GLOSSARY OF TERMS (ALPHABETICAL ORDER)

Active safety means features or derivatives integrated into vehicle design to avoid crashes, for example brakes and advanced emergency braking system.

Advanced emergency braking system (AEBS) is a system which can automatically detect an imminent forward collision and activate the vehicle braking system to decelerate the vehicle with the purpose of avoiding or mitigating a collision (cf. UN Regulation 152 definition).

Anti-lock braking system (ABS) is a system which senses wheel slip and automatically modulates the pressure producing the braking forces at the wheel(s) to limit the degree of wheel slip (cf. UN Regulations Nos. 13, 13H and 78 definition).

Appropriate speeds per road type is an approach of defining the speed limit according to the purpose of a road:

Roads with possible conflicts between cars and unprotected users	30 km/h
Intersections with possible side-on conflicts between cars	50 km/h
Roads with possible frontal conflicts between cars	70 km/h
Roads with no likelihood of frontal or side-on conflicts between road users	≥ 100 km/h

Table 2 Managing speed (Managing speed (who.int)), source Tingvall and Haworth, 1999

Accident Emergency Call Systems (AECS) (or eCall) is an automatic or manual triggered emergency notification system installed in a vehicle that informs emergency rescue services or the police of the position of the crash, using satellite-based Global Positioning System and cellular communication (cf. World Report, WHO 2004; UN Regulation No. 144).

Blood alcohol concentration (BAC) is the amount of alcohol present in the bloodstream, usually denoted in grams per decilitre (g/dl). A legal BAC limit refers to the maximum amount of alcohol allowed in the bloodstream that is legally acceptable for a driver on the road. In some countries, the law stipulates an equivalent quantity of alcohol in the air breathed out, in order to facilitate detection of drink-driving (cf. World Report, WHO 2004).

Business as usual is the routine and conventional way of carrying out activities by organizations and individuals. It becomes an established and habitual way of responding or acting to both old and new developments, not seeking alternative ways that are appropriate to a situation (see scenario planning literature from Oxford Scenario Planning Programme).

Child restraint (child restraint system) is a device capable of accommodating a child occupant in a sitting or supine position. It is so designed as to diminish the risk of injury to the wearer, in the event of a collision or of abrupt deceleration of the vehicle (adapted from World Report, WHO 2004, UN Regulations Nos. 44 and 129).

Compact urban development (compact urban design) is the utilization of the principles, strategies and tools of mixed land-use and spatial planning to promote dense and proximate development patterns linked by public transport, walking and cycling systems and with accessibility to local services and jobs. It is

associated with a wide range of urban benefits, including increased productivity due to agglomeration economies, improved accessibility to urban services, reduced travel times, and a smaller ecological footprint due to lower energy and land consumption.

Compact urban development is a counter to urban sprawl that leads to the spread of development across the landscape that far outpaces population growth and is associated with several challenges (GAPA 9789241514187-eng.pdf (who.int), OECD https://www.oecd.org/regional/cities/compact-urban-development.htm, Ewing 1997, Hamidi et al. 2015).

COVID-19: infectious disease caused by the SARS-CoV-2 virus (Coronavirus (who.int)).

Convention refers to formal multilateral treaties with a broad number of parties. Conventions are normally open for participation by the international community as a whole, or by a large number of States. Usually, instruments negotiated under the auspices of an international organization are entitled conventions. The same holds true for instruments adopted by an organ of an international organization. (Treaty Handbook, Treaty Section of the UN Office of Legal Affairs, 2012).

eCall: see Accident Emergency Call Systems (AECS)

Electronic stability control is a system to prevent skidding and loss of control in cases of oversteering or understeering. A central processing unit compares continuously a number of driving parameters, such as speed, side slip, yaw characteristics and steering wheel position. When these parameters indicate the beginning of over- or understeering, adequate counteractions are initiated, such as braking individual wheels and reducing engine power, among other things, and other control systems may be activated (Elvik et al 2009, cf. Save Lives, WHO 2017) (detailed technical definitions and requirements provided in UN Regulation 140 and UN GTR No. 8).

Emergency care system is an integrated platform for delivering accessible, quality and time-sensitive health care services for acute illness and injury across the life course. The emergency care system that delivers these services extends from care at the scene through transport and emergency unit care, and it ensures access to early operative and critical care when needed (WHA 72.16, Document A 72/31).

Equity is the absence of unfair, avoidable or remediable differences among populations or groups defined socially, economically, demographically, or geographically (WHO Health Promotion Glossary). Using equity as a principle is the act of deliberately and proactively seeking to consider the equity impacts of decisions and policies in order to address both the underlying causes and effects of inequity and disparity in society (Oxford Dictionary, Wilkinson and Pickett 2010).

Evaluation is a systematic examination of a programme or an initiative to improve its effectiveness, to guide decisions and demonstrate impact. To achieve this purpose, data are collected and analyzed about a programme's activities, characteristics, and outcomes. Evaluation may take several forms — process, impact, outcome and summative — depending on the aims of the specific programme to be evaluated (Patton 1987, Seat-belt manual).

Facility-based emergency care is the emergency care delivered by trained providers in a dedicated emergency area or unit within a health facility. This includes a core of non-rotating providers who are assigned to the unit and trained in the care of injuries; the use of protocols and checklists to ensure a systematic approach to every injured patient; and provision of essential equipment for diagnosis and treatment of injuries.

Functional classification of roads or road hierarchy is the process of classifying roads in a network according to their function and setting speed limits according to the road function (see appropriate speeds per road type) (cf. World Report, WHO 2004, 1968 Convention).

Gender refers to the characteristics of women, men, girls and boys that are socially constructed. This includes norms, behaviours and roles associated with being a woman, man, girl or boy, as well as relationships with each other. As a social construct, gender varies from society to society and can change over time (WHO: https://www.who.int/health-topics/gender#tab=tab_1).

Good Samaritan Laws are laws offering legal protection to bystander(s) providing reasonable care to an injured person in an emergency situation. Good Samaritan laws are intended to reduce bystanders' hesitation to provide assistance for fear of being sued for unintentional injury or wrongful death.

Graduated driving licences (GDL) consist of three phases: a) the learner phase, in which accompanied driving is permitted; b) the intermediate phase with several restrictions on unaccompanied driving, such as lower BAC limits, restrictions on driving at night, on motorways or with passengers, and often with a limit for the number of violations that may be committed; and c) the last phase without restrictions (Elvik et al, 2009).

Implementation is the execution of an idea or a plan, which moves a plan from a mere concept to tangible actions to achieve anticipated objectives and outcomes. Implementation seeks to operationalize and put to use an idea, research findings, a plan and a policy in the real world and practice (Nilsen 2015).

Infrastructure assessment (road infrastructure assessment) is the evaluation of existing roads to determine the extent to which its design and features comply with recommended safety and sustainability standards. Road infrastructure audits and inspection are necessary after a road is constructed to ensure that safety standards are adhered to, maintained and improved after construction.

Intelligent speed assistance (adaptation) (ISA) is a system by which the vehicle "knows" the permitted or recommended maximum speed for a road (cf. World Report, WHO 2004).

Multimodal transport planning is an integration of various modes of transport such as walking, cycling, private car, public transport and railway into transport planning. It seeks to promote complementarity and interconnection among these modes to ensure a seamless flow of people and goods from one place to another (Litman 2021).

ISOFIX is a system for the connection of child restraint systems to vehicles which has two vehicle rigid anchorages, two corresponding rigid attachments on the child restraint system and a mean (top tether or support leg) to limit the pitch rotation of the child restraint system. (UN Regulation 44 (Child Restraint Systems), UN Regulation 129 (Enhanced Child Restraint Systems and UN Regulation 145 (ISOFIX anchorage systems)).

Land-use planning is the design and utilization of the broader land or space for commercial, industrial, recreational, transport, conservation, agricultural or a mix of purposes. Several strategies and policies are utilized to ensure the available land or space and resources in an urban or rural area are used efficiently so that the needs of the people are met while safeguarding future resources. Land-use planning is required at different levels, including local, sub-national, national and international (Global action plan for physical activity, WHO 2018, https://prs3.com/why-land-use-planning-is-critical-for-development/, World Report, WHO 2004, Elvik et al. 2009).

Lay responders or lay providers are those who are present or who arrive first at the scene of a crash (Road traffic injury prevention, training manual).

Legislation is any document that is legally binding. It includes for example, laws enacted by the parliament (or legislative body), regulations or rules enacted by minister(s) or executive bodies, circulars, protocols and any other legally binding document issued by authorized entities at international, national or subnational levels.

Mass transit: see public transport

Mobility is the ability to reach a place, which is enhanced by accessibility, which is the ease by which a place can be reached.

Minimum infrastructure features [see infrastructure assessment and star ratings]

Monitoring is a systematic and continuous collection and analysis of data on activities of a programme or intervention to determine if planned activities are implemented as planned, addressing any implementation problems and identify any adjustments or improvements needed in order for the intended objectives to be achieved.

Multi-disciplinary crash investigation (MDCI) is a general approach to crash investigation based on a systems perspective on crash and human error. The MDCI should answer why a crash occurred and also why the consequences became serious. The question why must be asked several times, not only on the human level, but also on the technical (e.g., vehicles and infrastructure) and organizational (e.g., organizations responsible for the building and maintenance of infrastructure, professional transport companies and authorities) levels in order to identify latent conditions and contributing factors to the crash and its consequences. Understanding these conditions and factors in detail enable learning from them and consequently taking of effective countermeasures within a systems approach (definition adapted from new chapter 17 in the Consolidated Resolution on Road Traffic (R.E.1) (https://unece.org/DAM/trans/doc/2017/wp1/ECE-TRANS-WP1-157e.pdf)

New car assessment programmes are established at country, regional or global level, to assess safety performance of new cars using a star rating system which ranges from 0 to 5 (5 being the highest level of safety). These programmes are intended to provide consumer information on vehicle safety. Safety ratings are provided for different categories of users, including adult occupant protection, child occupant protection and pedestrian protection.

Non-motorized transport is any transport mode that does not require a motor to generate energy. Included in this term are walking, cycling, and using animal-drawn or human-drawn carts (cf. World Report, WHO 2004).

Passive safety is any device that automatically provides protection for the occupant of a vehicle, such as safety-belts, motorcycle helmets, child restraints, padded dashboard, bumpers, laminated windshield, head restraints, collapsible steering columns and air bags (adapted from World Report, WHO 2004).

Pedestrian protection consists of softer bumpers and modification to the front ends of vehicles (e.g. removal of unnecessarily rigid structures) to reduce the severity of a pedestrian impact with a car (cf. Save Lives, WHO 2017; detailed technical definitions and requirements provided in UN Regulation 127 and UN GTR No. 9).

Periodic technical inspections (vehicle) is a regular administrative uniform procedure by which the authorized technical inspection centres responsible for conducting the inspection tests declare, after

carrying out the required verifications, that the vehicle submitted conforms or does not conform to the requirements set (adapted from 1997 Agreement concerning the adoption of uniform conditions for periodical technical inspections which also specifies testing requirements).

Political priority is the expressed commitment or verbal declarations of support for an issue by high level, influential political leaders; institutional commitment or specific policies and organizational infrastructure in support of an issue; and budgetary commitment or earmarked allocations of resources towards a specific issue relative to a particular benchmark (Shiffman 2007, Fox et al. 2011).

Post-crash care is the care delivered to injured people by trained providers, both at the scene and at health facilities, and includes effective emergency, operative and critical care.

Post-crash response is a sequence of time-sensitive actions, beginning with activation of the emergency care system, and continuing with care at the scene, care during transport, and facility-based emergency care (based on language in Post-crash response: Supporting those affected by road traffic crashes WHO, 2018).

Prehospital care is healthcare provided at the scene or during transfer of injured persons from the scene of a collision to a health facility.

Public transport are systems of transport consisting of services and routes that are used for travel by the general public as passengers as opposed to an individual. These group travel systems are also referred to as mass transit and high-capacity transit services in some countries. The following are the public transport modes found in different countries: buses, commuter trains, light rail, trams, subways, cable cars, taxis, streetcars and trolleys, passenger service motorcycles and bicycles, van pool services, and ferries and water taxis.

Random breath testing is alcohol breath tests administered randomly at roadside checkpoints by the police, without any necessary cause for suspicion (cf. World Report, WHO 2004).

Road traffic fatality is a death occurring within 30 days of a road traffic crash (cf. World Report, WHO 2004).

Road traffic injuries are fatal or non-fatal injuries incurred as a result of a road traffic crash (cf. World Report, WHO 2004).

Road safety (road traffic injury prevention) are approaches, strategies and measures used to prevent people from being killed or seriously injured in road traffic collisions.

Road user behaviour are actions exhibited by people who travel on the road that either increase or reduce the risk of a road traffic collision occurring. Examples of road user behaviour associated with increasing the likelihood of a road traffic collision are driving under the influence of alcohol and speeding (see David Sleet's handbooks on behavioural approach to injury prevention). The focus of behaviour change approach is to modify these behaviours that increase the likelihood of a road traffic collision occurring.

Rumble strips are a longitudinal design feature installed on a roadway shoulder near the travel lane. Rumble strips are made of a series of indented or raised elements that alert inattentive drivers through their vibration or sound. They may also be used for speed reduction (cf. World Report, WHO 2004).

Safe system approach aims to develop a road transport system that is better able to accommodate human error and take into consideration the vulnerability of the human body. It starts from the acceptance of human error and thus the realization that traffic crashes cannot be completely avoided. The goal of a safe system is to ensure that crashes do not result in serious human injury. The approach considers that human

limitations - what the human body can stand in terms of kinetic energy - is an important basis upon which to design the road transport system, and that other aspects of the road system, such as the development of the road environment and the vehicle, must be harmonized on the basis of these limitations (Global plan of action 2011-2020).

Safety audit (infrastructure) are checks that are carried out at various stages of an individual road project to ensure that its design and implementation are consistent with safety principles, and to determine whether further design changes are needed to prevent crashes (cf. World Report, WHO 2004).

Safety-belt anchorages the parts of the vehicle structure or the seat structure or any other part of the vehicle to which the safety-belt assemblies are to be secured (UN Regulation 14).

Safety-belts (seat- belts) are vehicle occupant restraints capable of being anchored to the interior of a power-driven vehicle and designed to diminish the risk of injury to its wearer, in the event of collision or of abrupt deceleration of the vehicle (UN Regulation 16).

Safety performance standards (vehicles) are definitions or specifications for equipment or vehicle performance that provide improved safety. They are produced nationally, regionally, or internationally by a variety of standard-producing organizations (voluntary private standards) or regulatory bodies (legally binding regulations) (adapted from World Report, WHO 2004).

Safety-belt reminder is a system dedicated to alert the driver when any of the occupants do not use the safety-belt. The system is constituted by a detection of an unfastened safety-belt and by two levels of driver's alert: a first level warning and a second level warning (cf.; UN Regulation 16).

Self-explanatory road layouts are engineering measures such as road markings and signs that make clear the course of action by different road users (cf. World Report, WHO 2004).

Sharing responsibility is the practice of allocating or assigning activities and duties related to a programme or plan of action to different actors to execute (World Report, WHO 2004). It recognizes that different duties or activities are effectively executed by agencies or sections of an organization that have appropriate competence. It is not possible for a single agency or section to execute all the components of a plan. Accountability and transparency are important attributes when duties and roles are distributed among different state and non-state actors.

Speed bump is a device to inciting drivers to reduce vehicle speed, usually a raised form placed across a road. It can be permanent or temporary (adapted from World Report, WHO 2004).

Speed cameras are cameras fixed at sites or employed by mobile police patrols that take photographs of vehicles exceeding the speed limit. Their purpose is to enforce speed limits (cf. World Report, WHO 2004).

Speed hump is a convex elevation installed across the road that acts on the dynamics of vehicles in such a way that drivers have to reduce speed to avoid discomfort to themselves or damage to their vehicles (cf. World Report, WHO 2004).

Speed management is a method or an approach used to keep speeds to appropriate levels relying on different and complementary strategies including: establishing and enforcing speed limit laws, building or modifying roads which calm traffic (e.g. speed humps and bumps) and requiring car makers to install new technologies to help drivers keep to speed limits (e.g. ISA) (cf. Save Lives, WHO 2017).

Frontal and side impact protection regulations require protection of occupants and ensure that injury criteria for the different parties of the body (e.g. head, neck, thorax, tibia..) for driver and passengers are

not exceeded during frontal and side impact crash when tested at certain speeds [for technical specifications see UN Regulations 94, 95,135 and 137 as well as UN GTR 14].

Stakeholders in a process are actors (persons or organizations) with a vested interest in the policy being promoted. These stakeholders, or "interested parties," can usually be grouped into the following categories: international/donors, national political (legislators, governors), public (ministry of health [MOH], social security agency, ministry of finance), labor (unions, medical associations), commercial/private for-profit, nonprofit (nongovernmental organizations [NGOs], foundations), civil society, and users/consumers (https://www.who.int/workforcealliance/knowledge/toolkit/33.pdf) .

Star rating (infrastructure) is a system of measurement of safety performance of roads and road networks based on road inspection data. It assesses built-in safety attributes for different categories of road users (vehicle occupants, motorcyclists, bicyclists and pedestrians). It is based on a star rating system with 5 stars corresponding to the highest level of safety.

Star Rating				
★	No sidewalk, No safe crossing, 60 km/h traffic	No cyclepath, No safe crossings, poor road surface, 70 km/h traffic	No motorcycle lane, undivided road, trees close to road, winding alignment, 90 km/h traffic	Undivided road with narrow centerline, trees close to road, winding alignment, 100 km/h traffic
★★★	Sidewalk present, pedestrian refuge, street lighting, 50 km/h traffic	On-road cycle lane, good road surface, street lighting, 60 km/h traffic	On-road motorcycle lane, undivided road, good road surface, >5m to any roadside hazards, 90 km/h traffic	Wide centerline separating oncoming vehicles, >5m to any roadside hazards, 100 km/h traffic
★★★★★	Sidewalk present, signalized crossing with refuge, street lighting, 40 km/h	Off-road dedicated cycle facility, raised platform crossing of major roads, street lighting	Dedicated separated motorcycle lane, central hatching, no roadside hazards, straight alignment, 80 km/h traffic	Safety barrier separating oncoming vehicles and protecting roadside hazards, straight alignment, 100 km/h traffic

Source: reproduced from GSRRS 2018. For details on the full model for all road users and more urban and rural examples see https://www.irap.org//3-star-or-better/what-is-star-rating.

Star rating (vehicle): see new car assessment programmes

Sustainability reporting is regular provision of information on sustainability performance of an organization or a country. Sustainability reporting is key to stimulating corporate change. Reporting that is relevant, reliable and accessible help businesses organize and prioritize their efforts, actuate the business case for corporate virtue by enabling meaningful external review, and stimulate the application of stakeholder pressure, both positive and negative. Sustainability reporting has become a means for organizations to demonstrate their societal value and new tools are needed to help them communicate their contributions in an accurate and transparent way (adapted from the Recommendations from the Academic Expert Group).

Sustainable transport is the provision of services and infrastructure for the mobility of people and goods—advancing economic and social development to benefit todays and future generations—in a manner that is safe, affordable, accessible, efficient, and resilient, while minimizing carbon and other emissions and environmental impacts. (Mobilizing Sustainable Transport for Development, the United Nations Secretary-General's High-Level Advisory Group on Sustainable Transport, 2016).

Traffic calming is a strategy aimed at significantly reducing vehicle speeds in an urban neighbourhood or on an urban arterial road, in order to protect vulnerable road users and residents and improve the quality of life of those living in the neighbourhood (cf. World Report, WHO 2004).

Vehicle (motor vehicle) is any power-driven vehicle which is normally used for carrying persons or goods by road or for drawing on the road, vehicles used for the carriage of persons or goods. This term embraces trolleybuses, that is to say, vehicles connected to an electric conductor and not rail borne. It does not cover vehicles, such as agricultural tractors, which are only incidentally used for carrying persons or goods by road or for drawing, on the road, vehicles used for the carriage of persons or goods. (cf. 1968 Convention on Road Traffic).

Value chain is the connection among different activities for a product or a service as it moves from one stage to another in the production and distribution system of a firm. Porter points out five primary activities in a corporate value chain:

- Inbound logistics are the receiving, storing and distributing of raw materials used in the production process.
- Operations is the stage at which the raw materials are turned into the final product.
- Outbound logistics are the distribution of the final product to consumers.
- Marketing and sales include advertising, promotions, sales-force organization, distribution channels, pricing and managing the final product to ensure it is targeted to the appropriate consumer groups.
- Service refers to the activities needed to maintain the product's performance after it has been produced, including installation, training, maintenance, repair, warranty and after-sale services (adapted from the Recommendations from the Academic Expert Group).

Vehicle to infrastructure communications (V2I) are technologies that capture vehicle-generated traffic data, wirelessly providing information such as advisories from the infrastructure to the vehicle that inform the driver of safety, mobility, or environment-related conditions (US DoT).

Vehicle to vehicle communication (V2V) can be defined as the cooperative, peer to-peer exchange of data among/between vehicles and portable traveler devices through wireless technology, with the focus on crash-imminent safety and public safety, system efficiency, and mobility UNECE ITS road map.