

# **GLOBAL PLAN**

## DECADE OF ACTION FOR ROAD SAFETY 2021–2030





This **Global Plan** has been developed by the World Health Organization and the United Nations Regional Commissions, in cooperation with partners in the United Nations Road Safety Collaboration and other stakeholders, as a guiding document to support the implementation of the Decade of Action 2021–2030 and its objectives.



# **GLOBAL PLAN** DECADE OF ACTION FOR ROAD SAFETY 2021–2030

**The Global Plan** describes what is needed to achieve that target, and calls on governments & partners to implement an integrated

## SAFE SYSTEM APPROACH



Multimodal transport & land-use planning



Safe road infrastructure



Safe road use



Safe vehicles



Post-crash response

Legal

frameworks

HOW

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WHAT TO DO2

Gender



DECADE OF ACTION FOR ROAD SAFETY 2021-2030

ROAD SAFETY



# Road safety - where next?

#### Road safety is at a crossroads

Globally, road traffic crashes cause nearly 1.3 million preventable deaths and an estimated 50 million injuries each year – making it the leading killer of children and young people worldwide. As things stand, they are set to cause a further estimated 13 million deaths and 500 million injuries during the next decade and hinder sustainable development, particularly in lowand middle-income countries. These unacceptable numbers, both in absolute and relative terms, have remained largely unchanged for the past 20 years, despite the painstaking work of the United Nations and other road safety bodies.

Recognizing the importance of the problem and the need to act, governments from around the world declared unanimously – through UN General Assembly Resolution 74/299 – a Second Decade of Action for Road Safety 2021–2030 with the explicit target to reduce road deaths and injuries by at least 50% during that period. This plan describes the actions needed to achieve that target. It is aimed at senior policy makers and should serve as a blueprint for the development of national and local plans and targets. As we embark on the Second Decade of Action for Road Safety, governments and global stakeholders must choose between "business as usual" – in the hopes that this will be enough to significantly reduce the number of deaths – or acting boldly and decisively, using the tools and knowledge gained from the last Decade of Action to change course.

The Global Plan for the Decade of Action for Road Safety 2021-2030 rejects business as usual and calls on governments and stakeholders to take a new path – one that prioritizes and implements an integrated Safe System approach that squarely positions road safety as a key driver of sustainable development. It also calls for actions that help the world hit the target of a 50% reduction in the number of road traffic deaths and serious injuries by 2030.



## And there is hope

Tremendous opportunity for progress has been created by a powerful set of factors, including the announcement of a Second Decade of Action for Road Safety by the United Nations General Assembly; renewed political commitment from Member States and the strong foundations laid by the last Decade of Action for Road Safety; and the inclusion of road safety in Sustainable Development Goals targets 3.6 and 11.2. In addition, three Global Ministerial Conferences, the appointment of a Special Envoy for Road Safety by the United Nations Secretary General and the establishment of the United Nations Road Safety Fund indicate clearly the increased importance accorded to road safety and enhanced mechanisms to improve it globally. The inclusion of specific road safety targets in Agenda 2030 reflects universal recognition that death and injury from road crashes are now among the most serious threats for countries' sustainable development. This means that road safety cannot be compromised or traded-off in order to achieve other social needs. In this context, road safety should not be approached as a stand-alone issue but as an integrated component of many different policy agendas, including child health, climate action, gender, and equity. As highlighted by the COVID-19 pandemic, the need for mobility itself will undoubtedly evolve in the next decade and this will inevitably drive changes to transport systems in ways that are both expected and unexpected. Ensuring that these changes do not result in death or injury will require constant vigilance and adaptation.

#### Making safety a core value

The constant evolution of transport worldwide presents us with multiple challenges: greenhouse gas emissions and climate change; air pollution; fossil fuel reliance; an epidemic of chronic diseases; and the risks of road death and injury. Rapidly evolving technology, increasing density and population growth in urban areas, along with the emergence and growing presence of micromobility and the use of mobility services are indicative of the challenges that lie ahead.

But mobility systems truly based on safety will have a holistically beneficial impact on our health; our environment; on reducing the social and economic toll

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taken by road safety tragedies; and on women's role in our mobility and transport systems. Placing safety at the core of our road safety efforts will automatically make safe mobility a human right. It will push it up the global agenda and create a new impetus for increased commitment from governments, corporations and international organizations to implement measures that can significantly reduce road trauma.

The time to act is now: the intolerable death and injury toll, and the start of the next Decade of Road Safety, give the global road safety community the impetus to do things differently.

UN General Assembly Resolution 74/299 declared a **Decade of Action for Road Safety 2021–2030**, with the target to reduce road traffic deaths & injuries

BY AT 50% during that period

#### PART I



# Vision for the Global Plan

Mobility is integral to nearly every aspect of our daily lives. We step from our homes into a road system that leads us to work and school, to get our food, and to many of our daily family and social needs. The influence of the road transport system is so pervasive that its safety – or lack thereof – affects a wide range of basic human needs. As such, ensuring the safety of roads and enabling sustainable mobility plays an important role in reducing poverty and inequities, increasing access to employment and education, as well as mitigating the impact of climate change. In fact, the efficiency, accessibility and safety of transport systems directly and indirectly contribute to the realization of many SDGs. On its own, the road safety movement is limited in its potential reach and influence and is often subordinate to other social needs. But if road safety is seen as a necessity that can facilitate progress in meeting social needs – ranging from gender equity to environmental sustainability – its potential can be greatly expanded.

**The Global Plan** describes what is needed to achieve that target, and calls on governments & partners to implement an integrated

SAFE SYSTEM APPROACH



## Who this Global Plan is for

This plan aims to inspire national and local government, as well other stakeholders who can influence road safety (including civil society, academia, the private sector, donors, community and youth leaders, and other stakeholders) as they develop national and local action plans and targets for the Decade of Action.

## Building on the Safe System approach

The Safe System approach – a core feature of the Decade of Action – recognizes that road transport is a complex system and places safety at its core. It also recognizes that humans, vehicles and the road infrastructure must interact in a way that ensures a high level of safety. A Safe System therefore:

- anticipates and accommodates human errors;
- incorporates road and vehicle designs that limit crash forces to levels that are within human tolerance to prevent death or serious injury;
- motivates those who design and maintain the roads, manufacture vehicles, and administer safety

programmes to share responsibility for safety with road users, so that when a crash occurs, remedies are sought throughout the system, rather than solely blaming the driver or other road users;

- pursues a commitment to proactive and continuous improvement of roads and vehicles so that the entire system is made safe rather than just locations or situations where crashes last occurred; and
- adheres to the underlying premise that the transport system should produce zero deaths or serious injuries and that safety should not be compromised for the sake of other factors such as cost or the desire for faster transport times.





## **Recommended** actions

The following recommendations draw from proven and effective interventions and best practices for preventing road trauma and provide a comprehensive overview of actions to implement and strengthen Safe Systems. These recommendations are not prescriptive but can be used to inform the development of national road safety action plans that are tailored to local contexts, available resources and capacity.

#### Multimodal transport and land-use planning

With about 70% of the global population expected to live in urban settings by 2030, increased demand for urban mobility will exceed the capacity of systems that rely largely on private vehicles such as cars and motorcycles. Investment in public transport systems to facilitate safe and efficient movement of large and growing populations is therefore central to addressing this issue. Public transport systems such as buses, trams and commuter trains carry more people compared to private cars and are generally more affordable. They reduce exposure to crashes and are a key avenue to improve safety, as stressed in SDG target 11.2. Multimodal transport and land-use planning is an important starting point for implementing a Safe System. It establishes the optimal mix of motorized and non-motorized transport modes to ensure safety and equitable access to mobility, while responding to the diverse needs and preferences of a population. Multimodal transport and land-use planning should be adapted to local contexts and climates. Land use planning must include consideration of travel demand management, mode choice and the provision of safe and sustainable journeys for all, particularly for the healthiest and cleanest modes of transport but often most neglected: walking, cycling and public transport. This should be accompanied by standards that explicitly avoid or mitigate potential road safety risks and require minimum safety performance for all expected modes, abilities and journeys.

The availability of parking for bicycles and private vehicles at bus stops and train stations, for example,

can facilitate multimodal commutes. In addition to eliminating risks to pedestrians and cyclists from motor vehicle traffic, people need to feel safe. To this end, infrastructural investments and policies that improve people's perceived safety, both from traffic and crime, and especially those that address gender safety concerns, are important prerequisites to encouraging multimodal transport and active mobility.

Box 1

DECADE OF ACTION FOR ROAD SAFETY 2021-2030

#### Recommended actions to encourage multimodal transport and land-use planning

- Implement policies that promote compact urban design.
- Implement policies that lower speeds, and prioritize the needs of pedestrians, cyclists, and public transport users.
- Promote transit-oriented development to concentrate urban and commercial developments around mass transit nodes.
- Strategically locate where feasible public, subsidized, and workforce housing to provide convenient access to high-capacity transit services.
- Discourage the use of private vehicles in high density urban areas by putting restrictions on motor vehicle users, vehicles, and road infrastructure, and provide alternatives that are accessible, safe, and easy to use, such as walking, cycling, buses and trams.
- Provide intermodal connectivity between transit and bike share schemes at major transit stops and create transport connections for bicycle and pedestrian travel that reduce total travel time.
- Construct (or reconstruct existing) transport networks to ensure that non-motorized modes of travel are as safe as motorized ones, and most importantly serve the travel needs of all ages and abilities.
- Promote positive marketing and use of incentives such as employer cost-sharing of public transport subscriptions.

## Safe road infrastructure

Safe road infrastructure is essential to reduce road trauma. Road infrastructure must be planned, designed, built and operated to enable multimodal mobility, including shared/public transport, and walking and cycling. It must eliminate or minimize risks for all road users, not just drivers, starting with the most vulnerable.

Minimum technical infrastructure standards are required, covering the safety of pedestrians, cyclists, motorcyclists, vehicle occupants, public transport users, freight operators and other mobility users. These standards must include basic features such as vertical and horizontal marking (signs and painting); sidewalks; safe crossings; cycle paths; motorcycle lanes; bus lanes; safe roadsides; segregation of different modes of traffic; median separation of high-speed traffic; safe intersection design; and speed management suitable for the location, desired amenity and type of traffic. The physical and digital infrastructure needs for advanced driver assistance technologies and autonomous vehicles also require specification.

Logical and intuitive infrastructure design should be used for speed management to ensure the safety of all road users (e.g. town entry treatments, roadworks). In addition to improving safety, road infrastructure should enhance accessibility, including for persons with disabilities, and facilitate transfer from one mode to another. Guidance on appropriate standards for various safety components has been developed at global and regional level and can be used by countries when developing their own standards.

#### Box 2

#### Recommended actions to improve the safety of road infrastructure

- Develop functional classifications and desired safety performance standards for each road user group at the geographic land-use and road corridor level.
- Review and update legislation and local design standards that consider road function and the needs of all road users, and for specific zones.
- Specify a technical standard and star rating target for all designs linked to each road user, and the desired safety performance standard at that location.
- Implement infrastructure treatments that ensure logical and intuitive compliance with the desired speed environment (e.g. 30 km/h urban centres; ≤ 80 km/h undivided rural roads; 100 km/h expressways).
- Undertake road safety audits on all sections of new roads (pre-feasibility through to detailed design) and complete assessments using independent and accredited experts to ensure a minimum standard of three stars or better for all road users.
- Undertake crash-risk mapping (where crash data are reliable) and proactive safety assessments and inspections on the target network with a focus on relevant road user needs as appropriate.
- Set a performance target for each road user based on the inspection results with clear measurable metrics at the road-attribute level (e.g. sidewalk provision).

### Vehicle safety

Vehicles should be designed to ensure the safety of those inside and those outside them. To improve vehicle safety, different features can be integrated into vehicle design either to avoid crashes (active safety) or to reduce the injury risk for occupants and other road users when a crash occurs (passive safety). Although several types of technological solutions have been developed, they have penetrated countries to a different extent, and what is integrated as "standard equipment" in new vehicles differs between countries. In fact, depending on regulations in place per destination market, vehicles are produced with different safety features. Automobile companies frequently "de-specify" life-saving features in newer models sold in countries where regulatory frameworks do not require these features.

There is a need to apply harmonized legislative standards for vehicle design and technology to ensure a uniform and acceptable level of safety worldwide. Governments should provide, through legislation, a minimum set of safety standards for vehicles, considering all "traditional" categories of vehicles, including passenger cars, vans, trucks, buses, and powered two- and three-wheelers, but also "informal" modes prevalent in many countries (e.g. tuk-tuk, skylabs, jeepneys).

#### Box 3

#### **Recommended actions to ensure vehicle safety**

- Require high-quality harmonized safety standards for new and used motor vehicles, safety belts, child-restraint systems and motorcycle helmets, including:
  - standards on front and side impact to ensure that occupants are protected in a front and side-impact crash;
  - safety belts and safety belt anchorage for all seats to ensure that safety belts are fitted in vehicles when they are manufactured and assembled;
  - ISOFIX child-restraint anchor points to secure the child-restraint systems attached directly to the frame of the vehicle to prevent misuse;
  - · electronic stability control to prevent skidding and loss of control in cases of oversteering or understeering;
  - advanced emergency braking to reduce collisions;
  - pedestrian protection standards to reduce the severity of impact with a motor vehicle;
  - motorcycle helmets certified according to international harmonized standards;
  - anti-lock braking system and daytime running lights for motorcycles;
  - · intelligent speed assistance systems to help drivers keep to speed limits;
  - eCall or Accident Emergency Call Systems (AECS) to trigger an emergency response by an in-vehicle sensor.
- Ensure that high-quality, harmonized safety standards are kept throughout the full lifecycle of the vehicle.
  This can be done, for example, through:
  - mandatory certification and registration systems for new and used vehicles based on established safety requirements and combined with routine inspections;
  - regulations for the export and import of used vehicles that are accompanied by inspections at entry and exit points, and mandatory periodic technical inspection of vehicles; and
  - building demand for safer vehicles by encouraging independent new car assessment programs.

UN vehicle regulations agreements have been developed to help countries set rules to provide and implement safety standards in the production of vehicles and their parts as well as periodic technical inspections throughout their lifetime. Once standards are mandated, there is then a need to ensure that these standards are integrated into – and kept throughout – the full lifecycle of the vehicle. This includes vehicle production, sale, maintenance or re-sale, and movement through import or export. In this regard, governments should establish mechanisms for the periodic assessment of vehicles to ensure that all new and in-use vehicles comply with basic vehicle safety regulations. In parallel to regulatory action, governments should encourage the provision of consumer information on vehicle safety through new car assessment programmes that are independent of vehicle manufacturers. These programmes help buyers to make safer purchasing decisions by providing them with independent information on safety levels of vehicles tested. In addition, these programmes can directly encourage manufacturers to voluntarily fit safety technologies in advance of any regulatory mandate to meet a demand for safer vehicles. Both public and private sector fleets can also contribute to improved vehicle safety by always purchasing vehicles that at least exceed minimum UN safety regulations.

#### Safe road use

Speeding, drink-driving, driver fatigue, distracted driving, and non-use of safety belts, child restraints and helmets are among the key behaviours contributing to road injury and death. The design and operation of the road transport system therefore takes account of these behaviours through a combination of legislation, enforcement and education. Road user behaviours are also greatly influenced by vehicle safety features and road infrastructure design, which should take into account the needs of all road users and be implemented in a way that is intuitive and easy to understand, and which ensures that the easiest, most obvious actions are the safest.

Legislation to address road user behaviour can be enacted at national, subnational or continental level depending on countries' system of government. Although traffic laws are an essential part of ensuring safe road user behaviours, these laws must be enforced, and appropriate penalties issued to deter road traffic violations. Enforcement strategies should be backed up by message-tested communications to guarantee public understanding and support, and the involvement of local stakeholders to maximize compliance. Similarly, steps should be taken to prevent corruption in road safety enforcement, which undermines public support and legislative effectiveness.

Other factors, including basing insurance premiums on driver performance, can incentivize drivers to comply with established traffic laws and rules. Corporations – both public and private – can develop protocols that ensure safe operation of their fleets, including through allowing for reasonable delays to prevent speeding, setting limits on driving hours by delivery workers, and monitoring the driving behaviours of drivers through control devices such as speed-limiting devices and tachographs.



Box 4

#### Recommended actions to ensure safe road use

- Enact and enforce road safety legislation:
  - Set maximum speed limits considering the type and function of roads.
  - Establish blood alcohol concentration (BAC) limits to prevent impaired driving (drink- and drug-driving) with specific provisions for novice and professional drivers.
  - Mandate the use of protective equipment (safety belts, child restraints and helmets).
  - Restrict the use of handheld electronic devices while driving.
  - Establish a dedicated enforcement agency, provide training and ensure adequate equipment for enforcement activities.
- Establish traffic rules and licensing requirements:
  - Set out and regularly update traffic rules and codes of conduct for road users.
  - Provide information and education on traffic rules.
  - Set minimum age and vision requirements for drivers.
  - Implement competency-based testing for driver licensing and adoption of graduated driver licensing for novice drivers.
  - Set limits for maximum driving time and minimum rest periods for professional drivers.
  - Make liability insurance mandatory for operators of motorized vehicles.
- Ensure road infrastructure takes account of the needs of all road users and is designed to facilitate safe behaviours, including:
  - clear road signage and road markings that are intuitive;
  - use of roundabouts and traffic calming designs such as speed humps;
  - physical separation of road users including use of protected bicycle lanes and pedestrian only zones.
- Make use of vehicle safety features and technologies to support safe behaviours, including:
  - automatic safety belts and seat-belt alerts;
  - intelligent speed assistance;
  - technologies to disable texting and or other forms of distraction while driving.

#### Post-crash response

Post-crash care and survival is extremely time-sensitive: delays of minutes can make the difference between life and death. For this reason, appropriate, integrated and coordinated care should be provided as soon as possible after a crash occurs. Mechanisms to ensure appropriate action is taken include an alert system (e.g. a single universal access call number) connected to relevant professionals, who are in turn able to quickly dispatch appropriate emergency services with trained personnel and the necessary equipment through ambulances or sometimes helicopters, when needed.

Community first-responder training should be promoted to greatly expand timely access to simple lifesaving interventions, especially in areas where pre-hospital services are limited and/or response times are long. Suitable targets for first-responder training include non-medical emergency responders such as police and firefighters, and others whose occupations frequently put them at the scene of road traffic crashes, for example, professional drivers, including taxi drivers and public transport drivers. To encourage action by these first responders, countries should provide legal protection for them (e.g. Good Samaritan laws). Rehabilitation is an important component of post-crash response and care systems, as these services can greatly reduce lifelong disability among those injured in a road traffic crash. Mechanisms to strengthen the provision of, and access to, rehabilitation services for crash victims should be put in place. This includes embedding rehabilitative care into acute care systems, making rehabilitation services available at lower levels of care, and establishing appropriate financing mechanisms such as road-user insurance schemes (e.g. mandatory third-party liability). Providing protections for people with disabilities to keep their jobs or be hired in new jobs through the provision of incentives for employers will further alleviate the socio-economic consequences of permanent disability.

Comprehensive support systems for victims and their families should also be put in place. Governments should develop mechanisms to provide multidisciplinary crash investigation and ensure justice. Financial and social support should also be provided to victims and their families if needed, to ensure that they are not pushed into poverty because of the large costs sometimes associated with prolonged treatment and rehabilitation, or the loss of a breadwinner.





Box 5

#### Recommended actions to improve the post-crash response

- Provide a system to activate post-crash response:
  - Unique emergency telephone number with national coverage.
  - Coordination mechanism for dispatching response (fire brigade, police, ambulance).
- Build response capacity among lay responders (non-medical professionals):
  - Provide basic (EMS) training for lay providers such as taxi and public transport providers, police, fire brigade etc.
  - Enact Good Samaritan Laws to ensure protection for lay responders.
- Strengthen professional medical care:
  - Establish trauma registries in health-care facilities to gather information on the cause of injury and clinical interventions.
  - Build capacity of pre-hospital, hospital and rehabilitation care/services, and establish a basic package of emergency care services for each level of the health system.
  - Ensure 24-hour access regardless of ability to pay to operative and critical care services that are staffed and equipped.
  - · Provide recovery and rehabilitation services to prevent permanent disability.
- Establish requirements multidisciplinary, post-crash investigation:
  - Mandate investigations for crashes resulting in serious and fatal injuries to inform prevention strategies and apply an effective judicial response for victims and their families.
  - Establish coordination mechanisms for post-crash investigation and sharing of data by relevant sectors.
  - Establish appropriate financing mechanisms such as road-user insurance schemes (e.g. mandatory thirdparty liability).
- Provide social, judicial and, where appropriate, financial support to bereaved families and survivors.



# Requirements for implementation

Ensuring effective implementation of the Safe System is essential to realizing road safety improvements in the next decade. Actions should be based on evidence and, where possible, implementation research should be used to guide local adaptation of proven measures.

### Financing

Road safety is underfunded in most countries. Longterm, sustainable investment is required for the development of safe road infrastructure as well as for interventions that can improve road safety. There are significant opportunities to leverage existing investments in broader areas of transport, particularly transport and network planning, public transport, road construction, traffic operation and maintenance. Rather than serving as an "add-on" to these broader transport activities, road safety must be embedded in, and integral to, transport decision-making. The primary responsibility for funding road safety activities lies with national governments. Sustainable sources of funding are likely those that are: home-grown; clearly linked to the activity that is to be funded; driven by a solid business case that shows strong economic benefits; easy to collect and manage; and acceptable to the public and politicians. Sources of sustainable funding include central government allocations; local government allocations; road user charges; levies on private sector insurance; surplus from government insurance; use of traffic fines; and social impact bonds. However, to kickstart actions recommended in this plan, short-term bridging funds may be required. There are several sources of funding available to help commence road safety activity, particularly for low- and middleincome countries. These include multilateral lending institutions; private sector sponsorship; merchandise fundraising; international funding agencies; and philanthropic contributions from foundations and individuals.

#### Legal frameworks

United Nations (UN) road safety legal instruments provide a strong foundation for countries to build domestic legal frameworks and systems that contribute to road safety and facilitate international road traffic. They include the following:

- 1968 Convention on Road Traffic, and its predecessor, the 1949 Convention on Road Traffic, which facilitate international road traffic and increase road safety through the adoption of uniform road traffic rules.
- 1968 Convention on Road Signs and Signals, which establishes a set of commonly agreed road signs and signals.
- 1958 Agreement concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations, which provides the legal framework for adopting uniform United Nations Regulations for all types of wheeled vehicles manufactured, specifically related to safety and environmental aspects.
- 1997 Agreement concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of Such Inspections which provide the legal framework for the inspection of wheeled vehicles and for the mutual recognition of inspection certificates for cross-border use of road vehicles.

- 1998 Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be fitted and/ or be used on Wheeled Vehicles, which serves as the framework for developing global technical regulations for vehicles on safety and environmental performance.
- 1957 Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) which provide standards including requirements for operations, driver training and vehicle construction, that can be applied to prevent and mitigate the impact of crashes involving dangerous goods.

To fully realize their benefits, implementation of UN road safety conventions must go beyond accession. The vital next step is for the conventions to be transposed into national or regional legislation and systems to ensure their effective application, and thereafter be enforced through traffic police and inspection bodies.

#### Speed management

Managing speed is critical to the effective implementation of the Safe System approach. It is a cross-cutting risk factor and is addressed through actions relating to different elements of the Safe System, such as multimodal transport and land use planning, infrastructure, vehicle design and road user behaviour. Appropriate speed management not only directly impacts crash likelihood and severity, it also affects the effectiveness of other safety interventions. For example, vehicles that meet UN vehicle regulations or equivalent national standards are designed to limit crash forces on occupants and pedestrians to survivable levels in side impacts up to collision speeds of 50 km/h. Therefore, a Safe System would limit speeds to 50 km/h or lower on roads with intersections where side impacts can be expected.

In densely populated urban areas, there is strong evidence that even the best road and vehicle design features are unable to adequately guarantee the safety of all road users when speeds are above the known safe level of 30 km/h. For this reason, in urban areas where there is a typical, predictable mix of road users (cars, cyclists, motorcyclists, and pedestrians), a maximum speed limit of 30 km/h (20 mph) should be established, unless strong evidence exists to support higher limits.

Speed management interventions are possible across a range of road safety arenas, including road design and engineering (for example, employing speed humps or cushions, raised platform crossings, roundabouts, chicanes, as well as safe speed limits); vehicle interventions (speed limiting, Intelligent Speed Assistance or ISA); and behaviour change (legislation, enforcement and promotion to deliver effective general deterrence of speeding). The effective integration of these oftenfragmented efforts (and in the contexts in which they will be most effective) will improve speed management and deliver more powerful, fully effective outcomes. For example, road engineering measures are more suitable for lower, rather than higher speed contexts; vehicle interventions can take time to become cost-effective, especially in countries that import mainly used vehicles; and enforcement, including automated enforcement, is most effective in countries with little corruption, and effective judicial and administrative systems.



## Capacity development

Capacity-building for road safety professionals working for the government, the private sector, civil society and research institutions should be given top priority, as the lack of specialist knowledge of creating safer roads, vehicles and road user behaviour, and for designing and operating a well-functioning post-crash systems is a major barrier in many countries. Further, many countries and cities lack expertise in adapting Safe System principles to local conditions, in effectively collecting and analysing road safety data, and in carrying out quality road safety research.

Over the past decades, road safety has, to some extent, been integrated into academic curricula in multiple disciplines such as public health, transport, and urban planning. The accreditation of road safety as a field of study within institutions of higher learning and professional development would be an important element in ensuring the development of well-rounded road safety managers and practitioners. Short-term courses and continuing education activities can also help provide competencies such as programme management and implementation while professional networks and communities of practice are also important platforms to provide continued support and knowledge enhancement. In addition, training for professionals in allied fields (such as journalism) can be an effective means of strengthening advocacy and policy support for road safety efforts.

#### Ensuring a gender perspective in transport planning

The issues of road safety apply differently to men and women for a variety of physical, behavioural and social reasons. Despite the higher vulnerability of women during a crash they are far less likely to die in one than men. When they are killed it is usually in different circumstances – as pedestrians and car passengers rather than car drivers and motorcycle riders. This in part reflects the greater number of motorised journeys taken by men. It also reflects gender differences in taking risks. Evidence suggests that male drivers/ riders are associated with 2 to 4 times higher risk per km than females, even when taking into account that men overwhelmingly used the most dangerous modes, including in transport and related occupations.

There are also large gender differences in road injury patterns. Women have 47% higher risk of serious injury in a car crash than men and are at a five times higher risk of whiplash injury. The intrinsic gender differences in the skeleton may be one of the possible reasons for higher injury incidence in females. However, most of regulatory tests assessing vehicle occupant safety only use models of the average male, and so do not reflect the specific physical features and needs of women.

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As such, the following should be considered as part of the implementation of the Safe System:

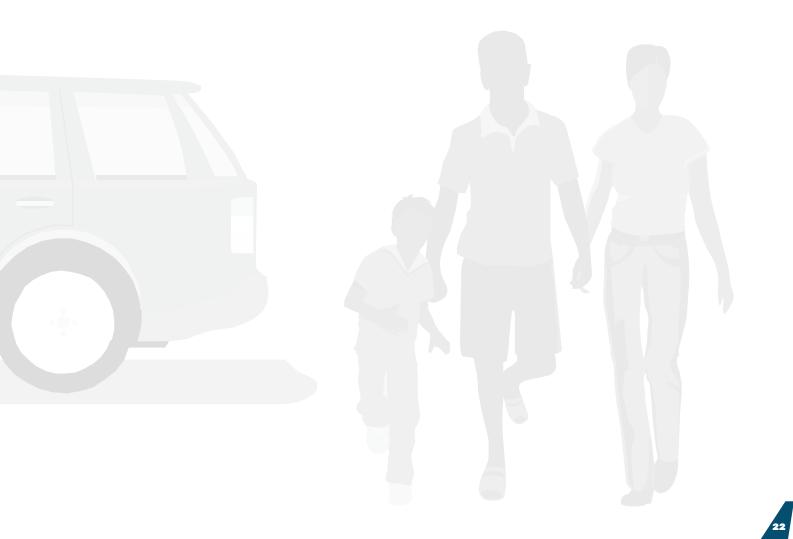
- Transport policy frameworks must provide an enabling environment for both men and women to share safe, secure, accessible, reliable and sustainable mobility, and non-discriminatory participation in transport.
- More women must be involved in the transport sector and its processes – as operators in transport systems, as decision-makers in the development of regulatory and policy systems, as engineers and designers, and everywhere in between.
- A greater focus is needed on gender differences in relation to the design and construction of all aspects of transport infrastructure. For example, vehicle design needs to be modified to accommodate the differences in ergonomics between genders – EvaRID dummy is a good example of how this might be achieved when it has been successfully validated for regulatory testing.

## Adapting technologies to the Safe System

Automotive technology is changing at an unprecedented rate and while there is debate about the potential of emerging technologies, advanced driver assistance systems, including electronic stability control, lanechange warnings and automatic emergency braking are already saving lives in many countries. Future automated vehicle functionalities are also being developed which will potentially save even more lives. Technologies outside the vehicle could also make a difference in low- and middle-income countries. One example is post-crash care, where communications technology - perhaps built upon the near-ubiquitous mobile phone - could facilitate effective bystander care for the injured. Where ambulances are not available, technology could provide route guidance for delivering crash victims to the nearest medical facility capable of trauma care.

Vehicle-to-vehicle and vehicle-to-infrastructure communications can also contribute to safer and more sustainable mobility. This capability could be particularly beneficial for the safety of pedestrians, cyclists and powered two-wheelers. Similar technology can also permit route planning to reduce congestion, reduce emissions and optimize safety. Communications and logistics technologies can reduce the need for travel by connecting people electronically for business and commerce as well as facilitating efficient and safe shipping of products and materials.

Stimulating the development of safety technology that would be appropriate in a wide range of settings is one part of the leadership challenge. The other part relates to managing the technological revolution and its potential impact – both positive and negative – on road safety. Increasing connectivity and other mobile technologies create new opportunities as well as challenges that require assessment and updating of policies, regulations, and traffic laws.





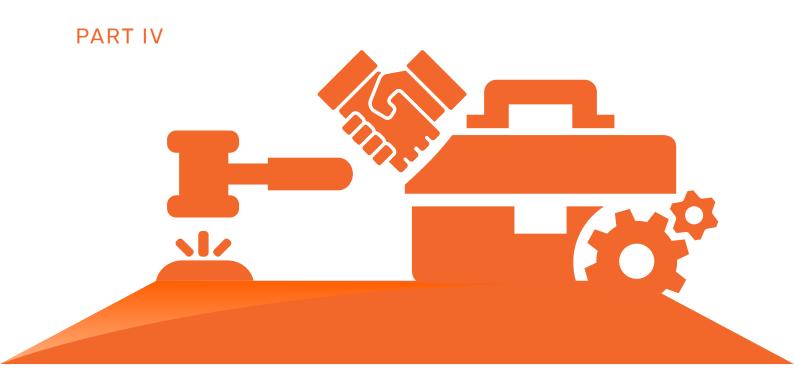
#### Focus on low- and middle-income countries

Low- and middle-income countries account for more than 90% of all road traffic deaths despite having less than 60% of the world's motor vehicles, so achieving the Decade of Action target will require increased attention and support to these countries. Despite obvious challenges, low- and middle-income countries can leapfrog traditional, standalone interventions to address road safety and adopt an integrated approach to safe and sustainable transport. As many highincome countries (particularly those that depend heavily on private vehicle use) face challenges - such as decarbonizing transport to mitigate climate change, and addressing health concerns resulting from physical inactivity - low- and middle-income countries can invest now in multimodal transport systems as part of an integrated development agenda.

In addition to sharing lessons learned and technical support, high-income countries (through their bilateral development agencies) along with multilateral and private donors should ensure provisions, and adherence to these provisions, for road safety as part of all development support. Similarly, multinational corporations operating in low- and middle-income countries should monitor the safety of their operations and put in place mechanisms to prevent road trauma throughout their value chain. Commitment and adherence to road safety principles by private corporations should be the same in low- and middleincome countries as it is in high-income countries, regardless of the regulatory environment in which they operate.

The diversity of contexts and geopolitical situations among low- and middle-income countries reinforces the importance of regional and national collaboration – including opportunities to establish regional targets and/ or strategies to address common challenges. In these situations, collaboration can also offer an opportunity to amplify the voice of individual countries. Through the establishment of regional networks and alliances, countries can increase their leverage during interactions with multilateral and multinational organizations.





# Shared responsibility for road safety

Though governmental agencies have the primary responsibility to design a safe road transport system and implement a road safety action plan, the role and influence of other actors are increasingly recognized as an important part of the Safe System. The private sector, civil society, academia, and other non-state actors can also contribute in important ways. The collective, global power of public and private organizations adopting road safety practices as part of their contributions to the SDGs, together with their endorsement, leadership and purchasing power, is substantial.

#### Role of government

Government (national and local) bears the main responsibility to ensure citizens' safety. Given the significant negative impact of road crashes and large positive payoffs of greater safety, road safety must be treated as a political priority and acknowledged as a valuable public good. A very important indication of the political will to do this is the level of financing, across sectors, allocated to road safety-related objectives at national level. Additionally, governments are responsible for establishing priorities as part of a national plan based on stakeholder consultation and local evidence; mechanisms for coordination; and ensuring the collection and analysis of data on crashes, deaths, and injuries.

The central role of government in leading and coordinating a country's road safety strategy needs to be sustained even where sharing responsibility with other actors through the following actions:

 Providing a legislative framework for road safety and legal mandate for the work of different agencies within and outside government.

- Developing a plan of action with targets and monitoring the road safety activity of different actors and ensuring adequate funding to support its implementation.
- Encouraging compliance with standards such as procurement practices by transport providers and users.

Public reporting by all actors is critical to ensuring transparency and accountability. State actors have an obligation to make public and encourage/mandate others to do the same with their own policies and performance indicators, including the number of road traffic deaths, injuries and other relevant data.

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Providing overall coordination for these activities.

#### Role of academia, civil society and youth

Globally, there is considerable expertise among academic institutions and civil society groups that can help fill important gaps in different (sometimes neglected) areas of road safety, as well as help implement the policy measures necessary to reduce road trauma. Academic and research institutions play an important role in generating evidence to help government and other actors understand (through epidemiological and risk analyses) the nature of the problem as well as to identify effective solutions and strategies (through intervention trials and implementation studies). Civil society can help amplify the voice of academia by being an advocate and acting as an independent voice to influence social change. It can also support the development of policies by augmenting the evidence base as well as bringing the perspectives of communities impacted by those policies to the table.

In addition to keeping road safety on the government agenda and uniting stakeholders with a common goal, academia and civil society groups can:

- be an important source of road safety information for the community and governments;
- help ensure government accountability by empowering communities on road safety issues and ensuring good governance; and
- help push for the achievement of the road safetyrelated SDGs.

Young people play an important role in shaping the future transport system for two key reasons. First, they are the age group most affected by road trauma, with road traffic crashes being the leading cause of death among those aged 5–29 years. Second, they are the generation that will inherit the outcomes of decisions made today about the safety of the evolving transport system. As such they should be asked about their needs, and to help shape the system and generate ideas on how to better protect some of the most vulnerable among us. Meaningful engagement with young leaders can help foster greater ownership of the road safety issue as well as develop a new cohort of road safety advocates with a fresh perspective on the future of mobility.

### Role of the private sector

Corporations and businesses have tremendous influence on society and transport systems through their products; their fleets and how they manage them; their influence on employees, contractors, as well as their potential to financially support road safety. Businesses and industries of all sizes and sectors can contribute to attaining the road safety-related SDGs by applying Safe System principles to their entire value chains (including internal practices throughout their procurement, production and distribution processes) and reporting on safety performance in their sustainability reports. For example, businesses could place contingencies in their contracts with suppliers that:

- specify vehicle safety levels (including for powered two-wheelers) for vehicle fleets that are used in carrying out procured services;
- require that transport drivers, including those using powered two-wheelers and other motorized personal mobility devices, have undergone user training;
- expect suppliers to perform road safety performance self-monitoring and reporting; and
- set standards for scheduling and planning procured driving operations and practices to manage driver fatigue, use of low-risk roads, use of lower risk vehicles, and improved times for travel.

Vehicle manufacturers and allied industries can contribute by ensuring that the vehicles that they produce include safety features regardless of the markets in which they are sold. They can advocate for safe infrastructure that is adapted for all road users, the development of safety technologies, and by supporting efforts to harmonize standards and requirements across regions.

Similarly, other sectors such as insurance can contribute to a culture of safety by creating incentives for safe road use through the premium pricing. Mandatory insurance schemes can contribute significantly to the post-crash response by facilitating crash investigations as well as offering protection from financial losses for victims. Other efforts to create a safety "commodity", such as the development of a safety index and the establishment of road safety bonds, are also important means of ensuring sustainable practices by corporations.

Additionally, corporations and private businesses must also address and mitigate actions that negatively impact road safety, including the promotion of cars based on the speed they can achieve; the promotion of high consumption of alcohol or other products that can contribute to impaired driving; and employment policies that can contribute to overcrowded public transport or driver fatigue.

#### Role of funders

Funders, both public and private, play an important role in ensuring that appropriate resources are available to support the actions described in this plan. Private donors play an important role in filling short-term gaps in investments and can provide resources such as seed funding to carry out immediate road safety improvements while stimulating country-wide and longer-term investments by government. Support from private funders also helps to fill critical gaps in capacity development, research, and advocacy in many countries. Ensuring the alignment of priorities between external funders and governments, as well as a pathway for sustainable financing for road safety, is critical to the success of these endeavours. External funders, including international organizations, bilateral and multilateral development agencies and development banks, can also contribute to road safety efforts by ensuring the integration of road safety in development activities, especially for infrastructure development initiatives that impact transport and mobility. These funders also have an obligation to ensure that provisions for road safety are guaranteed as part of all development support provided.

#### **Role of the United Nations**

The World Health Organization acts, in close cooperation with the UN Regional Commissions, as the coordinating agency for road safety within the UN system to support Member States by raising awareness; establishing targets; providing policy guidance; data collection; technical capacity building; and convening stakeholders. The UN Secretary-General's Special Envoy for Road Safety will continue to raise awareness on the importance of prioritizing road safety through national plans and budgets, as well as promoting its links with other SDGs. The UN Road Safety Collaboration will continue to act as a consultative mechanism to facilitate international cooperation and strengthen global and regional coordination among UN agencies and other international partners to support implementation of UN General Assembly Resolutions on road safety.

The UN Road Safety Fund will continue to strengthen governments' capacity to effectively implement lasting road safety improvements by leveraging public and private investments towards high-impact initiatives in countries. The UN Resident Coordinators will also continue to coordinate actions planned and undertaken by UN Country Teams and host governments in relation to this plan. Specialized agencies such as UN Habitat, the United Nations Environment Programme, UNICEF, the International Telecommunication Union, UNESCO, as well as the UN Special Envoy for Youth, will continue working to ensure that safe and sustainable mobility are reflected in other development priorities and agendas, reiterating the cross-cutting implications of road safety.



# Monitoring and evaluation

### Measuring progress towards the global target

At the global level, the WHO's *Global status report on road safety* is the main mechanism for monitoring progress of the Decade of Action for Road Safety. Information for this report is collected through a survey administered to Member States in which they provide details on the number of traffic deaths and injuries; status of traffic laws and their enforcement; as well as other indications of progress towards the implementation of this plan, such as accession to road safety-related UN conventions.

A 50% reduction in the number of road traffic deaths and serious injuries is called for by 2030. A change in the absolute number of people killed and seriously injured in road traffic crashes will be the starting point for analysis – based on current estimates, the targeted reduction will be in the order of 650 000 globally. These data will be analysed to show the number of road traffic deaths and injuries per 100 000 population. A baseline for both absolute and relative indicators will be computed for 2021. Mid-term (2025) and end-term (2030) evaluation will be conducted to determine changes in these indicators compared to the baseline. In addition to the main indicators, other outcome and process indicators will be described to enable a qualitative assessment. Although UNGA RES 74/299 also calls for a change in the number of people seriously injured in road traffic collisions to be shown, currently there is no comprehensive database with this information. Definition and measurement of serious injuries is problematic in many countries. The strengthening of data collection systems for road safety should be prioritized by governments and other actors.

## Monitoring in-country implementation

At the country level, the implementation of national and local action plans should be carried out iteratively and be informed by data and evidence. Countries and all stakeholders are therefore expected to assess the performance of their programmes routinely and use these findings to inform and improve planning and implementation. The global voluntary performance targets and indicators adopted in 2017 and 2018 provide a useful framework to assess progress towards the implementation of this plan.

The collection of quality data is a key prerequisite for implementation. Creating trauma registries,

harmonizing definitions, and establishing links between different sectors (police, health, transport) facilitate the gathering of data where resources are limited as well as ensure the validity of data collected. Opportunities for learning should be embedded within routine practices such as infrastructure inspections and audits, periodic technical vehicle inspections, and routine management reviews. These existing processes, along with research, can generate valuable data and feedback that can inform critical decisions about implementation, and as needed, modifications to action plans over the course of the next decade.





# The way forward

As we embark upon the Second Decade of Action for Road Safety, we urge governments and everyone concerned with road safety to use this plan to guide the ongoing development, implementation and evaluation of road safety action at global, regional, national and subnational levels, adapted and tailored to specific contexts. National plans should be based on a situational assessment and inputs from all government agencies and other stakeholders. They should set out the overall vision for road safety and the specific problems to be addressed in reaching it. To this end, plans should identify short-, medium- and long-term priorities for action, recognizing that not everything can be done at once.

As we pursue this path, it is critical that governments redouble their efforts to ensure political commitment and responsibility for acting on road safety at the highest level, along with contributions from different government agencies, multisectoral partnerships, corporations and international organizations. These strategies and efforts must be transparent and public. Safety must be the core value of these efforts and be reflected in the way policies are designed and implemented, and the way the system is governed. Seeing safety as the core value of road transport ensures that safety is embedded along the entire value chain of the transport system, from the design and production of vehicles and road infrastructure to the delivery of transport services and transport policy itself.

This Global Plan calls on governments and stakeholders to take a new path—one that emphasizes safety as a core value within the Safe System and sustainable mobility. We already know what to do, have the tools to do it, and we all have a part to play. **So let's do it.** 

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#### ANNEX I

#### Key information resources

The list of resources provided in this Annex includes primarily resources emanating from UN bodies and other International Governmental Organizations as well as resources endorsed and/or noted by the UN General Assembly in its resolutions.

- United Nations General Assembly Resolution 74/299 Improving Global Road Safety (4)
- Transforming our world: the 2030 agenda for sustainable development. New York, United Nations Organization, 2015 (4)
- Stockholm Declaration (<sup>1</sup>/<sub>4</sub>)
- Recommendations of the Academic Expert Group (setup at the occasion of the third high level conference on road safety to develop recommendations for the way forward) (<sup>1</sup>)
- Global Plan for the Decade of Action for Road Safety 2011–2020 (🍑
- UN road safety related legal instruments
  - 1968 Convention on Road Traffic (🍑)
  - 1949 Convention on Road Traffic (🍑)
  - 1968 Convention on Road Signs and Signals (🍑
  - 1958 Agreement concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations (4) (4)
  - 1997 Agreement concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of Such Inspections (🌢) (🕹)
  - 1998 Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be fitted and/or be used on Wheeled Vehicles (\*) (\*)
  - 1957 Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) (🌢)
- Inland Transport Committee Recommendations for Enhancing National Road Safety Systems (4)
- Zero road deaths and serious injuries: leading a paradigm shift to a safe system. Paris, Organisation for Economic Co-operation and Development, 2016 (4)
- Save LIVES A road safety technical package. Geneva: World Health Organization; 2017 (4)
- World report on road traffic injury prevention. Geneva: World Health Organization; 2004 (4)
- Global status report on road safety 2018. Geneva: World Health Organization; 2018 (¥)
- Global road safety performance targets (<sup>1</sup>/<sub>4</sub>)

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- Glossary for transport statistics (fifth edition). Geneva: United Nations Economic Commission for Europe; 2019 (¥)
- Data systems: a road safety manual for decision-makers and practitioners. Geneva, World Health Organization, 2010 (4)
- Cyclist safety: an information resource for decision-makers and practitioners. Geneva: World Health Organization; 2020 (4)

- Powered two- and three-wheeler safety: a road safety manual for decision-makers and practitioners. Geneva: World Health Organization; 2017 (4)
- Pedestrian safety: a road safety manual for decision-makers and practitioners. WHO 2013 (4)
- Strengthening road safety legislation: a practice and resource manual for countries. World Health Organization (2013) (<sup>1</sup>)
- Speed management: a road safety manual for decision-makers and practitioners, World Bank, World Health Organization & Global Road Safety Partnership. (2008) (4)
- Helmets: a road safety manual for decision-makers and practitioners. World Health Organization. (2006) (<sup>1</sup>)
- Drinking and driving: a road safety manual for decision-makers and practitioners, Geneva, Global Road Safety Partnership, 2007 (4)

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 Seat-belts and child restraints: a road safety manual for decision-makers and practitioners London, FIA Foundation for the Automobile and Society, 2009 (4)

#### ANNEX II

## Voluntary performance targets for road safety risk factors and service delivery mechanisms

Voluntary performance targets for road safety risk factors and service delivery mechanisms were adopted by Member States on 21 November 2017 as a way to guide countries' efforts and accelerate progress towards safer roads.

The process leading to the elaboration of these targets was facilitated by WHO, with the full participation of Member States and in collaboration with organizations in the United Nations system (including the United Nations regional commissions), through the existing mechanisms (including the United Nations Road Safety Collaboration) as requested by the General Assembly (A/Res/70/260) (<sup>1</sup>/<sub>4</sub>) and the World Health Assembly (WHA 69.7) (<sup>1</sup>/<sub>4</sub>).



Target 1: By 2020, all countries establish a comprehensive multisectoral national road safety action plan with timebound targets.



Target 2: By 2030, all countries accede to one or more of the core road safety-related UN legal instruments.



Target 3: By 2030, all new roads achieve technical standards for all road users that take into account road safety, or meet a three star rating or better.



Target 4: By 2030, more than 75% of travel on existing roads is on roads that meet technical standards for all road users that take into account road safety.



Target 5: By 2030, 100% of new (defined as produced, sold or imported) and used vehicles meet high quality safety standards, such as the recommended priority UN Regulations, Global Technical Regulations, or equivalent recognized national performance requirements.



Target 6: By 2030, halve the proportion of vehicles travelling over the posted speed limit and achieve a reduction in speed-related injuries and fatalities.



Target 7: By 2030, increase the proportion of motorcycle riders correctly using standard helmets to close to 100%.



Target 8: By 2030, increase the proportion of motor vehicle occupants using safety belts or standard child restraint systems to close to 100%.



Target 9: By 2030, halve the number of road traffic injuries and fatalities related to drivers using alcohol, and/or achieve a reduction in those related to other psychoactive substances.



Target 10: By 2030, all countries have national laws to restrict or prohibit the use of mobile phones while driving.



Target 11: By 2030, all countries to enact regulation for driving time and rest periods for professional drivers, and/ or accede to international/ regional regulation in this area.



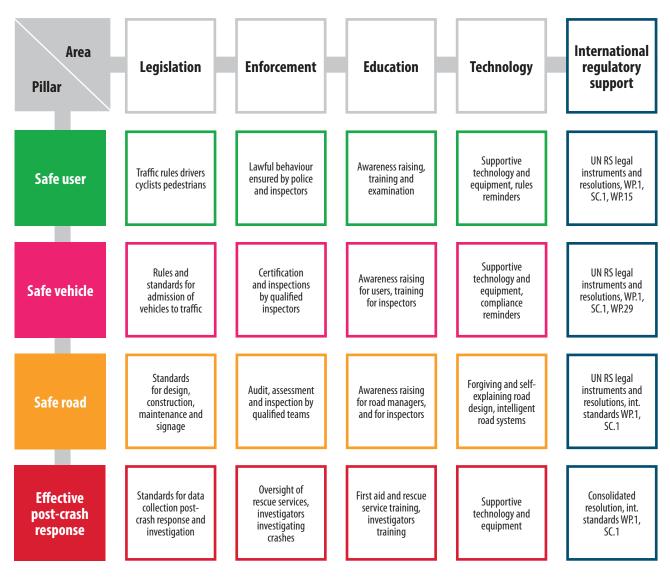
Target 12: By 2030, all countries establish and achieve national targets in order to minimize the time interval between road traffic crash and the provision of first professional emergency care.



#### ANNEX III

## Inland transport committee recommendations for enhancing national road safety systems

The Inland Transport Committee (ITC) of the United Nations Economic Commission for Europe provided countries with the ITC Recommendations for Enhancing National Road Safety Systems ("ITC Recommendations"), adopted at its eighty-second session (ECE/TRANS/2020/9). These recommendations give a comprehensive picture of national road safety systems that includes all key elements at the national level with international support. They interconnect the five pillars of the global plan for the Decade of Action 2011–2020 (management, safe user, safe vehicle, safe road and effective post-crash response) and further elaborate with key action areas (legislation, enforcement, education, technology). Possible actions, ideal responsible authority, national coordination, international support and application of relevant UN road safety related legal instruments for each pillar are specified in the Recommendations.



#### Road safety management - vertical and horizontal coordination

