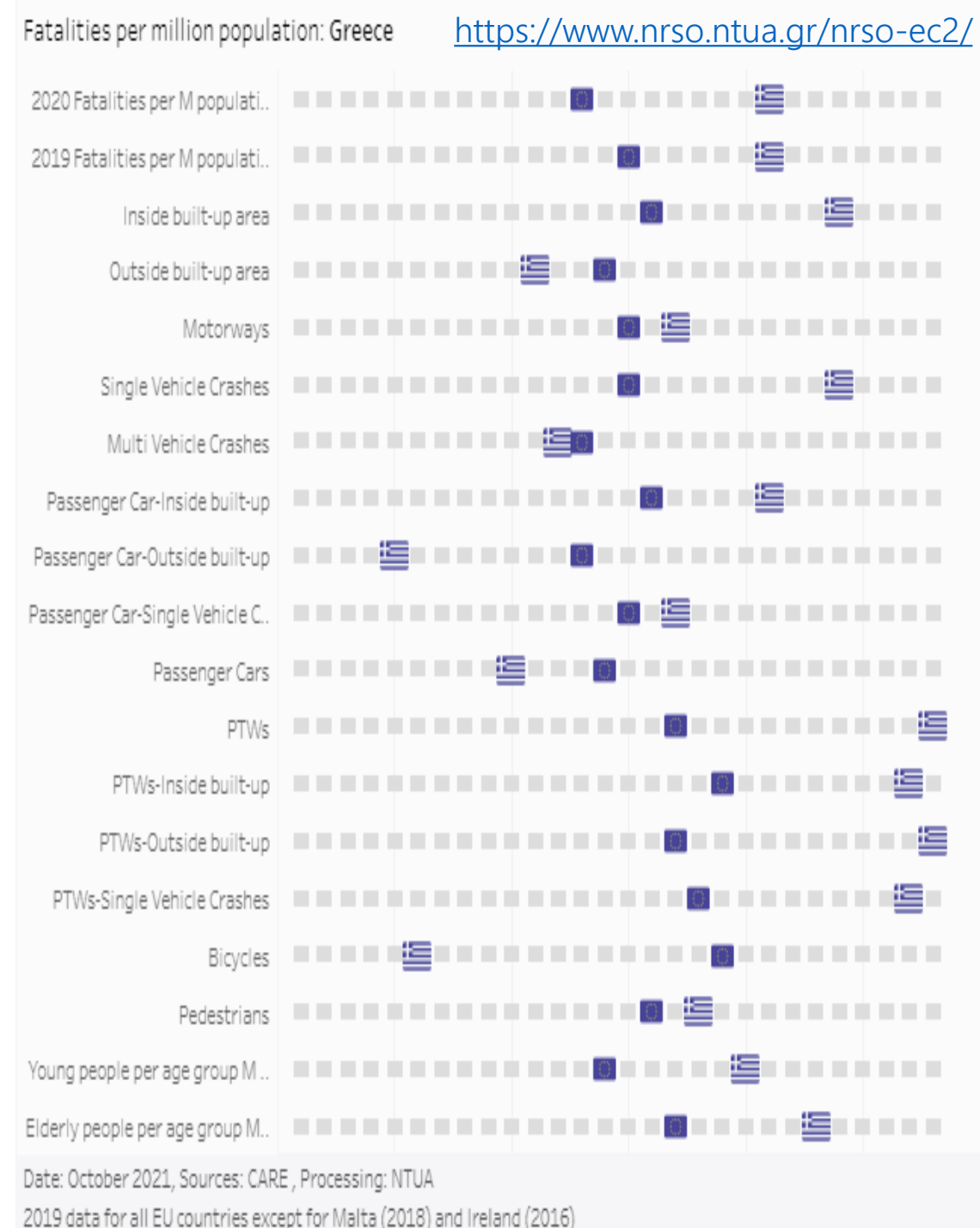
| Fatalities in Passenger Cars (2019) | | |
|-------------------------------------|--------------------------------|-------|
| Seat belt use | No seat belt use/ not recorded | Total |
| 53 | 149 | 202 |
| 26% | 74% | 100% |

| PTW Fatalities (2019) | | |
|-----------------------|-----------------------------|-------|
| Helmet use | No helmet use/ not recorded | Total |
| 84 | 163 | 247 |
| 34% | 66% | 100% |



PTW vs Passenger Car Fatalities in Greece

- Greece **ranked 20th among the EU countries** in terms of road fatalities per million population
- Greece had the **highest PTW fatality rate** in the EU (**27th**) with 23 fatalities per million population, while the EU average was about 9
- Concerning **passenger car** fatalities, Greece is ranked in **10th position**, with 19 fatalities per million population (the EU average is 23)



Overview of the Decade 2011-2020



Road Safety Management

- The **National Road Safety Strategic Plan 2011-2020** guided policy, programmes, measures and interventions
- The **Inter-Ministry Committee** on Road Safety was re-established in 2010 and under the chairmanship of the Prime Minister since 2014, assisted by the National Road Safety Council
- The Ministry of Transport has properly implemented all **EU Directives** (vehicles, driving licences, etc.) and all procedures concerning road safety are always tighter than those of the EU Directives
- Quite a lot of the **reforms imposed by the EU**, resulted in a more serious implementation of rules (vehicle insurance, driving licenses. etc.)



Road Infrastructure

- Major **improvement of the main road network** (from 750km of motorways in 2007 to 2.200 km in 2018), with traffic from unsafe interurban roads having been shifted to new motorways, safest roads by design
- Several Local Authorities developed and implemented **city mobility and safety plans** focusing on infrastructure but often also on campaigns
- The detailed specifications for **cycling infrastructure** were officially adopted, whereas in 2018 several provisions for cycle traffic were also officially adopted
- The **Road Infrastructure Safety Management Directive** has been in application since 2012 and all new major road projects have been road safety audited



Road User Behaviour

- Local police often do enforce safe behaviour. Traffic police statistics indicate a **steady number of checks and infractions** during the last decade
- **New traffic fines scheme** was introduced (2018) based on infringement safety importance and offenders' income
- Introduction of **vehicle control inspection** run by private entities; more efficient against corruption
- Massive and very efficient **campaigns**, training and other safety promotion activities



Economic Crisis

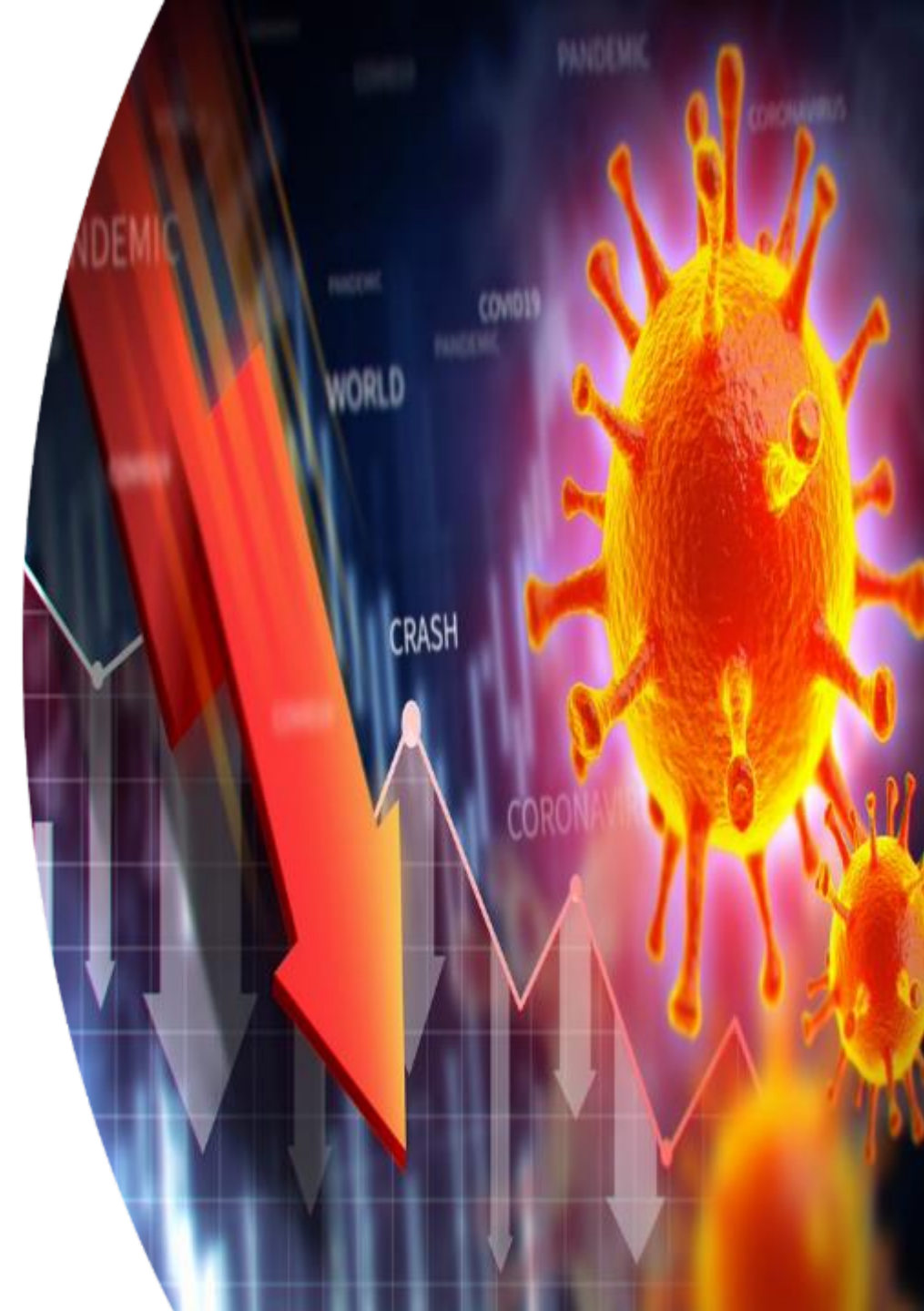
A Shock Therapy for Road Safety

- A significant part of the fatalities reduction over the last decade was initially attributed to the deep **economic crisis** (less veh-km, less speeding, etc.)
- An **average annual decrease of 11%** in road fatalities was recorded over the period 2010-2014
- Greek **drivers changed significantly their safety behaviour**, initially triggered by the economic crisis but maintained it also well after



COVID-19 Impact

- A **significant annual reduction** (16%) was recorded in traffic fatalities in 2020, mostly due to the pandemic
- Total number of trips and **distance travelled reduced** by **70%** (1st lockdown) and **37%** (2nd lockdown) for people driving and walking compared to the period before
- **Increase in average speed** by 10% (1st lockdown) and 3% (2nd lockdown) compared to the period before
- Promotion of **pedestrian and cycle traffic** with new infrastructure, in several cities (including the Athens Great Walk major urban regeneration project)



Next Steps for the Decade 2021-2030



Road Safety Strategic Plan Greece 2030



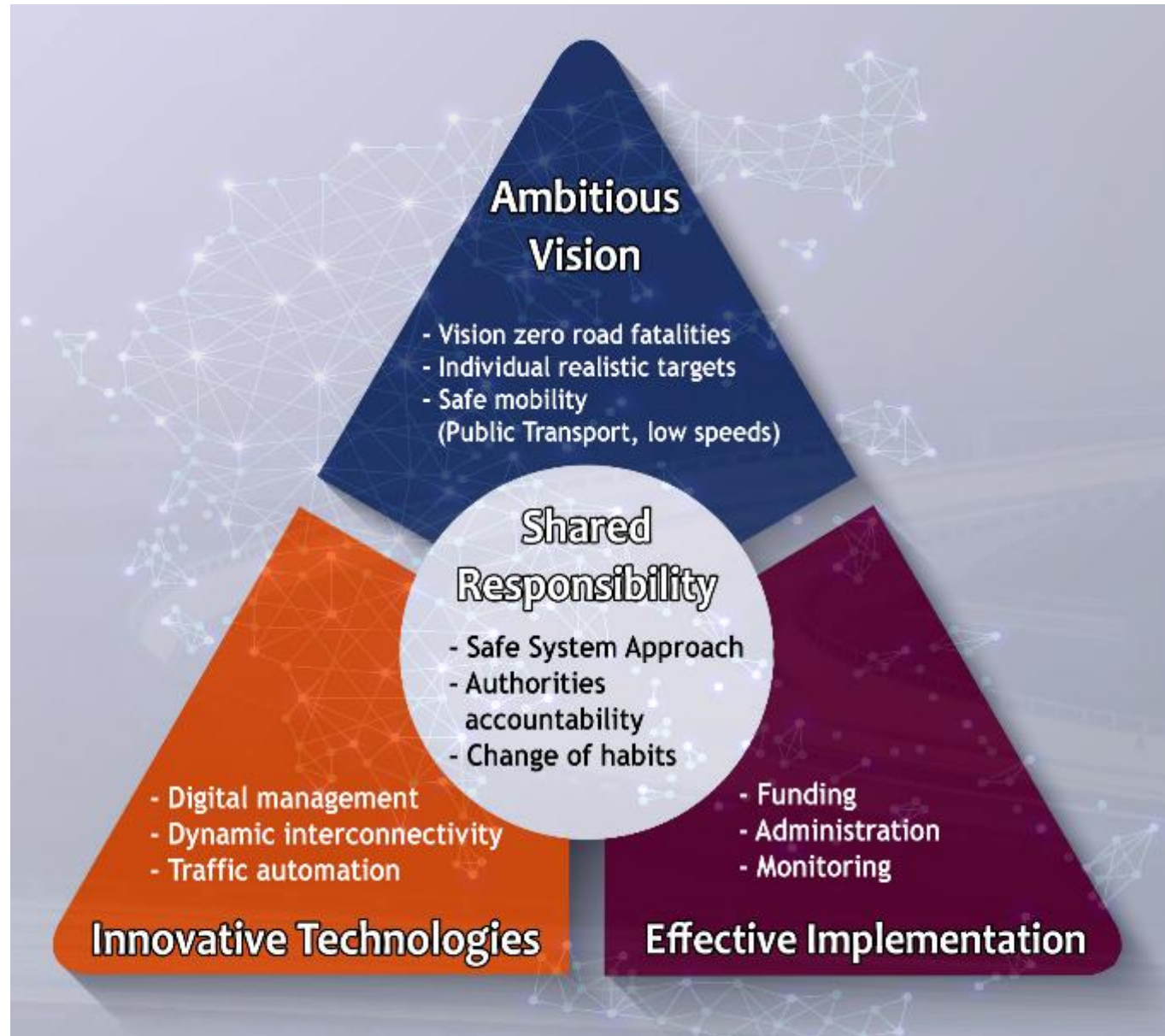
Road Safety Strategy 2021-2030

drafted by NTUA

- Adoption of:
 - **Safe System Approach**
 - **Vision Zero** by 2050
- **Alignment with** the European Strategy aiming to reduce the number of fatalities and serious injuries in road accidents **by 50% by 2030** with 2019 as the baseline year (according to EU decisions)



Ambitious Vision – Shared Responsibility



Action Plan for Road Safety

- New **National Road Safety Law**
- New **National Road Safety Fund**
- Revision of **Road Traffic Code**
- New **National Observatory for Road Safety**
- A large **road safety interventions program** (intervention at 7.000 high risk sites) EIB funding
- Introduction of automated electronic procedures for **monitoring traffic violations**
- Action plan for **motorcycle safety**
- Action plan for speed **management**



Key Lessons and Opportunities



Concluding Remarks

- Greece is a **success story** of significant road safety improvement by shock therapy
- The economic crisis was the main trigger for Greek Authorities and Greek drivers to **change their road safety behaviour**, which was maintained when the economy picked up again
- The challenge is to continue the efforts and the culture change with emphasis on **motorcycle safety and speeding**, with interventions at all levels:
 - urban and interurban road infrastructure
 - systematic enforcement and campaigns
 - efficient road safety management



Key Opportunities

- The **Covid-19 Pandemic** led to major behavioural changes which might stay after the pandemic (as it happened with the economic crisis in Greece)
- The society might embrace the **new road safety culture** and will not get back to previous unsafe behaviours, exploiting current **opportunities**:
 - social responsibility
 - teleworking
 - active travelling
 - 30km/h speed limits
 - new recovery and resilience funds



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